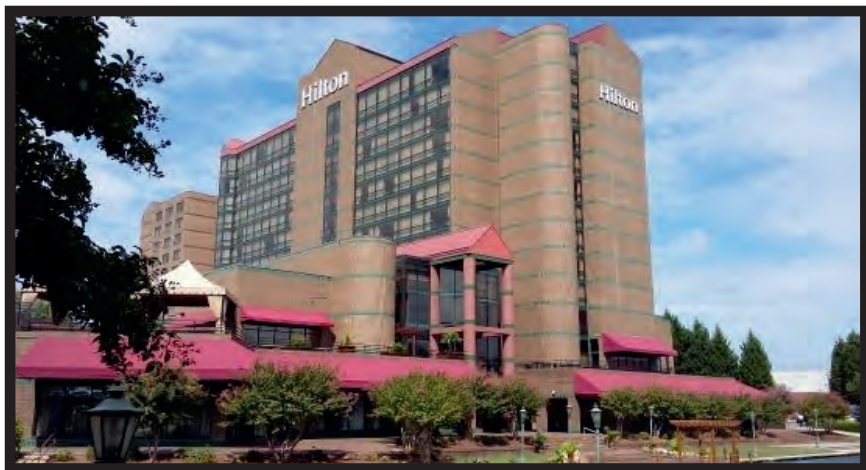


67th ANNUAL JAMES C. KIMBROUGH UROLOGICAL SEMINAR



2020 PROGRAM & ABSTRACT BOOK

January 15-19, 2020

Hilton Charlotte University Place
Charlotte, North Carolina



Society of Government Service Urologists

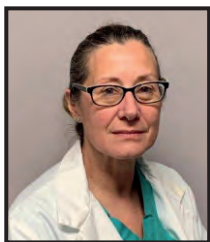
2020 PROGRAM BOOK



www.govurology.org

Scientific Program Directors:
Dr. Christopher Allam &
Dr. George Kallungal

Disclosure: The views and opinions expressed in this program book are those of the authors and do not necessarily reflect the official policy or position of the US Navy, Army, Air Force, the Department of Defense, or the U.S. Government.



Welcome from the President, Debora Moore, MD

Dear SGSU Members,

Welcome to Charlotte, North Carolina and the 67th Annual Kimbrough Seminar. It is a distinct honor to serve as the President of the Society of Government Service Urologists. Dr. Chris Allam and Dr. George Kallingal have put together an outstanding academic and social program, and the DeSantis Management Group continues to provide exceptional administrative leadership and support. This should be a fabulous meeting. As the field of Urology, military medicine, and VA medicine evolve, the Kimbrough Seminar will likewise change with the times. The meeting remains a foundation for Urologists in the service of our government, an excellent forum for education and training, and a wonderful opportunity to socialize and network with one another. The leadership and dedication of our active duty, VA and retired membership ensures that the wonderful tradition of the Kimbrough meetings will continue to support the mission and camaraderie that is unique to military and VA urology. Enjoy the meeting and your time in my town, Charlotte.

With Best Regards,

Debora Moore, MD



Welcome from the Program Chairmen

**Lt Col Christopher Allam, MC, USAF &
LTC George Kallingal, MC, USA**



Dear SGSU Members,

A warm welcome all to the 67th Annual Society of Government Service Urologists, James C. Kimbrough Urological Seminar in Charlotte, North Carolina. We have an exciting and robust academic program planned while maintaining our important SGSU traditions. We will have three full meeting days and Sunday is dedicated to the Mock Oral Boards and a few talks for a total of 21 hours of CME.

Our Scientific Program provides every resident and staff the opportunity to present original research at podium and poster sessions. We are also honored to have a distinguished group of visiting faculty that will focus on state-of-the art discussions and highlight best practices and new research in urology. Special topic lectures and industry programs will round out our meeting. As usual, we will include ample time for audience questions and discussions.

In addition to a power-packed scientific program, we are planning a number of exciting social activities including our Wednesday evening Welcome Reception, on Thursday evening, is the entertaining and traditional GU Bowl and Friday the Nascar Hall of Fame Night and Saturday evening the traditional Littrell Awards evening.

We look forward, as always, to renewing old friendships and making new ones.

Best Regards,

Lt Col Christopher Allam, MC, USAF

LTC George Kallingal, MC, USA

Brook Army Medical Center, Fort Sam Houston, TX

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Naval Medical Center San Diego

Air Force Urology Liaison

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Brooke Army Medical Center

Air Force Member-At-Large

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Laughlin Air Force Base Hospital, Del Rio, TX

Military Resident Representative

Amy Reed, MD & Felicia Balzano, MD
Brooke Army Medical Center

VA Member-At-Large

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VA Oklahoma City Health Care System

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Southern Illinois University, Div. of Urology

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Timothy Brand, MD
Sean P. Stroup, MD

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DeSantis Management Group
1950 Old Tustin Avenue, Santa Ana, CA 92705
T: 714.550.9155 / E: info@sgsu.org
www.sgsu.org

USAV LEADERSHIP



Urological Society for American Veterans (USAV) is established to enable its members to review and deliberate on topics and opportunities unique to federal urologic practitioners. The purpose of the organization is to initiate, discuss, and develop ideas, in an evidenced-based manner, which will improve the care of the Veteran patients with urologic disease(s) and the welfare of the federal urologic practitioner members. Learn about USAV's missions and the benefits of membership by visiting USAV website: <https://govurology.org/usav/>

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Executive Office: DeSantis Management Group - (714) 550-9155

Please join us at the 2020 USAV Meeting/Scientific Session at the AUA in Washington DC. **Sunday, May 17, 2020 (10:30am - 3:30pm) – Lunch is included.**

Preliminary Program:

10:30 - 12:00 Keynote Lecture, Presentations & Workshop
12:00 - 01:00 Lunch, Viewing of Posters, Exhibits & Networking
01:00 - 01:40 Poster Presentations & Awards
01:45 - 02:25 Lecture, Panel Discussion and Q&A
02:25 - 03:30 Closing Remarks

More details in the 2020 AUA program book/website.

Abstract deadline in January 2020

JAMES CLAUDE KIMBROUGH, MD

Colonel, Medical Corps, United States Army -1887-1956



Colonel Kimbrough was the “Father of U.S. Army Urology”. A native of Madisonville, Tennessee, he graduated from Vanderbilt University School of Medicine in 1916 and entered the U.S. Army Medical Corps in July 1917. He served a total of forty-one months in Europe during World Wars I and II. His career from 1921, was spent almost exclusively as Chief Urologist in many Army hospitals and included four tours, totaling eighteen years, at Walter Reed General Hospital where he initiated the urology residency program in 1946. His military awards include a MOS prefix of “A”, Bronze

Star, Legion of Merit, Purple Heart, and a Meritorious Service Citation from General Pershing. He was immediately recalled to active duty after his statutory retirement in 1948. In 1953 an Act of Congress appointed him a Permanent Consultant in urology at Walter Reed. In addition, COL Kimbrough was a Diplomat of the American Board of Urology, a member of the American Urological Association (AUA), a Fellow of the American College of Surgeons, and a member of the American Medical Association. He served as President of the Mid-Atlantic Section of the AUA from 1955 to 1956. From 1949 to 1950 he was President of the Washington, D.C. Urologic Society. He held honorary memberships in the Western Section of the AUA, Royal Society of Medicine of London, Academic de Chirurgie of Paris and Alpha Omega Alpha. Colonel Kimbrough was a 32d degree Mason and Shriner. His intense interest and enthusiasm in Urology made him an authority in the field of urologic oncology; he contributed fifty-eight papers to the urological literature. In 1953 this seminar was established in his honor. In 1957, after his death, the official name became the James C. Kimbrough Urological Seminar. On 29 June 1961, Kimbrough Army Hospital, Fort George G. Meade, was dedicated to his memory.

JAMES C. KIMBROUGH MEMORIAL AWARDS - PREVIOUS WINNERS (cont.)

In 1957, Mrs. Pauline Kimbrough established the Kimbrough Memorial Award for the best presentation by a military resident. Starting in 1972, first place awards began to be presented to the two armed forces urology residents making the best presentations in clinical urology and basic science research. The competition was expanded to include all residents in government service affiliated urology residency programs in 2007. A plaque is given to each award winner.

PREVIOUS AWARD WINNERS

1957	MAJ Gerald Mahaffey, USAF	Letterman Gen Hospital
1958	MAJ A.A. Borski, USA	Fitzsimons Gen Hospital
1959	LT Carter E. Carlton, USN	Baylor U. College of Medicine
1959	CPT Frank E. Ceccarelli, USA	Brooke Gen Hospital
1960	CPT Herbert Levin, USA	Walter Reed Gen Hospital
1961	CPT Richard C. Macure, USA	Brooke Gen Hospital
1962	LCDR R.M. Busch, USN	San Diego Naval Hospital
1963	CPT Richard Finder, USA	Walter Reed Gen Hospital
1964	MAJ Mauro P. Gangai, USA	Walter Reed Gen Hospital
1965	MAJ Thomas Shown, USA	Letterman Gen Hospital
1966	LCDR Robert E. Julian, USN	US Naval Hospital, PA
1967	MAJ Robert Wright, USA	Brooke Gen Hospital
1968	MAJ John C. Wurster, USA	Tripler Gen Hospital
1969	MAJ Joseph A. Bruckman, USA	Tripler Gen Hospital
1970	MAJ Davis F. Gates, USA	Tripler Gen Hospital
1971	MAJ Charles T. Swallow, USA	Brooke Gen Hospital
1972	CPT Tarver B. Bailey, USA	Walter Reed AMC
1972	MAJ Peter A. Leninger, USA	Walter Reed AMC
1973	MAJ George E. Deshon, Jr., USA	Walter Reed AMC
1973	MAJ Gerald L. Levisay, USA	Fitzsimons AMC
1974	MAJ H. David Cox, USA	Walter Reed AMC
1974	LTC Jan Hull, USA	Brooke AMC
1975	MAJ Shannon McMillen, USA	Madigan AMC
1975	LCDR Clifford J. Nemeth, USN	National Naval Med Ctr
1976	MAJ Phillip H. Beck, USA	Letterman AMC
1976	MAJ Patrick W. Kronmiller, USA	Madigan AMC
1977	MAJ William D. Belville, USA	Walter Reed AMC
1977	MAJ David W. Bentley, USA	Fitzsimons AMC
1978	MAJ Victor J. Kiesling, USA	Letterman AMC
1978	Torrence M. Wilson, USA	Fitzsimons AMC
1979	MAJ Jack R. Pence II, USAF	Wilford Hall MC
1979	MAJ Rene Sepulveda, USA	Walter Reed AMC
1980	MAJ George G. Mygatt, USA	Tripler Army AMC
1980	MAJ Jack R. Pence II, USAF	Wilford Hall MC
1981	LCDR Kathryn S. Buchta, USN	Naval Med Ctr, San Diego
1981	MAJ Gary A. Wikert, USA	Brooke AMC
1982	MAJ Louis R. Cos, USA	Univ of Rochester MC
1982	CPT August Zabbo, USAF	Cleveland Clinic Foundation
1983	CPT Robert G. Ferrigni, USAF	Wilford Hall MC
1983	CPT Ian M. Thompson Jr., USA	Brooke AMC
1984	CPT Stephen M. Dresner, USAF	WA Univ, St. Louis, MO
1984	CPT Julius L. Teague, USA	Brooke AMC
1985	LCDR Thomas F. Huisman, USN	Naval Medical Ctr, San Diego
1985	CPT Thomas A. Rozanski, USA	Madigan AMC
1986	CPT Judd W. Moul, USA	Walter Reed AMC

JAMES C. KIMBROUGH MEMORIAL AWARDS - PREVIOUS WINNERS (cont.)

1986	CPT Thomas A. Rozanski, USA	Madigan AMC
1987	LCDR Thomas J. Stilwell, USNR	Mayo Clinic, Rochester, MN
1987	LT Harold A. Frazier II, USNR	Nat'l Naval Med. Ctr.
1988	CPT Anurag K. Das, USAFR	Duke Univ Med Ctr
1988	LT Jeffrey Twidwell, USNR	Naval Medical Ctr, San Diego
1989	MAJ Kurt L. Hansberry, USA	Brooke AMC
1989	CPT Leonard G. Renfer, USA	Madigan AMC
1990	<u>Cancelled</u> (Desert Shield/Storm)	
1991	CPT Wilfred S. Kearse, Jr. USAF	Wilford Hall MC
1991	MAJ Timothy K. Dixon, USA	Brooke AMC
1992	CPT Richard W. Knight, USA	Madigan AMC
1992	MAJ Donald J. Lewis, USA	Walter Reed AMC
1993	MAJ M. David Bomalaski, USAF	Wilford Hall MC
1993	MAJ Thomas M. Seay, USAF	Wilford Hall MC
1994	CPT R. Duane Cespedes, USAF	Wilford Hall MC
1994	MAJ Joseph Y. Clark, USA	Brooke AMC
1995	CPT Jay T. Bishoff, USAF	Wilford Hall MC
1995	PT Ted O. Morgan, USA	Walter Reed AMC
1996	CPT Jay T. Bishoff, USAF	Wilford Hall MC
1996	CPT Raymond S. Lance, USA	Madigan AMC
1997	MAJ John G. Anema, USAF	Wilford Hall MC
1997	LTC Rhonda Cornum, USA	Brooke AMC
1998	MAJ John G. Anema, USAF	SAUSHEC*
1998	MAJ George B. Stackhouse, USA	Walter Reed AMC
1999	LT Melody A. Denson, USN	University of Iowa
1999	CPT Kyle J. Weld, USAF	University of Tennessee
2000	LCDR Prodromos G. Borboroglu, USN	Naval Medical Ctr, San Diego
2000	CPT Michael L. Gallentine, USAF	SAUSHEC*
2001	MAJ Kevin J. Gancarczyk, USA	Walter Reed AMC
2001	CPT Barak Perahia, USAF	SAUSHEC*
2002	CPT Ann S. Fenton, USAF	SAUSHEC*
2002	CPT Kenneth H. Ferguson, USAF	SAUSHEC*
2004	CPT Eric J. Hick, USAF	SAUSHEC*
2004	MAJ Stacey G. Koff, USA	Walter Reed AMC
2005	MAJ Mark Noller, USA	SAUSHEC*
2005	CPT Thomas Novak	Walter Reed AMC
2006	MAJ Inger Rosner, USA	Walter Reed AMC
2006	LT R. Chanc Walters, USN	Naval Medical Ctr, San Diego
2007	LT Alison M. Lake, USN	University of Michigan
2007	LT R. Chanc Walters, USN	Naval Medical Ctr, San Diego
2008	LT Alison M. Lake, USN	University of Michigan
2008	CPT L. Andrew Evans	SAUSHEC*
2009	CPT Chad DeRosa, MC, USA	Walter Reed AMC
2009	CPT Forrest C. Jellison, MC, USAF	Loma Linda Medical Center
2012	CPT Timothy Tausch, MC USA	Madigan AMC, WA
2012	MAJ Patrick McDonough, MC, USA	Madigan AMC, WA
2013	CPT Nicholas J. Kuntz, MC, USA	Duke University
2013	CPT Mark R. Anderson, MC, USA	Duke University
2014	CPT Ryan W. Speir, MC, USA	Madigan Army Medical Center
2014	CPT Nicholas J. Kuntz, MC, USA	Duke University

JAMES C. KIMBROUGH MEMORIAL AWARDS - PREVIOUS WINNERS (cont.)

2015	CPT Raffaella DeRosa, MC, USA	Tripler Army Medical Center
2015	CPT Nicholas J. Kuntz, MC, USA	Duke University
2016	MAJ Stephen Overholser, MC, USA	Univ. of TX Hlth. Sci. Ctr.
2016	LT Travis C. Allemang, MC, USN	Naval Medical Center Portsmouth
2017	CPT Tara K. Ortiz, MC, USA	Duke University Medical Center
2017	CPT Jonathan Wingate, MC, USA	Madigan Army Medical Center
2018	LT Chad Pusateri, MC, USN	Naval Medical Center San Diego
2018	Capt Theodore R. Saitz, MC, USAFR	Oregon Health & Sci. Univ. Urology
2019	CPT Bradley Potts, MC, USA	Duke University Medical Center
2019	CPT Alexandria Hertz, MC, USA	Madigan Army Medical Center

*,
*San Antonio Uniformed Services Health Education Consortium

PRINCE D. BEACH, MD

Colonel, Medical Corps, United States Army -1918-1992



Colonel Beach was a native of New Bedford, Massachusetts, a graduate of Colby College and Jefferson Medical College, and was commissioned in the US AMEDD in 1945. Over the next several years he served as a battalion surgeon and medical officer with varied and multiple commands of dispensaries and station hospitals, primarily in Europe. During the Korean War he received the Bronze Star while commanding officer and division surgeon of the 24th Medical Battalion. After completion of his urology residency in 1955 at Brooke Army Medical Center, he was the Assistant Chief of Urology at Fort Carson and Brooke, and Chief of Urology, 2nd General

Hospital, Landstuhl, Germany. He returned to Brooke General Hospital in 1963 and was Chief of Urology from 1965 until his retirement in 1968, after 23 years of active service. Subsequently, he became an Associate Professor in the Department of Urology at Baylor College of Medicine, Chief of Urology at the VA Hospital in Houston, Texas, and Co-chairman of the VA Cooperative Urological Research Group. He was Executive Secretary of the Society of Government Service Urologists (SGSU) from its inception until his death in 1992. He was known for his great sense of humor, administrative expertise, wise counsel and sound clinical acumen.

PRINCE D. BEACH AWARD PREVIOUS WINNERS

Established in 1992 for the best paper presented by a Society Member Staff Physician, as judged by Chief Residents attending the Seminar.

PREVIOUS AWARD WINNERS

1993	MAJ Samuel Peretsman, USAF, MC	Wilford Hall Medical Center
1994	MAJ J. Brantley Thrasher, MC, USA	Madigan Army Medical Center
1995	MAJ J. Brantley Thrasher, MC, USA	Madigan Army Medical Center
1996	MAJ Allen F. Morey, MC, USA	UCSF San Francisco Gen.Hospital
1997	MAJ Ronald S. Sutherland, MC, USA	Tripler Army Medical Center
1998	LTC Burkhardt H. Zorn, MC, USA	Walter Reed Army Medical Ctr.
1999	COL Rhonda Cornum, MC, USA	Eisenhower Army Medical Center
2000	LCDR Stephen V. Jackman, MC, USN	Naval Medical Ctr. Portsmouth
2001	COL Thomas A. Rozanski, MC, USA	Brooke Army Medical Center
2002	MAJ(P) Douglas W. Soderdahl, MC, USA	Eisenhower Army Medical Center
2004	LCDR Brian Auge, MC, USN	Naval Medical Center San Diego
2005	COL Edward Mueller, MC, USA (Ret.)	San Antonio, TX
2006	LCDR Emily Cole, MC, USNR	Naval Medical Center San Diego
2007	MAJ R. Clay McDonough, III, USAF, MC	University of Iowa Hosp. & Clinics
2008	James A. Brown, M.D.	Medical College of Georgia
2009	LTC Andrew Peterson, MC, USA	Madigan Army Medical Center
2010	LCDR Douglas W. Storm, MC, USN	Naval Medical Center San Diego
2011	MAJ Steven Hudak, MC, USA	San Antonio Military Med. Ctr.
2012	LCDR Joe Miller, MC, USN	Univ. of California, San Francisco
2013	LTC Timothy Brand MC, USA	Madigan Army Medical Center
2014	LCDR Douglas W. Storm, MC, USN	University of Iowa Hosp. & Clinics
2015	Col (Ret) Drew Peterson, MC, USA	Duke University
2016	LCDR Eric T. Grossgold, MC, USN	Washington Univ. Medical Ctr.
2017	LCDR Eric T. Grossgold, MC, USN	Washington Univ. Medical Ctr.
2018	Thomas Rozanski, MD	UT Hlth. Sci. Ctr. San Antonio
2019	Stephen A. Boorjian, MD	Mayo Clinic, Rochester, MN

H. GODWIN STEVENSON

SGSU Administrator - 1920-1992



H. Godwin Stevenson, a native of Philadelphia, graduated from Cornell University with a B.S. in zoology. He was a naval aviator and flight instructor during World War II. In 1946 he joined Eaton Laboratories as their first salesman and was in charge of government sales from 1952 until his retirement in 1982. He was a naturalist throughout his life, an expert in falconry, an avid birdwatcher, and published authority on moths. Known affectionately as "Tibbie," he was a trusted friend, confidant, and supporter of all Armed Forces and VA urologists. His numerous contributions to government service urology remain his legacy, and include: administrator of the SGSU from its inception in 1972 until his death in 1992, organization and

publication of the "Proceedings of the Kimbrough Seminar," solicitation of multiple corporate sponsors for the annual James C. Kimbrough Urological Seminar, resident grants to professional meetings, SGSU Membership Directory, and hotel conference agreements for the yearly Kimbrough meeting.

H.G. STEVENSON AWARD PREVIOUS WINNERS

In 1992 the Society established this award, which is presented annually for outstanding support and dedicated service to the Society. The recipient of this award can be a Corporate Member, physician, or other individual as determined by the Board of Directors.

PREVIOUS AWARD WINNERS

1992	COL Evan Lewis, MC, USA (Ret)
1994	Preston N. Littrell
1995	COL John N Wettlaufer, MC, USA (Ret)
1996	COL Leonard Maldonado, MC, USA (Ret)
1997	F. Kash Mostofi, M.D.
1998	Lester Persky, M.D.
1999	Charles A. Hulse, M.D.
2000	COL Donald E. Novicki, USAF, MC (Ret)
2001	Harry Tarr
2002	COL Martin L. Dresner, MC, USA (Ret)
2004	COL Robert M. Dobbs, MC, USA (Ret)
2005	COL Ian M. Thompson, MC, USA (Ret)
2006	Kathryn S. Littrell
2007	COL Howard E. Fauver, MC, USA (Ret)
2008	COL David G. McLeod, MC, USA (Ret)
2009	COL David McLeod, MC, USA (Ret)
2010	COL Thomas A. Rozanski, MC, USA (Ret)
2011	Isabel Sesterhenn, MD
2012	John Weigel, MD
2013	BGEN James T. Turlington, MC, USAF (Ret)
2014	John M. Barry, MD
2015	DeSantis Management Group
2016	MAJ GEN Thomas P. Ball, USAF, Ret.
2017	George W. Kaplan, MD
2018	Gerald Jordan, MD
2019	Joseph Y. Clark, MD

CHRISTINE MANTHOS

Major, Medical Corps, United States Army - 1961-1999



Major Manthos, a native of Leesburg, Virginia, commissioned in the USAR in 1985, was a graduate with distinction of University of Virginia and the Uniformed Services University of the Health Sciences from which she received the Army Surgeon General Award. She did her surgical internship at Fitzsimons AMC followed by a one year assignment in Korea as Troop Medical Clinic Commander. She returned to Fitzsimons to complete her Urology residency in 1996 as the last graduating urology resident prior to the closure of Fitzsimons. Among her accomplishments throughout her life were fluency in Russian, participation in an early Hanta

virus study, experience as a country music disc jockey, selection by her peers in 1996 as Outstanding Teaching Resident and below zone promotion to Major. An outstanding physician, she was known for her genuine compassion, excellent teaching abilities and superb surgical skills. Chris was lovingly devoted to her children, family and many friends. Her ever-present infectious smile touched all who knew her. The annual luncheon will be held in memory of Christina Manthos, a member of the society who died of breast cancer. We hope her memory and love for residents will live on during the annual Manthos Resident and Young Urologist Luncheon.

CLARE SCANLON

1941-2005



Clare Scanlon was just as much a member of the Army as was her husband, retired judge advocate Wally. A native of Long Island, New York, Clare graduated from Marymount College in Arlington, Virginia. While raising a family and moving from post to post, Clare worked tirelessly to enrich the lives of those around her. She received the Military Wife of the Year award at Fort Dix, NJ in 1971, and in 1974 was a recipient of the Molly Pitcher award for distinguished service as an officer's wife in the community at Ft. Sill, OK. While at West Point, Clare instructed cadets on finer points of decorum and protocol, launching many young men and women into successful Army careers.

After Wally's career took him to Fort Sam Houston, she served as the medical editor for Brooke Army Medical Center, shepherded many manuscripts into prestigious journals and textbooks of international renown, and began a decade of service to the SGSU. Even into the last year of her life, Clare dedicated countless hours to planning the Kimbrough Urological Seminar, editing and assembling the program book.

CLARE SCANLON AWARD - PREVIOUS WINNERS

CLARE SCANLON AWARD

In 2006, to express our deep gratitude for her devoted service, the Society established the Clare Scanlon Award, to be "presented annually for outstanding administrative support and service to the Society, specifically in regards to the annual Kimbrough Seminar, as determined by the Course Director".

PREVIOUS AWARD WINNERS

2006	Teresa Clark & Sharon Mason	2017	LTC Joseph R. Sterbis, MC, USA
2007	Janie N. Garcia	2018	Inger Rosner, MD
2008	Patricia A. Harrison	2019	COL Robert C. Dean, MC, USA
2009	Toni Dominci		
2011	Verna Munroe		
2016	Maria Salazar		

HONORARY LIFETIME MEMBERSHIP

Presented annually to an individual who has distinguished him or herself as a long-time supporter who is dedicated to the society.

HONORARY LIFETIME MEMBERSHIP AWARD PREVIOUS WINNERS

2015	Brendan Fox, MD
2016	COL (Ret.) Martin L. Dresner, MD
2017	Mitchell Edson, MD
2018	John M. Barry, MD
2019	COL (Ret.) Noah S. Schenkman, MD

PREVIOUS JAMES C. KIMBROUGH SEMINARS

NUMBER	YEAR	
1	1953	Walter Reed General Hospital COL Jack W. Schwartz, MC, USA
2	1954	Walter Reed General Hospital COL Jack W. Schwartz, MC, USA
3	1955	Brooke General Hospital COL Claude C. Dodson, MC, USA
4	1956	Walter Reed General Hospital LTC Kryder E. Van Buskirk, MC, USA
5	1957	Walter Reed General Hospital COL John F. Patton, MC, USA
6	1958	Brooke General Hospital COL Louis K. Mantell, MC, USA
7	1959	Brooke General Hospital COL Louis K. Mantell, MC, USA
8	1960	Brooke General Hospital LTC Clarence B. Hewitt, MC, USA
9	1961	Brooke General Hospital COL Louis K. Mantell, MC, USA
10	1962	Letterman General Hospital COL Kryder E. Van Buskirk, MC, USA
11	1963	Walter Reed General Hospital COL Clarence B. Hewitt, MC, USA
12	1964	Brooke General Hospital COL Prince D. Beach, MC, USA
13	1965	Letterman General Hospital LTC Charles A. Moore, MC, USA
14	1966	Walter Reed General Hospital COL Kryder E. Van Buskirk, MC, USA
15	1967	Brooke General Hospital COL Prince D. Beach, MC, USA
16	1968	Walter Reed General Hospital COL Kryder E. Van Buskirk, MC, USA
17	1969	Letterman General Hospital COL Leonard Maldonado, MC, USA

PREVIOUS JAMES C. KIMBROUGH SEMINARS

NUMBER	YEAR	
18	1970	Brooke General Hospital LTC Robert M. Dobbs, MC, USA
19	1971	Letterman General Hospital LTC Ray E. Stutzman, MC, USA
20	1972	Fitzsimons General Hospital COL Evan L. Lewis, MC, USA
21	1973	Walter Reed Army Medical Center COL Anthony A. Borski, MC, USA CAPT Mitchell Edson, MC, USN
22	1974	Brooke Army Medical Center COL Mauro P. Gangai, MC, USA
23	1975	Madigan Army Medical Center COL John N. Wettlaufer, MC, USA
24	1976	Naval Hospital, NRMHC, San Diego, CA CAPT C.R. Sargent, MC, USN
25	1977	Fitzsimons Army Medical Center COL Robert M. Dobbs, MC, USA
26	1978	Wilford Hall USAF Medical Center COL Thomas P. Ball, MC, USAF COL Carl H. Weber, MC, USAF
27	1979	Walter Reed Army Medical Center COL Ray E. Stutzman, MC, USA
28	1980	Naval Regional Med Center, San Diego CAPT Michael R. McCarthy, MC, USN CDR John P. Sands, MC, USN
29	1981	Fitzsimons Army Medical Center COL Howard E. Fauver, MC, USA
30	1982	Wilford Hall USAF Medical Center COL Donald E. Novicki, USAF, MC LT COL Richard A. Airhart, USAF, MCP
31	1983	Letterman Army Medical Center COL Robert E. Agee, MC, USA
32	1984	Naval Hospital, Oakland, CA CDR George J. Gavrell, MC, USN

PREVIOUS JAMES C. KIMBROUGH SEMINARS

NUMBER	YEAR	
33	1985	Madigan Army Medical Center COL William D. Belville, MC, USA
34	1986	Wilford Hall USAF Medical Center COL Alvin L. Sago, USAF, MC LTC John D. Maldazys, MC, USAF
35	1987	Walter Reed Army Medical Center/USUHS COL David G. McLeod, MC, USA LTC Steven J. Skoog, MC, USA
36	1988	Naval Hospital Portsmouth CAPT Gordon MacDonald, MC, USA
37	1989	Brooke Army Medical Center COL Francisco R. Rodriguez, MC, USA
38	1990	Fitzsimons Army Medical Center COL Michael J. Raife, MC, USA
39	1991	National Naval Medical Center-Bethesda s CAPT Kevin J. O'Connell, MC, USN LCDR Harold A. Frazier, II, MC, USN
40	1992	Madigan Army Medical Center Four Seasons Olympic Hotel, Seattle, WA COL John N. Wettlaufer, MC, USA
41	1993	Naval Medical Center San Diego Bahia Hotel, San Diego, CA CAPT John P. Sands, MC, USN
42	1994	Naval Medical Center Portsmouth Omni at Charleston Place, Charleston, SC CAPT James R. Auman, MC, USN
43	1995	Walter Reed Army Medical Center/USUHS L'Enfant Plaza, Washington, DC COL David G. McLeod, MC, USA LTC Pierce B. Irby, MC, USA
44	1996	Wilford Hall USAF Medical Center Scottsdale Plaza Hotel, Scottsdale, AZ MAJ Steven C. Lynch, MC, USAF MAJ Edmund S. Sabanegh, MC, USAF

PREVIOUS JAMES C. KIMBROUGH SEMINARS

NUMBER	YEAR	
45	1997	Tripler Army Medical Center The Fairmont Hotel, San Francisco, CA COL George E. Deshon, MC, USA
46	1998	National Naval Medical Center-Bethesda Ft. Magruder Inn, Williamsburg, VA CAPT Paul J. Christenson, MC, USN CDR Harold A. Frazier, II, MC, USN
47	1999	Brooke Army Medical Center Hilton Palacio Del Rio, San Antonio, TX LTC Thomas A. Rozanski, MC, USA LTC John P. Foley, MC, USA
48	2000	Naval Medical Center San Diego Wyndam Emerald Plaza, San Diego, CA CAPT James L. Roberts, MC, USN LCDR Christopher J. Kane, MC, USN
49	2001	Madigan Army Medical Center Four Seasons Olympic Hotel, Seattle, WA LTC(P) Raymond A. Costabile, MC, USA
50	2002	Walter Reed Army Medical Center Crystal City Marriott Hotel, Arlington, VA COL Dennis S. Peppas, MC, USA
51	2004	Wilford Hall USAF Medical Center Hilton Palacio Del Rio, San Antonio, TX MAJ Edith Canby-Hagino, MC, USAF LT COL Steven C. Lynch, MC, USAF
52	2005	Tripler Army Medical Center Sheraton Waikiki Hotel, Honolulu, HI COL Ronald S. Sutherland, MC, USA
53	2006	Naval Medical Center Portsmouth & Eastern Virginia Medical School Savannah Marriott Riverfront, Savannah, GA CAPT Leo Kusuda, MC, USN Gerald H. Jordan, MD
54	2007	Brooke Army Medical Center Westin Galleria, Houston, TX LTC Douglas W. Soderdahl, MC, USA COL Allen F. Morey, MC, USA

PREVIOUS JAMES C. KIMBROUGH SEMINARS

NUMBER	YEAR	
55	2008	Naval Medical Center San Diego Wyndam Emerald Plaza, San Diego, CA CDR Brian K. Auge, MC, USN LCDR Donald S. Crain, MC, USN
56	2009	Walter Reed Army Medical Center & National Naval Medical Center-Bethesda Hyatt Regency Capitol Hill, Washington DC COL James R. Jezior, MC, USA COL Robert C. Dean, MC, USA
57	2010	Wilford Hall Medical Center Westin Hotel, San Antonio, TX LT COL Kyle J. Weld, MC, USAF
58	2011	Madigan Army Medical Center Seattle Sheraton, Seattle, WA MAJ Timothy C. Brand, MC, USA
59	2012	Naval Medical Center Portsmouth Charleston Marriott, Charleston, SC CAPT Paul D. McAdams, MD, FACS
60	2013	Tripler Medical Center, Honolulu Marriott Waikiki Beach Hotel, Honolulu, HI COL (Ret) USA, Richard S. Stack, MD MAJ Joseph Sterbis, MC, USA CDR Tammy L. Bloom, MC, USN
61	2014	Naval Medical Center San Diego Sheraton Harbor Island Hotel, San Diego, CA CDR Sean P. Stroup, MC, USN CDR Jamey Sarvis, MC, USN
62	2015	Madigan Army Medical Center Sheraton Harbor Island Hotel, San Diego, CA LTC Timothy C. Brand, MC, USA LTC Jack R. Walter, MC, USA
63	2016	San Antonio Military Medical Center Westin Hotel, San Antonio, TX MAJ Steven J. Hudak, MC, USA LT COL Timothy M. Phillips, MC, USAF

PREVIOUS JAMES C. KIMBROUGH SEMINARS

NUMBER	YEAR	
64	2017	Naval Medical Center, Portsmouth, VA Sheraton Harbor Island Hotel, San Diego, CA CDR R. Chanc Walters, MC, USN LCDR Paul R. Womble, MC, USN
65	2018	Walter Reed National Military Medical Center The Scottsdale Resort at McCormick Ranch, Scottsdale, Arizona COL Robert C. Dean, MC, USA
66	2019	Tripler Army Medical Center Sheraton Kona Hotel, Kona, Hawaii LTC Joseph Sterbis, MC, USA & LTC John Musser, MC, USA
67	2020	Brooke Army Medical Center San Antonio Military Medical Center Hilton Charlotte University Place LTC Christopher Allam, MC, USAF LTC George Kallingal, MC, USA

GENERAL INFORMATION

Registration:

Registration is required in order to obtain Continuing Medical Education credits. Attendees will be given badges at registration. It is required that you wear your badges to gain entry into the scientific sessions, exhibits, social events, breakfasts, and breaks. Should you wish to bring your spouse to any of these events, you must register them for a badge.

The evening optional social events include the:

- Wednesday Evening President's Welcoming Reception - \$25
- Friday Evening Nascar Night - \$55
- Saturday Evening Littrell Awards Dinner - \$65

If you have not purchased these tickets, you may do so at the registration desk. (Note some events may be sold-out)- (Tickets will be collected at the entrance).

Registered Spouses/Guests are welcome to attend the morning breakfasts and breaks in the exhibit hall. Spouse/Guest badge is required.

Overview/Highlights:

Topics featured at the Kimbrough Annual Seminar will feature state of the art lectures in various urologic topics - including: Neurourology, Renal Malignancy Reconstruction and Andrology, Oncology, Pediatric Urology, Prostate, Female Urology, Sexual Health, VA & Surgical Updates, and a Course Summary. In addition, the program will include the traditional Resident Research Competition, Research Papers, Podium/Poster Session and Mock Oral Boards - for those preparing for the ABU certifying examination.

Special Assistance/Dietary Needs: The SGSU complies with the Americans with Disabilities Act §12112(a). If any participant is in need of special assistance or has any dietary restrictions, please see the registration desk.

Attention Presenters:

Go to slide preview area to make changes/update slides. Updates must be made at least one hour in advance of your presentation.

Slide Preview Hours:

WED: 2:00 PM - 6:00 PM

THURS - SAT: 7:00 AM - 5:00 PM

Slide Preview Supported by **Guerbet**  **Boston Scientific**

CONTINUING MEDICAL EDUCATION

Acknowledgement of Financial Commercial Support

No financial commercial support was received for this educational activity.

Acknowledgement of In-Kind Commercial Support

No in-kind commercial support was received for this educational activity.

Satisfactory Completion

Learners must complete an evaluation form to receive a certificate of completion. If you are seeking continuing education credit for a specialty not listed below, it is your responsibility to contact your licensing/certification board to determine course eligibility for your licensing/certification requirement.

Physicians



In support of improving patient care, this activity has been planned and implemented by Amedco LLC and Society of Government Service Urologists. Amedco LLC is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

Credit Designation Statement – Amedco LLC designates this live activity for a maximum of 21.00 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Objectives - After Attending This Program You Should Be Able To:

1. Examine and discuss challenges in urologic malignancies.
2. Assess complications with renal cysts in kidney surgery.
3. Discuss trends in female urology therapy outcomes.

Disclosure of Conflict of Interest

The following table of disclosure information is provided to learners and contains the relevant financial relationships that each individual in a position to control the content disclosed to Amedco. All of these relationships were treated as a conflict of interest, and have been resolved. (C7 SCS 6.1--6.2, 6.5)

All individuals in a position to control the content of CE are listed in the program book. If their name is not listed below, they disclosed that they had no financial relationships with a commercial interest.

FIRST	LAST	COMMERCIAL INTEREST
Nathaniel	Fried	IPG Medical: Consultant
Jessalyn	Liu	Tolmar Pharm.: Consultant
Judd	Moul	TolmarPharm.: Consultant, Sanofi: Speakers Bureau, Janssen: Speakers Bureau, Ferring: Speakers Bureau, Abbvie: Scientific/Medical Advisory Board Member, Theralogix: Scientific/Medical Advisory Board Member

CONTINUING MEDICAL EDUCATION

For your CME Credit ~

1. Submit daily evaluations
2. After meeting, print your certificate

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1. Complete your daily evaluations electronically -

Go to >> www.govurology.org/2020-meeting

Click on >> [Daily Evaluations](#)

2. Print Your CME Certificate After The Meeting

Go to >> www.govurology.org/2020-meeting

Click on >> [Print CME Certificate](#)

*Please print all pages of your certificate for your record.
Questions? Email Certificate@AmedcoEmail.com*

Thank you!

PROGRAM-AT-A-GLANCE

Special Note: Meal service for all daytime functions is in the first hour.

WEDNESDAY, JANUARY 15

TIME	EVENT	ROOM
2:00 PM - 6:00 PM	Registration	Lakeshore Bllrm. Foyer
2:00 PM - 6:00 PM	Slide Preview	Keynes Room
2:00 PM - 4:00 PM	Board of Director's Mtg.	Harris Room
6:30 PM - 8:30 PM	Welcome Reception	Lakeview Room

THURSDAY, JANUARY 16

TIME	EVENT	ROOM
7:00 AM - 2:00 PM	Exhibits Open	Lakeshore Ballroom
7:00 AM - 8:15 AM	Networking Breakfast	Exhibits/Expo Lab Area
7:00 AM - 4:00 PM	Registration	Lakeshore Bllrm. Foyer
7:00 AM - 5:00 PM	Slide Preview Station	Keynes Room
8:15 AM - 8:30 AM	Opening Ceremonies	University Ballroom
8:30 AM - 9:00 AM	Keynote Address/Lecture	University Ballroom
9:00 AM - 9:12 AM	Preston Littrell Tribute	University Ballroom
9:12 AM - 9:20 AM	Group Picture	University Ballroom
9:20 AM - 10:00 AM	Resident Competition	University Ballroom
10:00 AM - 10:45 AM	Refreshment Break	Exhibits/Expo Lab Area
10:45 AM - 11:45 AM	Special Symposium	University Ballroom
11:45 AM - 12:15 PM	Resident Competition	University Ballroom
12:15 PM - 1:45 PM	Manthos Lunch Program	Glenwaters Room
12:15 PM - 1:45 PM	Lunch in Exhibits Area	Lakeshore Ballroom
1:45 PM - 4:20 PM	Resident Competition	University Ballroom
6:00 PM - 8:00 PM	GU Bowl /Tailgate Party	Glenwaters / Univ. Blrm.

PROGRAM-AT-A-GLANCE

Special Note: Meal service for all daytime functions is in the first hour.

FRIDAY, JANUARY 17

TIME	EVENT	ROOM
7:00 AM - 2:00 PM	Exhibits Open	Lakeshore Ballroom
7:00 AM - 8:15 AM	Networking Breakfast	Exhibits/Expo Lab Area
7:00 AM - 3:30 PM	Registration	Lakeshore Bllrm. Foyer
7:00 AM - 5:00 PM	Slide Preview Station	Keynes Room
8:15 AM - 9:00 AM	SMSNA Lecture	University Ballroom
9:00 AM - 10:00 AM	Special Symposiums	University Ballroom
10:00 AM - 11:00 AM	Refreshment Break	Exhibits/Expo Lab Area
11:00 AM - 12:10 PM	Sex.Med./Female Urol.	University Ballroom
12:10 PM - 1:25 PM	CME Lunch Program	University Ballroom
1:25 PM - 2:15 PM	VA Session	University Ballroom
2:15 PM - 3:30 PM	Poster Session/Reception	Lakeview Room
5:30 PM	Nascar Night (optional)	

SATURDAY, JANUARY 18

TIME	EVENT	ROOM
7:00 AM - 2:00 PM	Exhibits Open	Lakeshore Ballroom
7:00 AM - 8:15 AM	Networking Breakfast	Exhibits/Expo Lab Area
7:00 AM - 5:00 PM	Registration	Lakeshore Bllrm. Foyer
7:00 AM - 5:00 PM	Slide Preview Station	Keynes Room
8:15 AM - 9:40 AM	Military Urology	University Ballroom
9:40 AM - 10:15 AM	General Urology 1	University Ballroom
10:15 AM - 11:15 AM	Refreshment Break	Exhibits/Expo Lab Area

PROGRAM-AT-A-GLANCE

Special Note: Meal service for all daytime functions is in the first hour.

SATURDAY, JANUARY 19 (cont.)

TIME	EVENT	ROOM
11:15 AM - 12:00 PM	Reconstruction	University Ballroom
12:00 PM - 1:15 PM	CME Lunch Program	University Ballroom
1:20 PM - 2:30 PM	SGSU Business Meeting	University Ballroom
2:30 PM - 3:20 PM	General Urology 2	University Ballroom
3:20 PM - 4:05 PM	GU Malignancy	University Ballroom
4:05 PM - 4:10 PM	Short Break	
4:10 PM - 5:00 PM	Prostate Cancer	University Ballroom
6:30 PM - 9:30 PM	Littrell Awards Dinner	Lakeshore Ballroom

SUNDAY, JANUARY 19

TIME	EVENT	ROOM
7:30 AM - 9:00 AM	Registration	University Ballroom
7:45 AM - 8:30 AM	Hasta La Vista Breakfast	University Ballroom
7:45 AM - 8:15 AM	Special Program	University Ballroom
8:15 AM - 8:45 AM	Meeting Highlights	University Ballroom
8:50 AM - 12:00 PM	Mock Oral Boards	Lakeshore Ballroom

**Please sign up for Mock Oral Boards
at Registration Desk.**

INVITED SPEAKERS

Gopal H. Badlani, MD, FACS, FRCS

Past AUA Secretary, Professor and Vice Chair, Dpt. of Urology, Wake Forest University Health Sciences, Section Chief, Urology, W.G.(Bill) Hefner VA Med. Ctr.

Arjun V. Balar, MD

Associate Professor of Medicine, Director of the Genitourinary Medical Oncology Program, Laura and Isaac Perlmutter Cancer Center at NYU Langone Med. Ctr., New York

Robert Dreicer, MD, MS, MACP, FASCO

Associate Director for Clinical Research, Deputy Director, Univ. of Virginia Cancer Center. Section Head of Medical Oncology, Co-Director of the Paul Mellon Urologic Institute; Professor of Medicine and Urology, University of Virginia School of Med.

Robert C. Flanigan, MD, FACS

AUA Immediate Past President, Chair, Dpt. of Urology, Loyola Univ. Chicago Stritch School of Med.

Nathaniel Fried, PhD

Professor, Dpt. of Physics and Optical Science University of North Carolina, Charlotte, NC

Muta M. Issa, MD, FACS, MBA

President, USAV, Professor of Urology, Emory University School of Medicine & Chief of Urology, Atlanta Veterans Affairs Medical Center

Jeffrey Jones, MD

Past President, USAV, Professor, Baylor College of Medicine, Dpt. of Urology & Center for Space Medicine

Max J. McKibben, MD

Urology Specialist, Carolinas Physician Alliance, Charlotte, NC

Judd W. Moul, MD

James H. Semans Professor of Surgery, Div. of Urology, Dpt. of Surgery, Duke Cancer Institute & Duke Univ. Med. Ctr.

Ranjith Ramasamy, MD

Director of Male Reproductive Medicine and Surgery, Associate Professor, Department of Urology, University of Miami, Florida

Jennifer Robles, MD, MPH.

Candidate, Epidemiology Track, Vanderbilt School of Medicine, Nashville, TN

Sanoj Punnen, MD

Assistant Professor, Urologic Oncologist, University of Miami Health System

Mohammad Ramadan, MD

Assistant Professor, Dpt. of Urology, University of Oklahoma College of Medicine, VA Urology, Urology Section Chief, Oklahoma City Veterans Affairs Medical Center

Eugene Y. Rhee, MD, MBA

Chair, AUA Public Policy Cmte. Regional Chief Urology/SCAL, National Chair KP Interregional Chiefs/ AAMD Business Line KPSD, Kaiser Permanente, Del Mar, CA

Hossein Sadeghi-Nejad, MD, FACS

President of the Sexual Medicine Society of North America (SMSNA) Professor of Surgery / Urology, Rutgers New Jersey Med. Sch., Chief of Urology, the New Jersey Veterans Affairs Hospitals

Doug Soderdahl, MD

Corps Specific Branch Proponent Officer Army Medical Corps, San Antonio, TX

Ian Thompson, MD, III, MBA

CEO, Texas Urology Group CMO, Christus Santa Rosa Med. Ctr. Hospital

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Friday evening - Optional Event

NASCAR Hall of Fame Race Night



The evening includes exclusive use of many uniquely fun activities & games in our private group area that can be played as you are moving about while enjoying different food stations and bars. Interactive games include race car simulators and pit challenge experiences! You can also explore the hundreds of artifacts and exhibits. Tickets will be collected. Transportation provided. Buy your tickets at the registration desk.

EXHIBITOR ACTIVITIES



**Visit the
Expo Lab
For The**



Education & Experience!

Latest in urology technology & services

Hearty networking breakfasts

Win prizes - drawings during breaks

Lively refreshment breaks



Use your Prize Card to win!

Expo Lab happenings → Lakeshore Ballroom

Open Thurs.-Sat. - 7:00am - 2:00pm

Thursday Events:

Breakfast: 7:00am

Refreshment Break: 10:00am

Lunch Break: 12:15pm

Friday Events:

Breakfast: 7:00am

Refreshment Break: 10:00am

Saturday Events:

Breakfast: 7:00am

Refreshment Break: 10:15am

**Visit with the Expo Lab during the
Breakfasts, Refreshment Breaks**

Use your “Prize Card” to win prizes!

EXHIBITORS

We thank our commercial exhibitors for their support of the Kimbrough Annual Meeting. Please be sure to visit them during the meeting.

*Thank
You!*

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Recruitment

**Please visit our Exhibitors in
the Expo Lab
and see what's new and exciting.
Win prizes! Have fun!**

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Society of Genitourinary Reconstructive Surgeons

American Urological Association

GU BOWL

Experience a Great Tradition!



Attend Thursday Evening's

**Official Tailgate Party
6:00 pm, Lakeview Room**

**GU Bowl
6:45 pm, University Ballroom**



WEDNESDAY, JANUARY 15

Outline of Scientific Program

67th Kimbrough

Annual Seminar * Hilton Charlotte University Place * Charlotte, NC

TIME	EVENT	ROOM
2:00 PM - 6:00 PM	Registration	Lakeshore Bllrm. Foyer
2:00 PM - 6:00 PM	Slide Preview	Keynes Room
2:00 PM - 4:00 PM	Board of Director's Mtg.	Harris Room
6:30 PM - 8:30 PM	Welcome Reception	Lakeview Room

6:30pm - 8:30pm - Lakeview Room

Welcome Reception



**Kick-off the meeting with
your colleagues with the beautiful view of the
lake and surrounding area.
Enjoy hosted bar and small bites.**

**Be sure to bring your Event
& Drink tickets.**

THURSDAY, JANUARY 16

Outline of Scientific Program

67th Kimbrough

Annual Seminar * Hilton Charlotte University Place * Charlotte, NC

TIME	EVENT	ROOM
7:00 AM - 2:00 PM	Exhibits Open	Lakeshore Ballroom
7:00 AM - 8:15 AM	Networking Breakfast	Exhibits/Expo Lab Area
7:00 AM - 4:00 PM	Registration	Lakeshore Bllrm.Foyer
7:00 AM - 5:00 PM	Slide Preview Station	Keynes Room
8:15 AM - 8:30 AM	Opening Ceremonies	University Ballroom
8:30 AM - 8:40 AM	AUA Keynote Address	University Ballroom
8:40 AM - 9:00 AM	Special Lecture	University Ballroom
9:00 AM - 9:12 AM	Preston Littrell Tribute	University Ballroom
9:12 AM - 9:20 AM	Group Picture	University Ballroom
9:20 AM - 10:00 AM	Resident Competition	University Ballroom
10:00 AM - 10:45 AM	Refreshment Break	Exhibits/Expo Lab Area
10:45 AM - 11:45 AM	Special Symposium	University Ballroom
11:45 AM - 12:15 PM	Resident Competition	University Ballroom
12:15 PM - 1:45 PM	Manthos Lunch Program	Glenwaters Room
12:15 PM - 1:45 PM	Lunch in Exhibits Area	Lakeshore Ballroom
1:45 PM - 4:20 PM	Resident Competition	University Ballroom
6:00 PM - 6:45 PM	GU Bowl Tailgate Party	Glenwaters Room
6:45 PM - 8:00 PM	GU Bowl	University Ballroom



**7:00 AM - Be in the lead and get your
Coffee & Breakfast in the Expo Lab!**



*Bring your prize card.
Mingle with colleagues and industry reps!*

THURSDAY, JANUARY 16, 2020

OPENING CEREMONIES

8:15 AM - 9:20 AM - University Ballroom

8:15AM - 8:25AM

Welcome & Announcements

Program Chairman: Lt Col Christopher Allam,
MC, USAF & LTC George Kallingal, MC, USA &
President: Debora Moore, MD

8:25AM - 8:30AM

National Anthem / Color Guard

1.

8:30 AM - 8:40 AM

AUA Keynote Address

Robert C. Flanigan, MD, FACS

Immediate Past President,
American Urological Association

2.

8:40 AM - 9:00 AM

Special Guest Lecture

Gopal H. Badlani, MD, FACS, FRCS

Regenerative Therapy for Post Prostatectomy Incontinence,
a Primate model.

9:00 AM - 9:12 AM

SPECIAL TRIBUTE

to Preston Littrell

Given by Thomas Rozanski, MD

9:12AM

Stay for Group Picture (All)

THURSDAY, JANUARY 16, 2020

SESSION I - RESIDENTS COMPETITION

General Urology

**9:20 AM - 10:00 AM - University Ballroom
(Papers are seven minutes)**

Moderators:

Lt. Col Necia Pope, MC, USAF & CDR Todd H. Sterling, MC, USN

**Judges: COL (RET) Martin Dresner, MD, FACS, John M. Barry, MD,
AUA Past President, Robert C. Flanigan, MD**

- 3 9:20AM CPT Theodore Crisostomo-Wynne, MC, USA**
Trends in Research Presented at the Kimbrough Urological Seminar Over a 10 Year Period.
 - 4 9:27AM CPT Alexandria M. Hertz, MC, USA**
Microscopic Hematuria Evaluation Stratification: A Machine Learning Approach.
 - 5 9:34AM CPT Felicia Balzano, MC, USA**
Intraurethral Lidocaine Instillation After Endourology Procedure to Improve Dysuria in Anesthetized Patients.
 - 6 9:41AM CPT John Q. Schisler, MC, USA**
Opioid-free Ureteroscopy is Associated with a Lower Incidence of New Persistent Opioid Use.
 - 7 9:48AM Capt Amy Reed, MC, USAF**
The Role of Ureteral Stenting Following Uncomplicated Ureteroscopy for Ureteral and Renal Stones: A Randomized, Controlled Trial.
- 9:55AM Discussion (5 minutes)**
- 10:00AM End of Session**



Courtesy Reminder

SET PHONES TO VIBRATE

**Please take your calls outside the
meeting room.**

Thank You

10:00 AM - 10:45 AM

Vendor-Blender - Fuel up

Refreshment Break in Expo Lab



Visit Vendors, get stickers on your

Prize Card

for great prizes!!!

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SPECIAL SYMPOSIUM

8. 10:45AM - 11:45 AM - University Ballroom

**Important Evidence-Based Changes in the
Metastatic Castration-Sensitive Prostate Cancer
Treatment Landscape.**

Supported by Astellas & Pfizer Oncology - Non CME Program

THURSDAY, JANUARY 16, 2020

SESSION II - RESIDENTS COMPETITION

Andrology Urology

11:45 AM - 12:15 AM - University Ballroom

(Papers are seven minutes)

Moderators:

MAJ Carolyn Salter, MC, USA & LCDR Eric Biewenga, MC, USN

Judges: COL (RET) Martin Dresner, MD, FACS, John M. Barry, MD,

AUA Past President, Robert C. Flanigan, MD

- 9 11:45AM CPT Timiyin E-Nunu, MC, USA**
Mere Mortals: A 10-year Experience of Vasovasostomy by Non-Andrologists.
- 10 11:52AM LCDR Charles V. Rinehart, MC, USN**
Trends In Hypogonadism Among Active Duty Males From 2006-2015.
- 11 11:59AM Capt Helal A. Syed, MC, USA**
Interim Analysis for Patterns of Erectile Recovery after Robotic-Assisted Laparoscopic Prostatectomy: A Penile Rehab Study.

12:06PM Discussion (9 minutes)

12:15PM End of Session



LUNCH PROGRAMS

12:15pm - 1:45pm - Glenwaters Room

SESSION III:

Manthos Resident & Young Urologist Lunch Program

Moderator: CDR Erik T. Grossgold, MC, USN

"Business Side of Medicine"

Ian Thompson, MD, III

"Military Medicine as a Career Choice"

COL Doug Soderdahl, MC, USA



Meet & Greet with Industry ~ 12:15pm - 1:45pm

**Lunch provided by SGSU
in the Expo Lab**

(Food service until 1:15pm)

Complete your Prize Card for raffle prizes!

THURSDAY, JANUARY 16, 2020

SESSION IV - RESIDENTS COMPETITION

Pediatric Urology

**1:45 PM - 2:19 PM - University Ballroom
(Papers are seven minutes)**

Moderators:

Alison C. Keenan, MD & Lt Col Timothy S. Baumgartner, MC, USAF

Judges: COL (RET) Martin Dresner, MD, FACS, John M. Barry, MD,

AUA Past President, Robert C. Flanigan, MD

- 12 1:45PM LCDR Chad R. Pusateri, MC, USN**
Clinical Care Pathway To Reduce Time To The Operating Room For Testicular Torsion.
- 13 1:52PM Capt Kiersten M. Craig, MC, USAF**
Pediatric Renal Trauma with Hilum Injury: Are Guidelines Needed?
- 14 1:59PM 2LT Timothy Brandt, MC, USA**
Opioid Prescribing Trends In Pediatric Minor Surgeries.
- 15 2:06PM Maj Daniel Ensley, MC, USAF**
Pediatric Referral Patterns For Primary Monosymptomatic Nocturnal Enuresis.
- 12:13PM Discussion (6 minutes)**
- 12:19PM End of Session**

**Go on-line to complete your
daily evaluation forms - go to
www.govurology.org/2020-meeting
click on "Daily Evaluations"**

THURSDAY, JANUARY 16, 2020

SESSION V - RESIDENTS COMPETITION

Kidney

**2:20 PM - 3:04 PM - University Ballroom
(Papers are seven minutes)**

Moderators:

CAPT Lisa Cartwright, MC, USN & CAPT Hernan O. Altamar, MC, USN

Judges: COL (RET) Martin Dresner, MD, FACS, John M. Barry, MD,

AUA Past President, Robert C. Flanigan, MD

- 16 2:20PM Capt Kyle D. Hart, MC, USAF**
Use of Dual Energy CT in Guiding Treatment in Complex Renal Cyst.

- 17 2:27PM Capt Ashley Henry, MC, USAF**
Indeterminate Renal Cysts: Clinical Features, Follow Up, and Progression.

- 18 2:34PM Jenna Winebaum, MD**
Technical Intraoperative Maneuver for Management of Challenging Left-sided Interior Vena Cava Thrombus in Renal Cell Carcinoma.

- 19 2:41PM CPT Robert E. Cooper, MC, USA**
Predictors Of Upstaging In Clinical Stage T1 Renal Malignancy.

- 20 2:48PM LCDR Blair Townsend, MC, MBA, USN**
Post Operative Pain Scores And Time To Return of Bowel Function After Implementation of An Enhanced Recovery Clinical Care Pathway For Renal Surgery.

- 2:55PM Discussion (9 minutes)**

- 3:04PM End of Session**

THURSDAY, JANUARY 16, 2020

SESSION VI - RESIDENTS COMPETITION

Neurourology & Reconstruction

**3:05 PM - 3:40 PM - University Ballroom
(Papers are seven minutes)**

Moderators:

LCDR Jack M. Zuckerman, MC, USN & LTC Timothy J. "TJ" Tausch, MC, USA

**Judges: COL (RET) Martin Dresner, MD, FACS, John M. Barry, MD,
AUA Past President, Robert C. Flanigan, MD**

- 21 3:05PM CPT Bradley A. Potts, MC, USA**
Barringtons's Reflexes Revisited: Proximal Urethral
Electrostimulation Causes Remarkable Excitatory Bladder Response
In Spinal Cord Intact Rats.

- 22 3:12PM Capt Jessica B. Saeger, MC, USAF**
Complications And Risk Factors For Male Urethral Sling Surgery In
Military Beneficiaries.

- 23 3:19PM Capt Clinton Yeaman, MC, USAF**
Characterization Of Dyspareunia In Women Presenting To General
Urology Clinic.

- 24 3:26PM CPT Brent D. Nosé, MC, USA**
Annexin A1 Inhibits NLRP3 Mediated Inflammation During Bladder
Outlet Obstruction.

- 3:33PM Discussion (7 minutes)**

- 3:40PM End of Session**

THURSDAY, JANUARY 16, 2020

SESSION VII - RESIDENTS COMPETITION

Malignancy

**3:40 PM - 4:20 PM - University Ballroom
(Papers are seven minutes)**

Moderators:

CPT Kevin Rice, MC, USA & MAJ Sean Kern, MC, USN

**Judges: COL (RET) Martin Dresner, MD, FACS, John M. Barry, MD,
AUA Past President, Robert C. Flanigan, MD**

- 25 3:40PM LCDR Nathan Oehrlein, MC, USN**
Association Of Race And Long-term Prostate Cancer Outcomes In A Cohort Of Military Health Care Beneficiaries Undergoing Surgery: 1990-2017.
- 26 3:47PM LT Colin A. McLain, MC, USN**
Learning Curve for Robotic-Assisted Laparoscopic Retroperitoneal Lymph Node Dissection.
- 27 3:54PM Laura Horodyski, MD**
Safe Transition to Opioid-Free Pathway in Patient Undergoing Robotic-Assisted Laparoscopic Prostatectomy: A Retrospective Analysis of a US Veterans Affairs Medical Center Patient Cohort.
- 28 4:01PM LT Elizabeth I. Roger, MC, USN**
Moderate To Severe Incontinence After Prostatectomy: Predicting Resolution Using Early Post-operative Factors.
- 29 4:08PM CPT David Barham, MC, USA**
Routine Postoperative Hemoglobin Assessment Poorly Predicts Transfusion Requirement Among Minimally Invasive Radical Prostatectomy Patients.
- 4:15PM Discussion (5 minutes)**
- 4:20PM End of Session**

Thursday's Night

Session VIII: GU Bowl

**Moderators: MAJ Jeremy C. Kelley, MC, USAF / Lt
Col Timothy S. Baumgartner, MC, USAF**



**Official Tailgate Party - 6:00 pm
Glenwaters Room**

**followed by GU Bowl - 6:45 pm
University Ballroom**



(Bring your drink tickets)

FRIDAY, JANUARY 17

Outline of Scientific Program

67th Kimbrough

Annual Seminar * Hilton Charlotte University Place * Charlotte, NC

TIME	EVENT	ROOM
7:00 AM - 2:00 PM	Exhibits Open	Lakeshore Ballroom
7:00 AM - 8:15 AM	Networking Breakfast	Exhibits/Expo Lab Area
7:00 AM - 3:30 PM	Registration	Lakeshore Bllrm. Foyer
7:00 AM - 5:00 PM	Slide Preview Station	Keynes Room
8:15 AM - 9:00 AM	SMSNA Lecture	University Ballroom
9:00 AM - 10:00 AM	Special Symposiums	University Ballroom
10:00 AM - 11:00 AM	Refreshment Break	Exhibits/Expo Lab Area
11:00 AM - 12:10 PM	Sex.Med./Female Urol.	University Ballroom
12:10 PM - 1:25 PM	CME Lunch Program	University Ballroom
1:25 PM - 2:15 PM	VA Session	University Ballroom
2:15 PM - 3:30 PM	Poster Session/Reception	Lakeview Room
5:30 PM	Nascar Night (optional)	

7:00 AM



NETWORK BREAKFAST in the Expo Lab

BRING your Prize Card

FRIDAY, JANUARY 17, 2020

SESSION IX - SEXUAL MEDICINE

8:15 AM - 9:00 AM - University Ballroom

Moderator:

LTC Kuwong B. Mwamukonda, MC, USA

SEXUAL MEDICINE SOCIETY OF NORTH AMERICA (SMSNA) SUPPORTED STATE OF THE ART LECTURE

30

8:15AM - 9:00 AM

Hossein Sadeghi-Nejad, MD

**Pearls and Pitfalls in Penile Prosthesis Surgery:
A Few Lessons From the Past 25 Years.**

SPECIAL SYMPOSIUM

31

9:00 AM - 9:30 AM - University Ballroom

**The ExoDx Prostate Test (EPI) – Contemporary Utility
in the Prostate Biopsy Decision.**

Judd W. Moul, MD, FACS

*James H. Semans Professor of Surgery, Div. of Urology, Dpt. of Surgery, Duke
Cancer Institute & Duke Univ. Med. Ctr.*

Supported by Exosome Diagnostics - Non CME Program

SPECIAL SYMPOSIUM

32

9:30 AM - 10:00 AM - University Ballroom

**New Thinking, New Strategies in Advanced
Urothelial Carcinoma.**

Arjun V. Balar, MD

*Director, Genitourinary Medical Oncology Program,
NYU Langone's Perlmutter Cancer Center.*

This activity is supported by an independent educational grant from Merck.

This activity is provided by i3 Health.

FRIDAY, JAN. 17
10:00AM - 11:00AM -
REFRESHMENT BREAK

Zoom
to the
Expo Lab!



Refuel, meet with the vendors and
get your stickers for the
Prize Card

Thank you - Break supported by

Guerbet | 

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FRIDAY, JANUARY 17, 2020

SESSION X - SEXUAL MEDICINE / FEMALE UROLOGY

11:00 AM - 12:10 PM - University Ballroom

Moderators:

LTC Andrew R. Medendorp, MC, USA & CDR Justin J. Degrado, MC, USN

- 33 11:00AM Ranjith Ramasamy, MD**
Restorative Therapies for Erectile Dysfunction.
- 34 11:30AM LCDR Charles V. Rinehart, MC, USN**
Trends In The Distribution Of Hypogonadism Encounters Among
Specialty And Primary Care Clinics At A Single Military Treatment
Facility From 2008-2018.
- 35 11:40AM Al Squitieri, MD, FACS, Colonel MC US Army, Retired**
50 Years Of Stuff From Past Urology Meetings.

11:55AM Discussion (10 minutes)

12:10PM End of Session

CME LUNCH PROGRAM

36 12:10 PM - 1:25 PM - University Ballroom

**Keeping Pace With Evolving Management
Strategies in Castration-Resistant Prostate Cancer.**

Judd W. Moul, MD

*James H. Semans Professor of Surgery, Div. of Urology, Dpt. of
Surgery, Duke Cancer Institute & Duke Univ. Med. Ctr.*

*This activity is supported by an independent educational grant from
Sanofi Genzyme. This activity is provided by i3 Health.*

FRIDAY, JANUARY 17, 2020
SESSION XI - VA SESSION

1:25 PM - 2:15 PM - University Ballroom

Moderator:
Jeffrey Jones, MD

- 37 1:25PM Jeffrey Jones, MD**
Overview of VHA System and VA Urology.
- 38 1:35PM Mohammad Ramadan, MD**
VA Urologic Training Programs, Leadership and Career Opportunities Within Academia.
- 39 1:45PM Muta Issa, MD, MBA**
VA Compensation Structure and Benefits.
- 40 1:55PM Jennifer Robles, MD, MPH**
VA Entry Opportunities and Timing: Pros/Cons
- 41 2:05PM Martin Dresner, MD, Jeffrey Jones, MD**
My Experience with the DOD-VHA Transition.
- 2:15PM End of Session**



**Go on-line to complete your
daily evaluation forms go to
www.govurology.org/2020-meeting
click on "Daily Evaluations"**

FRIDAY, JANUARY 17, 2020

SESSION XII - POSTER SESSION & RECEPTION

**2:15 PM - 3:30 PM - Lakeview Room
(5-10 minutes of viewing posters, followed by
2 minute podium presentations)**

Moderators/Judges:

Steve Lynch, MD, Bradley Schwartz, MD, COL Timothy Brand, MC, USA

- 42 LCDR Chad R. Pusateri, MC, USN**
Robotic Management of Calyceal Diverticulum: A Case Report.
- 43 CPT Brock E. Boehm, MC, USA**
IgG-4 Related Inflammatory Pseudotumor: A Case Report of a Peri-Renal Mass Masquerading As Upper Tract Urothelial Cell Carcinoma.
- 44 Cancelled**
- 45 LCDR Christine M. Herforth, MC, USN**
Postmortem Sperm Retrieval: An Analysis on Interest in the Military.
- 46 LT Chloe Michel, MC, USN**
A Delayed Presentation of Non Classical Congenital Adrenal Hyperplasia in a Patient with Testicular Adrenal Rest Tumors.
- 47 LT Zhengran Jiang, MC, USN**
I'm Just Happy To See You.
- 48 CPT Michael A. Bork, MC, USA**
Case Report of A Healthy 22 Year Old Male With Necrotizing Fasciitis In Inguinal Canal.
- 49 2LT Luke Bandi**
Oligometastatic Renal Cell Carcinoma To Superior Pubic Ramus Following Nephron-sparing Surgery For pT1b Tumor.

- 50 LCDR Blair Townsend, MC, MBA, USN**
Benchmark Early Compliance Following Implementation of An Optimized Clinical Care Pathway For Renal Surgery Patients.
- 51 Capt Cassandra C. Lyons, MC, USAF**
Zoon Balanitis Causing Scrotal Dermatitis Cured With Circumcision.
- 52 CPT Timothy W. Wright, MC, USA**
Actinomycosis In Peri-stomal Abscess: A Novel Complication of Mitrofanoff Procedure.
- 53 CPT Alexandria M. Hertz, MC, USA**
Automated Flow Cytometry Urine Analysis: Reassessing the Gold Standard of Microscopic Hematuria.
- 54 CAPT Kiersten Craig, MC, USAF**
Extravesical Common Sheath Reimplantation for Surgical Management of Duplicated Ureters.
- 55 MAJ Carolyn A. Salter, MC, USA**
Testosterone Therapy In Men With Gleason 6 And 7 Prostate Cancer.

End of Session

Thank you - Poster Reception Supported by

**Boston
Scientific**

**RICHARD
WOLF** 



Friday evening - Optional Event

NASCAR Hall of Fame Race Night

The evening includes exclusive use of many uniquely fun activities & games in our private group area that can be played as you are moving about while enjoying different food stations and bars. Interactive games include race car simulators and pit challenge experiences! You can also explore the hundreds of artifacts and exhibits. Tickets will be collected. Transportation provided.

SATURDAY, JANUARY 18

Outline of Scientific Program

67th Kimbrough

Annual Seminar * Hilton Charlotte University Place * Charlotte, NC

TIME	EVENT	ROOM
7:00 AM - 2:00 PM	Exhibits Open	Lakeshore Ballroom
7:00 AM - 8:15 AM	Networking Breakfast	Exhibits/Expo Lab Area
7:00 AM - 5:00 PM	Registration	Lakeshore Bllrm. Foyer
7:00 AM - 5:00 PM	Slide Preview Station	Keynes Room
8:15 AM - 9:40 AM	Military Urology	University Ballroom
9:40 AM - 10:15 AM	General Urology 1	University Ballroom
10:15 AM - 11:15 AM	Refreshment Break	Exhibits/Expo Lab Area
11:15 AM - 12:00 PM	Reconstruction	University Ballroom
12:00 PM - 1:15 PM	CME Lunch Program	University Ballroom
1:20 PM - 2:30 PM	SGSU Business Meeting	University Ballroom
2:30 PM - 3:20 PM	General Urology 2	University Ballroom
3:20 PM - 4:05 PM	GU Malignancy	University Ballroom
4:05 PM - 4:10 PM	Short Break	
4:10 PM - 5:00 PM	Prostate Cancer	University Ballroom
6:30 PM - 9:30 PM	Littrell Awards Dinner	Lakeshore Ballroom



7:00 AM
It's Green! Go Start
your day off in the
Expo Lab with Breakfast!
Mix, Mingle & Learn!



SATURDAY, JANUARY 18, 2020

SESSION XIII - MILITARY UROLOGY

8:15 AM - 9:40 AM - University Ballroom

Moderator:

Lt Col Christopher L. Allam, MC, USAF

- 56 8:15AM COL Douglas Soderdahl, MC, USA**
DHA Update.
- 57 8:45AM LTC Alexander (Lex) J. Ernest, MC, USA**
ICTL Assessments and Update on KSA.
- 58 9:00AM COL Timothy Brand, MC, USA / Lt Col Christopher Allam, MC, USAF / CAPT R. Chanc Walters, MC, USN**
Consultant Panel Updates Discussion
- 59 9:20AM Eugene Y. Rhee, MD, MBA**
AUA Health Policy Update.
- 9:40AM End of Session**



**Go on-line to complete your
daily evaluation forms go to
www.govurology.org\2020-meeting
click on "Daily Evaluations"**

SATURDAY, JANUARY 18, 2020

SESSION XIV - GENERAL UROLOGY 1

9:40 AM - 10:15 AM - University Ballroom

Moderators:

Peter Stuhldreher, MC, USN & LTC Amanda B. Reed-Maldonado, MC, USA

- 60 9:40AM CPT Theodore Crisostomo-Wynne, MC, USA**
Survey of Opioid Prescribing Patterns After Non-Endoscopic Urologic Office Procedures.
- 61 9:48AM LCDR Blair Townsend, MC, MBA, USN**
Initial Evaluation of Clinical Outcomes Before And After Implementation of An Enhanced Recovery Clinical Care Pathway For Renal Surgery.
- 62 9:56AM CAPT Kiersten Craig, MC, USAF**
Urethral Mobilization and Advancement with Teardrop Meatoplasty for Hypospadias Repair.
- 10:04AM Discussion (6 minutes)**
- 10:10AM End of Session**

Speed into the Expo Lab for a break!



Refreshments & Networking
10:15am - 11:30am



**Bring your
Prize Card for the Drawings!**

Thank you - Break supported by

Guerbet | 

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SATURDAY, JANUARY 18, 2020

SESSION XV - RECONSTRUCTION

11:15 AM - 12:00 PM - University Ballroom

Moderator:

CDR Erik T. Grossgold, MC, USN

GENITOURINARY RECONSTRUCTIVE SURGEONS (GURS) SUPPORTED STATE OF THE ART LECTURE

63

11:15AM - 12:00 PM

Max McKibben, MD

**Management of Pelvic Fracture Urethral Injury -
Past, Present and Future.**

CME LUNCH PROGRAM

64

12:00 PM - 1:15 PM - University Ballroom

**Navigating the Prostate Cancer Disease Continuum: Evolving
Strategies in the Management of HSPC and CRPC.**

Robert Dreicer, MD, MS, MACP, FASCO

*Professor of Medicine and Urology, University of Virginia School of Medicine, Associate
Director for Clinical Research, Deputy Director of the University of Virginia
Cancer Center, Charlottesville.*

*This activity is supported by educational grants from Astellas and Pfizer Inc,
Genomic Health, Janssen Biotech, Inc., administered by
Janssen Scientific Affairs, LLC, and Sanofi Genzyme.*

1:20pm - 2:30pm - University Ballroom

SGSU MEMBERS BUSINESS MEETING



Hear updates on the state of the branches of the Services

SATURDAY, JANUARY 18, 2020

SESSION XVI - GENERAL UROLOGY 2

2:30 PM - 3:20 PM - University Ballroom

Moderators:

LTC Joseph R. Sterbis, MC, USA & COL Jack R. Walter, MC, USA

- 65 2:30PM Eugene Y. Rhee, MD, MBA**
Telemedicine in Urology.
- 66 2:50PM CPT Theodore Crisostomo-Wynne, MC, USA**
Variance in Opioid Prescribing in Patients Undergoing Robotic Minimally Invasive Urologic Surgery.
- 67 2:58PM Nathaniel Fried, PhD**
Thulium Fiber Laser Lithotripsy.
- 3:15 PM Discussion (5 minutes)**
- 3:20PM End of Session**

**Go on-line to complete your
daily evaluation forms go to
www.govurology.org\2020-meeting
click on “Daily Evaluations”**

SATURDAY, JANUARY 18, 2020

SESSION XVII- GU MALIGNANCY

3:20 PM - 4:05 PM - University Ballroom

Moderators:

LTC John E. Musser, MC, USA & James T. Kearns, MD

- 68 3:20PM MAJ Sean Q. Kern, MC, USA**
Does Percentage Of Seminoma At Orchiectomy Impact Patient Morbidity And Pathologic Outcomes At Post-chemotherapy Retroperitoneal Lymph Node Dissection For Mixed Germ Cell Tumor?
- 69 3:28PM MAJ Sean Q. Kern, MC, USA**
Establishing A Hereditary Renal Syndrome Clinic: One Institution's Experience In Patient Identification, Risk Assessment, Genetic Testing And Surveillance Outcomes.
- 70 3:36PM MAJ Ryan W. Speir, MC, USA**
Outcomes Following Retroperitoneal Lymph Node Dissection For Clinical Stage Ii Patients Experiencing A Late Relapse Following Upfront Platinum Based Chemotherapy.
- 71 3:44PM MAJ Sean Q. Kern, MC, USA**
Longitudinal Health Related Quality Of Life After Radical Cystectomy Utilizing The Fact-bl-cys Instrument: Comparison Of Ileal Conduit, Indiana Pouch, And Orthotopic Neobladder.
- 4:02PM Discussion (3 minutes)**
- 4:05PM End of Session**

4:05 PM - 4:10 PM
“Take Ten”

SATURDAY, JANUARY 18, 2020

SESSION XVIII - PROSTATE CANCER

4:10 PM - 5:00 PM - University Ballroom

Moderators:

Peter Clark, MD &

LTC Alexander (Lex) J. Ernest, MC, USA

- 72 4:10PM Sanoj Punnen, MD**
Prostate MRI With Biopsy.
- 73 4:25PM Judd W. Moul, MD**
Late Dosing of Luteinizing Hormone-Releasing Hormone Agonists
And Testosterone Levels >20 NG/DL In Prostate Cancer.
- 74 4:32PM MAJ Carolyn A. Salter, MC, USA**
Biochemical Recurrence Rates In Men With High Grade Prostate
Cancer on Testosterone Therapy.
- 75 4:40PM CPT Jacob McFadden, MC, USA**
Joint Impact of Diagnostic PSA and Race/Ethnicity On 25+ Year
Prostate Cancer Outcomes Following Radical Prostatectomy.
- 76 4:48PM MAJ Carolyn A. Salter, MC, USA**
Testosterone Therapy In Men On Active Surveillance For Prostate
Cancer.
- 4:56PM Discussion (4 minutes)**
- 5:00PM End of Session**



6:30pm-9:30pm
Lakeshore Ballroom

**Preston & Kathy Littrell Awards
Reception/Dinner**

Be sure to bring your Event & Drink Tickets!



In Memoriam

Preston Littrell

(June 5, 1934 - July 27, 2019)

Preston served as the SGSU administrator for nearly 20 years. He attended more than 40 Kimbrough Urologic Seminars

during his lifetime. He was an absolute blessing to our organization! Preston was a kind and loving person. He always had a twinkle in his eye and smile on his face and his heart overflowed with a sense of gratitude for life, and he was forever focused on how he could serve his fellow man and woman. We have lost a true gentleman!

~Hal Frazier, MD

SUNDAY, JANUARY 19

Outline of Scientific Program

67th Kimbrough

Annual Seminar * Hilton Charlotte University Place * Charlotte, NC

TIME	EVENT	ROOM
7:30 AM - 9:00 AM	Registration	University Ballroom
7:45 AM - 8:30 AM	Hasta La Vista Breakfast	University Ballroom
7:45 AM - 8:15 AM	Special Program	University Ballroom
8:15 AM - 8:45 AM	Meeting Highlights	University Ballroom
8:50 AM - 12:00 PM	Mock Oral Boards	Lakeshore Room



Reminder to go on-line to complete your evaluations

**GO TO www.govurology.org\2020-Meeting
- click on "Daily Evaluations"**

Print your CME Certificate after the meeting

**GO TO www.govurology.org\2020-Meeting
- click on "Print CME Certificate"**

THANK YOU!

SUNDAY, JANUARY 19, 2020

SPECIAL SYMPOSIUM

77

7:45 AM - 8:15 AM - University Ballroom

Aquablation Therapy – Changing the Surgical Treatment Paradigm for BPH.

Gopal H. Badlani, MD, FACS, FRCS

Professor and Vice Chair, Dpt. of Urology, Wake Forest University Health Sciences, Section Chief of Urology, W.G.(Bill) Hefner VA Medical Center

Supported by PROCEPT BioRobotics - Non CME Program

SESSION XIX - MEETING HIGHLIGHTS

8:15 AM - 8:45 AM - University Ballroom

78 8:15AM Lt Col Christopher Allam, MC, USAF
Meeting Summary Highlights - Take Home Messages.

8:45AM End of Session

SESSION XX - MOCK ORAL BOARDS

8:50 AM - 12:00 PM - Lakeshore Ballroom

Director: LTC Joseph R. Sterbis, MC, USA

GET PREPPED FOR THE BOARDS!

**Be sure to sign up for this session at the
Registration Desk.**

**Attendees will circulate through examiner
stations and be asked board questions.**

ABSTRACTS

PAPER #2

REGENERATIVE MEDICINE FOR POST PROSTATECTOMY ERECTILE DYSFUNCTION (PPED AND POST PROSTATECTOMY URINARY INCONTINENCE (PPUI)

Zambon JP^{1,2}, Patel M¹, Hemal A^{1,2}, Badlani G³, Andersson KE², Magalhaes RS², Lankford S², Dean A², Williams JK².

Author information

- 1 Department of Urology, Wake Forest University Baptist Medical Center, Winston-Salem, North Carolina.
- 2 Wake Forest Institute for Regenerative Medicine, Wake Forest Baptist Medical Center, Winston-Salem, North Carolina.
3. Veterans Administration , Salisbury ,NC

Prostate cancer – a major health burden in veterans. Prostate cancer is the most frequently diagnosed cancer in American men accounting for nearly 30,000 deaths each. For most men with localized prostate cancer, radical prostatectomy provides excellent long-term oncologic outcomes and remains the gold standard treatment. Although nerve sparing prostatectomies, including robotic surgery are currently available for many patients, persistent urinary incontinence (UI) occurs in 4-31% of patients, and erectile dysfunction (ED) occurs in 54-90% at 12 months follow up post radical prostatectomy.

Autologous stem cell injection has been tested in experimental studies; however, the preliminary results to date demonstrate only modest efficacy in terms of function recovery. As an alternative, Regenerative Pharmacology seeks to use small molecules (or combination of molecules) to stimulate the body to self-heal *in situ*. As such, regenerative pharmacology is distinct from standard pharmacotherapy, which is often limited to the amelioration of symptoms.

The proposed approach has the potential of bypassing the lengthy, expensive and complicated cell isolation and implant pre-conditioning protocols of conventional regenerative medicine. We have published that local administration of the chemokine CXCL12 restores short-term urinary sphincter structure in female NHPs with chronic urinary sphincter deficiency to a greater extent than autologous skeletal muscle precursor cell (skMPC) therapy. We now present pilot data of use of CXCL12 in treating PPED and PPUI in a nonhuman primate (NHP) male model of chronic PPED and PPUI.

PAPER #3

TRENDS IN RESEARCH PRESENTED AT THE KIMBROUGH UROLOGICAL SEMINAR OVER A 10 YEAR PERIOD

Theodore Crisostomo-Wynne, MD, Timothy Wright, MD, Timothy C. Brand, MD,
Tacoma, WA

Introduction: The Kimbrough Urological Seminar is an opportunity for government service urologists to present research within the field. Over the past decade there have been significant changes to government service urology. We sought to describe trends in research presented at this meeting over the past decade.

Methods: Two reviewers independently reviewed all abstracts from the SGSU annual meeting program book from 2009 - 2018. Abstracts were categorized as being basic science, clinical descriptive, clinical experimental, clinical analytical, or other. Concordance between reviewers was measured and differences in classification were reviewed and adjudicated by the primary reviewer. Descriptive statistics and Chi-Square testing were used as appropriate to determine trends between years.

Results: A total of 643 abstracts were reviewed from the ten-year period. The concordance between reviewers was 97.3%. There was no significant difference in basic science ($p = 0.52$), clinical descriptive ($p = 0.46$), clinical experimental ($p = 0.44$), clinical analytical ($p = 0.09$), or other (0.22) between individual years in the types of abstracts published at SGSU annual meeting.

Conclusions: Despite the changes to the organization and practice of government service urology and military residency programs the distribution of research presented at the annual Kimbrough seminar appears to be consistent.

Source of Funding: none

PAPER #4

MICROSCOPIC HEMATURIA EVALUATION STRATIFICATION: A MACHINE LEARNING APPROACH

Alexandria M. Hertz MD, Theodore Crisostomo-Wynne MD, Nicholas Hertz PhD*,
Timothy C. Brand MD, Mark I. Anderson MD
Tacoma, WA- to be Presented by Dr. Hertz

Objectives: Current guidelines for evaluation of microscopic hematuria use the threshold of 3 red blood cells per high power field. This is based on traditional microscopy which is being used less with emerging technologies. These evaluations also have a significant cost burden and expose patients to both infectious and radiation risk. Our objective was to explore the use of machine learning to establish a predictive model for who should undergo evaluation of microscopic hematuria.

Materials/Methods: A retrospective review was performed of 229 consecutive patients who underwent evaluation of microscopic hematuria. Information was collected to include urinalysis results, age, gender, cystoscopy, and imaging findings.

The classification of dichotomous cystoscopy results was performed using the MATLAB Classification Learner Tool using the following predictors: red blood cells on urinalysis, age, gender, smoking history, and radiation history. The classification performances were tested by fifteen machine learning algorithms in the domains of Decision Tree, Logistic Regression, Naïve Bayes, Support Vector Machine (SVM), and Ensemble classifiers.

A five-fold cross-validation protocol of randomly splitting the data into training and testing sets was used to evaluate the classification performance in terms of sensitivity, specificity, accuracy, and receiver operating characteristics (ROC).

Results: The best classification results were obtained using the Ensemble RUSBoosted Tree classifier with a specificity of 68%, a sensitivity of 75%, and an area under the curve (AUC) of the ROC curve of .75. This also had a positive predictive value of 48% and negative predictive value of 87%.

Conclusion: This machine learning model offers the first steps for a predictive model based on risk factors and real results for who would most benefit from undergoing a microscopic hematuria evaluation. This has a high negative predictive value and sensitivity, both of which are good for screening tools. This model will be strengthened with additional patients and results in the future, and act as a continually enhancing model in real-time.

PAPER #5

INTRAURETHRAL LIDOCAINE INSTILLATION AFTER ENDOUROLOGY PROCEDURE TO IMPROVE DYSURIA IN ANESTHETIZED PATIENTS

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(Presentation to be made by Dr. Balzano)

Objectives: Many urological conditions are diagnosed and treated with the use of endourology procedures. Unfortunately, dysuria is a common patient complaint following these procedures. Intraurethral lidocaine instillation is regularly used prior to office-based endourology procedures to alleviate dysuria, as well as, discomfort during the procedure. We sought to prove that that instilling lidocaine into the urethra at the conclusion of an endourologic procedure in the anesthetized patient will decrease dysuria in the immediate post-operative period.

Materials and Methods: Patients undergoing any endourologic procedure that does not require urethral dilation or post-operative catheter were randomized to receive intraurethral lidocaine or placebo at the end of the procedure. Their pain was evaluated with a pain scale after first void prior to discharge.

Results: 34 patients were enrolled, 17 received lidocaine, 17 received placebo. Average age of lidocaine group was 57 (22-80) and average age of the placebo group was 53 (29-74). The average pain score of the lidocaine group was 3.14 vs. the placebo group which was 3.47 ($p=.188$).

Conclusion: Intraurethral lidocaine has long been used for office based procedures and we sought to expand the use to the operating room. While our small sample size did not show a significant difference, it is worth continuing this study to definitively show that the cost and time associated with post operative intraurethral lidocaine does not significantly change dysuria and pain scores.

PAPER #6

Opioid-free Ureteroscopy is Associated with a Lower Incidence of New Persistent Opioid Use

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(Presentation to be made by Dr. John Schisler)

Introduction and Objective: The AUA (American Urological Association) Position Statement on opioid use recommends using opioids only when necessary. We sought to determine if routine prescribing of opioids is necessary for pain control after ureteroscopy for kidney stones, and if an association exists with persistent use.

Methods: We retrospectively reviewed the charts of patients who underwent ureteroscopy for kidney stones at Tripler Army Medical Center between April 2018 and March 2019. A clinical practice change was made in October 2018 to stop the routine prescription of opioids and patients were stratified into two groups representing the six month period before and after the practice change. In Group 1, opioids were prescribed routinely. In Group 2, a nonopioid pain regimen was prescribed routinely, with opioids utilized only for select cases. Encounters with a medical provider for postoperative pain, subsequent opioid prescriptions, and new persistent opioid prescriptions at 90-210 days were compared using the Fisher exact test.

Results: A total of 149 patients underwent ureteroscopy for kidney stones in the 1 year review period. There were 76 patients in Group 1 and 73 patients in Group 2. In Group 1, 53/76 (69.7%) were prescribed opioids postoperatively, compared to 13/73 (17.8%) in Group 2. There was no statistically significant difference between the two groups in ED encounters for pain (10.5% vs 5.5 %, $p = 1.0$), phone calls for pain (10.5% vs 9.5 %, $p = 1.0$), or new opioid prescriptions (18% vs 8.2 %, $p = 0.09$). The incidence of new persistent opioid use was significantly higher for those in Group 1 (10.5% vs 1.4%, $p=0.034$). When stratifying the patients based solely on prescription of opioids at time of ureteroscopy, 66 patients received opioids and 83 did not over the 1 year period. There was no significant difference in ED visits for pain (9% vs 7.2%, $p=0.78$), phone calls for pain (8% vs 12%, $p=0.42$), or new opioid prescriptions (15% vs 12%, $p=0.63$). The incidence of new persistent use was significantly higher in patients prescribed opioids at time of ureteroscopy (13% vs 0%, $p=0.0005$).

Conclusion: Stone formers are at high risk of recurrent opioid exposure. Opioid-free URS is associated with less persistent opioid use and does not increase healthcare utilization for postoperative pain. In the face of an opioid epidemic urologists should work to limit unnecessary opioid prescriptions.

PAPER #7

THE ROLE OF URETERAL STENTING FOLLOWING UNCOMPLICATED URETEROSCOPY FOR URETERAL AND RENAL STONES: A RANDOMIZED, CONTROLLED TRIAL

Amy M. Reed, M.D., Christopher L. Allam, D.O.

Objectives: It is well established that uncomplicated distal ureteroscopy can be safely performed without leaving a ureteral stent. However, there is a paucity of data regarding the utility of stent placement for proximal ureteral or renal stones following ureteroscopy. We designed a prospective, randomized controlled trial to evaluate the role of ureteral stent placement following ureteroscopy and pyeloscopy in proximal ureteral and renal stones. Primary objective was short term complications and secondary objectives evaluated analgesic use and postoperative pain.

Materials and Methods: Sixty-nine patients with proximal ureteral or renal stones 1.5cm or under were prospectively randomized into stented (35) or unstented (34) groups. Stones were managed with a combination of semi-rigid ureteroscopy or flexible ureteroscopy. Patients tracked postoperative analgesic use and completed validated pain questionnaires on postoperative days 1, 3, 7 and 30. Patients with stents had removal on postoperative day 7. Postoperative follow up imaging was obtained at four weeks.

Results: Overall complication rate between the stent and unstented group were not significantly different (). In the stented group, there was an overall complication rate of 37% including 3 readmissions for pain (8.5%), 7 visits to the ED for pain (20%), 4 UTIs (11.4%) and 1 urinary retention (2.8%). In the unstented groups, overall complication rate was 23% including 3 readmissions for stent placement (8%) and 5 ED visits for pain (15%). Mean stone size was 7.8mm. Younger patient age was associated with postoperative complications ($p < .002$). Patients in the stented group had significantly more irritative urinary symptoms ($p < .0001$) and pain ($p < .0001$), more days off work ($p < .01$) and more narcotic use ($p < .0005$). Postoperative imaging was available in 53 patients (76.8%) with no obvious strictures and stone free rate (SFR) of 94%.

Conclusions: Patients without stents after ureteroscopy have less pain and urinary symptoms, miss few days of work and have decreased narcotic use postoperatively. For the majority of patients, it may be possible to safely omit ureteral stents following uncomplicated ureteroscopy for proximal ureteral and renal stones, although further studies with larger patient cohorts are warranted.

Source of Funding: None

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PAPER #9

MERE MORTALS: A 10-YEAR EXPERIENCE OF VASOVASOSTOMY BY NON-ANDROLOGISTS

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Presentation to be made by Dr. Timiyin E-Nunu

Introduction: Most vasectomy reversals are performed by infertility fellowship-trained urologists. Most published success rates originate from high volume centers with infertility specialists. We sought to assess the success rate of vasovasostomy (VV) performed at an institution with no fellowship-trained microsurgeon.

Methods: We performed a retrospective review of all patients undergoing a vasectomy reversal at our institution between 2009 and 2019. In all cases, a surgical microscope was utilized. In no cases was fluid from the vas deferens examined for sperm. No vasoepididymostomies were performed. Success rate was defined by sperm present in a post VV semen analysis.

Results: A total of 301 vasovasostomies were performed during the 10-year study period. The mean patient age was 36.7 years (range 23-67) and mean spouse age was 31.7 years (range 20-46). The mean obstructive interval was 7.3 years (range 1-43). 203/301 patients completed a post reversal semen analysis. Of the patients who completed a post-reversal semen analysis, the patency rate was 167/203 (82%). In patients with an obstructive interval less than 10 years, 92/165 (56%) completed post reversal semen analysis. Patency rate in this group was 79/92 (86%).

Conclusions: Urologists who did not complete an infertility fellowship had VV patency rates of 82%. This is slightly lower than reports from high volume infertility centers. However, in the appropriately selected patient who is at low risk for needing a vasoepididymostomy, the general urologist can counsel patients that the patency rate after VV approaches 90%.

PAPER #10

TRENDS IN THE DISTRIBUTION OF HYPOGONADISM ENCOUNTERS AMONG SPECIALTY AND PRIMARY CARE CLINICS AT A SINGLE MILITARY TREATMENT FACILITY FROM 2008-2018

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(Presentation to be made by Dr. Charles Rinehart)

Objectives: The use of testosterone replacement therapy has increased dramatically, both within the military and civilian population over the last two decades. In this study we report and compare the trends in hypogonadism diagnoses among urology, endocrine and primary care clinics within a single military treatment facility between the years 2008-2018.

Materials and Methods: This is a retrospective analysis of all encounters at adult clinics within the Naval Medical Center San Diego between the years 2008-2018 with an ICD 9/10 diagnosis code corresponding to hypogonadism. Chi square test was used to evaluate the proportion of diagnoses seen by each clinic over the selected period. Additionally, linear regression models were used for multivariate analysis evaluating the effect of calendar year on the rate of hypogonadism diagnoses at each clinic.

Results: Over the 11 year period, there was a significant shift in the proportion of hypogonadism diagnoses among the evaluated clinics [$\chi^2(20, N = 11,474) = 482.43$, $p < 0.001$] with urology and endocrinology clinics shifting from 18.3% and 21.1% respectively at the beginning of the period to 67.1% and 10.1% at the end. Calendar year and clinic were both significantly related to hypogonadism diagnoses ($R^2 = 0.700$, $F(3, 29) = 22.59$, $p < 0.0001$).

Conclusions: From 2008 to 2018, there was a significant increase in the diagnosis of hypogonadism at Naval Medical Center San Diego. Additionally, a shift in the proportion of encounters for hypogonadism among urology, endocrinology and primary care at our institution was seen, with the urology clinic absorbing the majority of this growth. Although the reasons for this change are unclear, it highlights the importance of clinical standards in the diagnosis and treatment of this increasingly common condition.

Source of Funding: None

PAPER #11

INTERIM ANALYSIS FOR PATTERNS OF ERECTILE RECOVERY AFTER ROBOTIC-ASSISTED LAPAROSCOPIC PROSTATECTOMY: A PENILE REHAB STUDY

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(Presentation to be made by Dr. Helal Syed)

Objectives: Erectile dysfunction (ED) after Radical Prostatectomy (RP) is a known complication occurring in anywhere from 25 to 100% of patients undergoing this procedure, primarily due to the multifactorial nature of the disorder. Patient characteristics such as age, stage of cancer, and pre-operative potency as well as experience of the surgeon and the nerve-sparing technique, all play a significant role in postoperative ED. This study intends to examine if early and continuous Sildenafil citrate therapy or Pentoxifylline after RALP promotes improved erectile function as compared to placebo.

Materials and Methods: 240 subjects undergoing unilateral or bilateral nerve sparing robotic radical prostatectomy will be enrolled with approximately 120 subjects at Brooke Army Medical Center over a period of 5 years. Enrollment began in 2017. Each participant will be randomly assigned in a double blind fashion to one of three treatment plans and the stretched penile length, International Index of Erectile Function Scores (IIEF) and sexual activity will be measured at various points over the course of one year.

Results: To date 30 patients enrolled in the study; 7 of these subjects discontinued the study. Out of the remaining 23, 18 have completed the 12 month trial. Mean age of patients is 57.6 year. Mean TRUS volume was 31.5g, mean Volume of prostate from surgical specimens was 52g.58gm. Mean BMI of patient pre-RALP was 29.02 which was not significantly different at one year post-RALP was 29.5. Mean SPL pre-op was 12.25 and also not significant at one year post-RALP at 12.28. IIEF scores at the end of the 12 months were significantly less across all domains when compared to pre-surgery. When comparing the type of intervention (placebo vs pentoxifylline vs sildenafil citrate), there was no significant difference in IIEF scores across all domains at 12 months post-RALP and there was no difference in the SPL difference from pre to post-RALP either.

Conclusions: Based on these small numbers, it appears that there is no difference in IIEF scores as well as SPL between placebo vs pentoxifylline vs sildenafil citrate and as such regimens utilizing Viagra or other expensive medications may not be necessary.

Source of Funding: None

PAPER #12

CLINICAL CARE PATHWAY TO REDUCE TIME TO THE OPERATING ROOM FOR TESTICULAR TORSION

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(Presentation to be made by Dr. Chad Pusateri)

Objective: Testicular torsion is a time critical diagnosis that requires urgent surgical attention. Time from the ER to the OR should be reduced as much as possible. We aim to create a testicular torsion care pathway in order to reduce time from the emergency department to the operating room.

Materials and Methods: All testicular torsion cases for 3 year period were reviewed (July 2016-June 2019). Critical time points were then reviewed in order to identify areas where time may be reduced. Based on these times, a clinical care pathway was developed in order to reduce time to surgical intervention.

Results: 17 cases were identified during this time period. Mean time from Emergency Department triage to cut time in the operating room was 225 minutes (112-467 mins). Mean time from evaluation by emergency room physician to ultrasound results was 98 minutes (29-297 mins). Mean time from ultrasound result to operating room start time was 79 minutes (13-202 mins). Orchiectomy was performed in 6/17(35%) patients and was strongly correlated to delayed presentation. Of the orchiectomies, mean delayed presentation was 47 hours.

Conclusions: Critical appraisal of testicular torsion times to the operating room should be performed regularly within institutions. A multidisciplinary care pathway can be utilized in order to reduce time to the operating room for this urgent diagnosis.

PEDIATRIC RENAL TRAUMA WITH HILUM INJURY: ARE GUIDELINES NEEDED?

Craig, KM, Balsamo L, Akhavan A, Poppas DP

Objective: Guidelines are lacking to guide surgeons caring for pediatric patients with renal trauma associated with vasculature injury. Current management is extrapolated from adult treatment protocols. We investigated the treatment of pediatric patients with renal trauma associated with injury to the hilum using a Pediatric Health Information System Database (PHIS) by age group and determine if the outcomes indicate a need for unique age group specific guidelines.

Methods: We performed a retrospective database review of patients with renal trauma diagnosis in the PHIS national discharge billing database from January 2004 to December 2018. We identified records with ICD9 (2004-2015) codes starting with 9024 and ICD10 (2015-2018) codes starting with S354. Patient age, gender, disposition, length of stay (LOS), mortality, mechanism of injury, and highest level of intervention were recorded. Patients were divided into six age groups in accordance with National Institute of Health and Human Development Conference. And duplicate entries were eliminated so that only the initial presentation, highest grade of renal injury of each renal unit, and the highest level of care were considered.

Results: We identified 103 patients with 107 renal unit vascular injuries. Injuries were most common in the 10-14 year old age group. Patients with a vascular injury were admitted for an average 8.9 days, which was not statistically significant between age groups ($p=0.161$). The majority of patients in all age groups were admitted to an ICU. Patients managed in the ICU decreased with increasing age (100% at 0-1 years to 55% in the 15-18 year old age group). However, the differences in ICU admissions did not significantly differ between age groups ($p=0.357$). The majority of the patients were managed non-operatively in all age groups; but non-operative management was least common in the 2-4 year old age group (93.4% vs. 95.0%-96.5% $p < 0.001$). Interventional radiology procedures including embolization and percutaneous nephrostomy placement only occurred in patients >10 years old. A nephrectomy was required in 4.35% of the patients and overall mortality was low (4.67%) in this patient population and did not vary by age group ($p=0.470$). Motor vehicle accidents were the most common mechanism of injury in all age groups except the 0-1 year old group where abuse predominated. Cycling injury occurred 4.5 times more often than the next common mechanism of injury (snow-related injuries).

Conclusion: Renal vascular injuries are managed differently depending on age group of patients. Age specific guidelines are necessary for management of patients with injury to renal vessels. Cycling is an important mechanism of injury in patients who suffer injury to the renal vasculature. Interventions directed at preventing cycling injuries in the pediatric population will be useful.

PAPER #14

OPIOID PRESCRIBING TRENDS IN PEDIATRIC MINOR SURGERIES

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(Presentation to be made by 2LT Timothy Brandt)

Objectives: Post-operative opioid prescribing rates in the pediatric population within the military health care system may have short and/or long-term effects in pediatric patients. In the current climate of the opioid epidemic, health care providers are now focusing on the impacts of opioid prescribing in pediatric populations. The objective of this paper is to understand the current state of opiate prescribing in pediatric urology within the military health care system.

Materials and Methods: This study is a single institution retrospective chart review of pediatric patients ages 18 years or younger who underwent penile or scrotal operations between 2011-2016. Laparoscopic, open, and robotic operations were excluded from the study. The main outcome measure was opiate prescribing rates for this population.

Results: 521 total patients underwent minor surgical operations during the study time period: 362 penile surgeries to include circumcision, circumcision revision, hypospadias repair and hypospadias complication repairs, and 159 scrotal surgeries including orchiopexy, hernia/hydrocele repair, and varicocele. Patients were ages 0 days to 18 years, mean age was 3.5 years. A total of 53 patients received narcotics (10%), from 13 different prescribers. The amounts ranged from 20ml to 300ml for liquid solutions and 10 to 40 tabs for pill formulations. There were a total of 4 complications requiring additional procedures and no patient calls were received for pain not being controlled with discharge medications. When looking at opioid prescribing over time, the data indicated significantly less opioid prescribing as the study time period progressed (F 37.38, $p > 0.001$). The data also indicated more opioid prescriptions were given to older patients (F 42.28, $p > 0.001$). Additionally, scrotal/inguinal surgeries were seen to have more opioids prescribed when compared to penile surgeries (X 41.94, $p > 0.001$).

Conclusions: Opioid prescription for minor surgeries was overall low and did not increase complication rates or patient calls when not prescribed. However, older patients were more likely to receive opioids and the number prescribed may be significant.

Source of Funding: None

**PEDIATRIC REFERRAL PATTERNS FOR PRIMARY MONOSYMPTOMATIC
NOCTURNAL ENURESIS**

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(Presentation to be made by Dr. Daniel Ensley)

Objectives: Primary Monosymptomatic Nocturnal Enuresis is a common pathology in the pediatric population, occurring in 15% of 5 year-old children. The International Children's Continence Society (ICCS) has provided recommendations for evaluating and treating these children. Initial evaluation consists of a patient history, physical exam, spot urinalysis and voiding diary or questionnaire. Treatment includes behavioral modifications, alarm therapy and medications. In addition, there is an increasing demand for the services of the small number of pediatric urologists. The purpose of this study is to identify the trends of primary care evaluation and treatment prior to pediatric urology referral.

Materials and Methods: The Armed Forces Health Longitudinal Technology Application database for Brooke Army Medical Center and Wilford Hall Ambulatory Surgical Center was used for this study. All ICD-9 and ICD-10 coded visits for primary nocturnal enuresis between 1 January 2008 and 31 December 2017 were screened. Children between 5 and 18 years of age were evaluated. Outcomes evaluated were imaging and laboratory studies ordered, prevalence of constipation and treatment management prior to Pediatric Urology referral.

Results: 108 children were referred to the Pediatric Urology clinic for evaluation of nocturnal enuresis. The patient population showed a male predominance (n=70). Behavioral modifications and alarm therapies were initiated in 55 (51%) patients and 45 (42%) patients ($p < 0.00001$) respectively. Medications were rarely prescribed with only 24 (22%) patients starting pharmacotherapy. Desmopressin was the most common prescription (n=18). Imaging was obtained in 24 patients: 16 ultrasounds and 14 abdominal x-rays. Six of these patients had both sonographic and radiographic imaging performed. 11 of the 14 abdominal x-rays were positive for evidence of constipation. Only 2 renal sonograms had abnormal findings. 75 of the 108 patients had urinalysis performed during initial workup ($p < 0.00001$).

Conclusions: Prior to Pediatric Urology referral, thirty percent of patients did not have a urinalysis accomplished as part of their initial evaluation. In addition, just over half of the patients had either one of the first line treatment therapies initiated prior to referral. An increased rate of evaluation and treatment at the primary care level could decrease the need for Pediatric Urology referral.

Source of Funding: None

PAPER #16

USE OF DUAL ENERGY CT IN GUIDING TREATMENT IN COMPLEX RENAL CYST

Matt Davis MD, Julia Fiuk MD, Kyle Hart MD, Nick Lanzatti, Aye Lwin , Brad Schwartz

Objective: Dual energy CT (DECT) is a novel imaging modality that may assist in management of complex renal cysts. We reviewed cases using this modality at our institution.

Methods: This retrospective proof of concept review highlights 17 cases utilizing DECT to assist in management of complex renal cysts. All patients were referred to our tertiary care center with prior ultrasound or CT imaging. DECT imaging was obtained when initial imaging was insufficient to guide treatment. We plan to retrospectively review both sets of images along with treatment outcomes or plans. A literature search was performed and salient benefits of DECT were highlighted.

Results: 17 pilot patients with DECT imaging were identified from 2014 to 2019 that had been referred to our institution for treatment. Six of the scans demonstrated increased iodine uptake that suggested solid components, and four of the six elected to undergo surgery. Two patients had Grade 3 clear cell renal cell carcinoma, one had grade three papillary renal cell carcinoma, and the final patient's pathology was benign. Only one patient without iodine uptake on DECT elected to undergo surgery, and his pathology returned benign. All remaining patients have remained on active surveillance.

Conclusions: Based on lack of iodine uptake, DECT successfully downgraded management to surveillance in patients who would have received surgical intervention according to current standard practice. Use of DECT lowered total radiation dose by precluding the need to obtain pre-contrast images. In contrast and iodine enhancing lesions, there is potential to use quantitative iodine measurement to distinguish between benign and malignant lesions.

PAPER #17

INDETERMINATE RENAL CYSTS: CLINICAL FEATURES, FOLLOW UP, AND PROGRESSION

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(Presentation to be made by Dr. Ashley Henry)

Objectives: Cystic renal lesions can be either benign or malignant. The Bosniak 2F category has been cited to have a malignancy rate ranging from 5-38% and is traditionally followed with interim imaging. Few retrospective studies on risk factors for malignant transformation of Bosniak 2F cysts have been performed. This study aims to assess clinical, radiographic, and laboratory features as they pertain to risk of progression. Additionally, with an updated 2019 proposal for Bosniak classification, this study retrospectively reviews the initial diagnostic imaging and reclassifies according to the new proposed modifications.

Materials and Methods: This is a retrospective single center chart review from March 2006 to March 2016. Patients were identified according to their IMPAX records and specifically chosen if the phrase "Bosniak 2F" was included in the report as viewed by the clinician. Fifty charts were retrospectively reviewed. Once identified, AHLTA, CHCS, and IMPAX records were queried for patient's age, past medical and surgical history, family history, prior urinalysis results, urine cytology results, prior CBC results, additional imaging, and pathology results. Amongst radiologic data, the size and number of septations were recorded along with size of the largest septation on follow up imaging. Patients were followed for number of subsequent imaging studies specifically ordered for surveillance and ultimate biopsy results. Inclusion criteria included age above 18, imaging and laboratory studies available in EMR, and clinical visits or follow up imaging for five years. Patients with renal cysts that had previously been biopsied or with no clinical encounters in the EMR were excluded.

Results: Identified in 50 patients (35 men, 15 females; average age 67.9) with 2F cysts. Each patient averaged 2.57 CTs, 1.53 MRIs, and 1.14 US with a range of 0-10 CTs, 0-7 MRIs, and 0-4 US during their surveillance period. One patient progressed to malignancy (2%). The number needed to treat was 16.7 in order to identify one patient with malignancy. Of the 50 charts reviewed three out of 50 developed contrast allergies (6%) compared to the 0.2-0.7% demonstrated in several large studies. There was no clinical significance (p 0.399) for positive cytology during initial diagnosis. There was no correlation (R -0.0563) between age and number of CTs obtained.

Conclusions: Continued prolonged clinical surveillance of patients with these indeterminate features proves in most cases costly and unproductive. Adoption of the new 2019 proposal for Bosniak classification may obviate the need for surveillance in select patients. Further studies are needed to help identify clinical features that can help guide clinicians on counseling patients with Bosniak 2F cysts.

Source of Funding: None

TECHNICAL INTRAOPERATIVE MANEUVER FOR MANAGEMENT OF CHALLENGING LEFT-SIDED INTERIOR VENA CAVA THROMBUS IN RENAL CELL CARCINOMA

Jenna Winebaum, MD; Caitlin Shepherd, MD; Christopher Foote, MD, Satish Nadig, MD, Thomas Keane, MD; Robert Grubb, MD

Introduction: Left sided inferior vena cava (IVC) thrombectomy is a challenging case, especially in cases with bulky thrombus. The longer length and need to work under the mesentery increase the difficulty of removing left sided tumors compared to right-sided tumors. Here, we discuss a novel technique we have used to safely resect difficult tumor thrombi.

Methods: Our multidisciplinary surgical team (urology and transplant) performed left sided nephrectomy with IVC thrombectomy using this technique in two cases. In one case the procedure was done due to aberrant anatomy with associated thrombus and due to hemodynamic instability in another. In the technique, the renal vein is stapled as close to IVC as possible, followed by cavotomy with standard proximal and distal caval control with excision of the renal vein stump including the entire staple line to remove all remaining thrombus.

Patients: The first patient underwent a cytoreductive nephrectomy for metastatic type 2 papillary RCC with known bifurcated renal vein and level II tumor thrombus. The second patient had a renal mass with level II tumor thrombus and experienced greater than expected blood loss during kidney mobilization due to extensive collateralization. Stapling across the left renal vein allowed expedited and safe removal of both the mass and the thrombus without need for caval reconstruction or extensive repair in both patients. Both patients are without evidence of intravascular recurrence or lung metastasis at 6 month follow-up

Conclusion: Stapling across the left renal vein tumor thrombus is a novel surgical technique that may reduce blood loss and allow more efficient excision of IVC and renal vein thrombus in left sided cases, without the need to bring the tumor across the mesentery. More experience and longer term oncologic outcomes are needed before we advocate broad adoption of this technique.

PAPER #19

PREDICTORS OF UPSTAGING IN CLINICAL STAGE T1 RENAL MALIGNANCY

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(Presentation to be made by Dr. Robert Cooper)

Objectives: It is well known that the majority of small renal masses are malignant however only 30% of these are potentially aggressive cancers. With the recent increase in incidental diagnosis of small renal masses in younger patients, there has been a trend toward observation or nephron sparing interventions. The purpose of this study is to determine risk factors which can be used to identify patients with the potential for more aggressive disease.

Materials and Methods: A multi-center international retrospective review of was conducted in 5 centers including Winnipeg (Canada), Johns Hopkins, UCSD, China, and UT Health San Antonio. Consecutive patients with cT1 renal cell carcinoma managed with surgery between 2008 and 2019 were included. Clinical risk factors were evaluated. A multivariate analysis was performed to identify significant characteristics predictive of upstaging to pT3a disease.

Results: 1488 patients managed surgically for their cT1 disease met inclusion criteria. The median age was 60 years old and 60.8% (905) were male. Median preoperative tumor size was 3.2cm. Clinical factors were evaluated. Predictors of upstaging to pT3a disease included advanced age ($p<0.001$), male sex ($p=0.048$), tumor size ($p<0.001$), history of diabetes ($p=0.016$), and treatment with radical nephrectomy ($p<0.001$). There were no center effects identified.

Conclusions: Active surveillance, or delayed intervention, carries inherent oncologic risk. In this surgical cohort patients with larger tumors and male sex were at increased likelihood of being upstage to pT3. However, patients with a diabetes, advanced age, and those treated with radical nephrectomy were more likely to be upstaged. Therefore, patients with these characteristics, and those who traditionally may have been good candidates for active surveillance may actually harbor increased biological risk. Finally, it is intriguing to note that those treated with radical nephrectomy were more likely to be upstaged and this requires further investigation.

Source of funding: None

POST OPERATIVE PAIN SCORES AND TIME TO RETURN OF BOWEL FUNCTION AFTER IMPLEMENTATION OF AN ENHANCED RECOVERY CLINICAL CARE PATHWAY FOR RENAL SURGERY

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(Presentation to be made by LCDR Blair Townsend, MD, MBA)

Objectives: Multimodal pain management strategies are embedded within enhanced recovery after surgery (ERAS) protocols to decrease postoperative pain, opioid consumption and enhance bowel recovery. Following initiation of ERAS in our nephrectomy patients, we sought to evaluate the effect on post-operative pain scores and return of bowel function.

Methods/Materials: Pain scores on POD 0-3 (using VAS, 0-10) and time to return of bowel function (days) were analyzed from two patient cohorts and entered into our Research Electronic Data Capture (REDCap) renal surgery database. The first cohort consisted of 100 patients who had nephrectomy performed prior to 10/1/2018 before an enhanced recovery pathway was implemented. The second cohort consisted of 94 consecutive patients who underwent nephrectomy between 10/1/2018-5/31/2019 after an enhanced recovery pathway was implemented. These cohorts were further divided by operation type (partial and radical nephrectomy) and approach (open and laparoscopic/robotic). Fisher's exact tests were used for categorical outcomes and median two sample tests were used for continuous outcomes.

Results: There were no differences in post-operative pain scores between the cohorts regardless of nephrectomy type or approach. Patients in the enhanced recovery cohort who underwent radical nephrectomy had faster time to first bowel movement than those before protocol implementation (2 v 3 days, $p=0.013$). Patients in the enhanced recovery cohort who underwent open radical nephrectomy trended towards decreased time to return of flatus (2 v 3 days, $p=0.057$) and first bowel movement (2 v 3 days, $p=0.059$) compared to their counterparts before protocol implementation (Table 1). Patients in the enhanced recovery cohort who underwent open partial nephrectomy had faster time to pain control than those before protocol implementation (2 v 3 days, $p=0.042$) (Table 2).

Conclusions: Our initial experience suggests possible improvements for nephrectomy patients in time to pain control and return of bowel function using an enhanced recovery clinical care pathway, particularly open nephrectomies. Future work will evaluate these pain scores and time to bowel function in a larger cohort of patients.

Source of Funding: None

BARRINGTONS'S REFLEXES REVISITED: PROXIMAL URETHRAL ELECTROSTIMULATION CAUSES REMARKABLE EXCITATORY BLADDER RESPONSE IN SPINAL CORD INTACT RATS

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(Presentation to be made by Dr. Bradley A. Potts)

Objectives: Detrusor underactivity is an important contributor to voiding dysfunction with numerous neurogenic and myogenic causes; unfortunately, there are few reliable treatment options. In the early 1900's, Barrington discovered excitatory urethra-to-bladder reflexes in cats via pudendal, hypogastric, or pelvic nerve afferents. We electrically field-stimulated nerves of the proximal urethras of spinal-intact (SI) rats before and, in some, subsequent to acute suprasacral spinal cord injury (SCI) to determine if we could elicit these reflexes in normal and acute spinal shock conditions.

Materials and Methods: Eight urethane-anesthetized female Sprague-Dawley rats (230-290g) received ureteral diversion and transvesical catheters via laparotomy. The ventral pubis was removed to expose the urethra. Five rats were prepped with posterior vertebral dissection to facilitate acute SCI. Following continuous cystometry, static bladder volumes were set below bladder capacity (BC) and proximal urethral electrical stimulation (PUES) was applied via two 50 μ m stainless steel wire electrodes placed across the rostral and caudal proximal urethra and immediate surrounding tissue. PUES was applied for 30 sec (60 sec recovery) with 0.1msec pulse, 5-250Hz and 10-50V. Following SI stimulation, SCI was performed at T9-10 (n=5). The bladder was filled to pre-SCI BC and PUES was performed from 5-250Hz and 50-75V. Extracted data included presence/absence of bladder contraction and evidence of lower extremity motor activity. Data were assigned a score of 1 if there was a bladder without motor response, 0 for no response or both bladder and motor response, and -1 for only motor response. Data were analyzed graphically and frequencies with non-negative results were further analyzed with one-way ANOVA.

Results: Overall positive responses were observed in SI rats for frequencies of 20Hz and 50Hz. Only 20Hz demonstrated significant differences by intensity; 30 and 40V elicited significantly higher average scores than other voltages ($P=0.0213-0.0365$ for 10, 20, and 50V). While 50V always elicited both a bladder and motor response in SI, only motor responses were observed after SCI.

Conclusions: In the SI rat, PUES at 20Hz and 30-40V elicited reliable bladder contractions in the absence of observable motor responses. Failure to elicit bladder responses following SCI suggests supralumbar involvement in excitatory urethra-to-bladder reflex arcs.

Source of Funding: Discretionary Research Funds

**COMPLICATIONS AND RISK FACTORS FOR MALE URETHRAL SLING
SURGERY IN MILITARY BENEFICIARIES**

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(Presentation to be made by Dr. Jessica B. Saeger)

Objectives: Male stress urinary incontinence (SUI) can often cause significant distress and negatively affect quality of life. It is commonly treated with a urethral sling procedure. There is limited information about complications from multi-institutional administrative data sets that include many hospitals and surgeons. The aim of this study is to describe adverse events and identification of risk factors after urethral male sling surgery.

Materials and Methods: A retrospective cohort study was performed using the Military Health System Data Repository (MDR). Male urethral slings performed from 01JAN2014 to 01AUG2018 were selected. Patient demographic information, preoperative diagnosis, surgical history, comorbidities, and surgeon volume were identified. The primary outcome was to measure 30 day complication rates and secondarily identify risk factors for these complications.

Results: MDR revealed 91 males that had undergone urethral sling during the study period. All patients had a diagnosis of SUI. Robotic Assisted Laparoscopic Prostatectomy (RALP) was performed prior to sling surgery in 55 men and Radical Retropubic Prostatectomy was performed in 30. Overall, there were no hospital readmissions or reoperations within 30 days of the procedure. All of the complications were minor with fifteen falling under Clavien Grade I complications and three under Clavien Grade 2. The most common complication requiring emergency visits or unplanned outpatient clinic visits was urinary retention requiring catheter placement in eight patients. The next most common complication was wound dehiscence experienced by five patients, where only local wound care was provided. Antibiotics were given to one who developed a urinary tract infection and another with a superficial wound infection. One patient had mild bleeding, which did not require any intervention, and one experienced rash/hives treated with antihistamines.

Conclusions: Male urethral slings are associated with an overall minor complication rate of 19.8% and there were no major 30 day complications. The most common minor complications were urinary retention requiring insertion of a catheter and mild wound dehiscence at 8.7% and 5.5%, respectively.

Source of Funding: None

PAPER #23

CHARACTERIZATION OF DYSPAREUNIA IN WOMEN PRESENTING TO GENERAL UROLOGY CLINIC

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(Presentation to be made by Dr. Clinton Yeaman)

Objectives: Dyspareunia affects an estimated 8%-22% of US women; however, little is known about its specific location, qualities, and bother. We thus aimed to specifically characterize dyspareunia in a general urology population.

Methods: This is an IRB-approved prospective, survey-based study of female patients presenting to a general urology clinic over a 10-month period (7/2018-5/2019). Participants were recruited and screened by a study coordinator in clinic registration, excluding those presenting for a pain condition. Patients were given a 32-item survey with questions pertaining to sexual activity and dyspareunia. Questions regarding dyspareunia included severity, location, quality, frequency, and age of onset. A figure was provided to aid in localization. Demographics and pertinent history were obtained via chart review. Analysis was performed with R programming language (3.6.1).

Results: 181 women meeting inclusion criteria completed the survey, with a mean age of 56 years. Fifty-three (29.3%) of overall cohort reported dyspareunia; however, among sexually active women the prevalence was 45.9%. A third of patients with dyspareunia also reported having at least weekly sexual activity. The majority (60%) of patients with dyspareunia experienced onset prior to age 50. All localized their pain inside the vagina (Table 1), though patients reported a median number of 2 specific pain locations (IQR 1,4). A significant proportion (34%) reported high or very high pain severity, and 45% had pain most or all times of sexual activity. Patients also described the quality of pain, with the majority (62.3%) reporting sharp or stabbing pain (Table 2). Most (69.8%) endorsed only one pain quality, though a subset (24.5%) endorsed 2+ qualities (IQR 1,4). Over half (53%) of patients indicated moderate to severe dissatisfaction with their sexual activity.

Conclusions: A significant percentage of women presenting to a general urology clinic experience dyspareunia (29%). Overall patient-reported characteristics of the pain, including location, quality, and severity, varied greatly.

ANNEXIN A1 INHIBITS NLRP3 MEDIATED INFLAMMATION DURING BLADDER OUTLET OBSTRUCTION

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(Presentation to be made by Dr. Brent Nosé)

Objectives: The transurethral resection of the prostate is the gold standard surgical management for benign prostatic hyperplasia, the most common cause of bladder outlet obstruction in men. Despite the prevalence and relative success of this surgery, up to one third of men will have persistent irritative voiding symptoms post-operatively. Our lab has done extensive work examining inflammation secondary to bladder outlet obstruction and its contribution to the long-term sequelae of bladder dysfunction. We have found that this inflammatory pathway is dependent on the NLRP3 inflammasome. However, little is known about the effects of deobstruction on the detrimental inflammation in the bladder. Recently, Annexin A1 has been shown to play a critical role in the resolution of inflammation in other tissues but its effects in the bladder and on the NLRP3 pathway have yet to be studied. In the present study, we have explored the ability of Annexin A1 to inhibit NLRP3 activity in vitro and its potential to expedite the resolution of inflammation in vivo following bladder outlet deobstruction.

Materials and Methods: In vitro, urothelial cells from Sprague Dawley rat bladders were plated in culture for 24 hours, washed and treated with increasing concentrations of AC2-26, the active N-terminal peptide of Annexin A1. Following a one-hour incubation period, cells were treated with 0.625 mM ATP for an additional hour. Caspase-1 activity (a marker of NLRP3 inflammasome activity) was then measured by cleavage of a fluorogenic substrate (YVAD-AFC).

In vivo, bladder outlet obstruction was performed in female rats by insertion of a 1 mm (o.d.) urethral catheter, tying a silk ligature around the urethra and removing the catheter. All rats remained obstructed for 12 days. The deobstruction cohort had their urethral ligature removed after the 12th day and were then provided either 1 g/g of AC2-26 in PBS or vehicle once daily for two or three days. One hour prior to sacrifice, 25 g/g of Evans blue dye in normal saline was injected IV. Bladders were then removed, weighed and Evans blue concentration was measured spectrophotometrically.

Results: In vitro studies demonstrated a dose-dependent decline in caspase-1 activity by AC2-26 (% maximal ATP response) with an IC₅₀ of 0.26 M.

In vivo, bladder weights decreased from a mean of 289.1mg on the day of deobstruction to 211.3 mg three days after deobstruction. This effect was augmented with AC2-26 which resulted in a mean bladder weight of 166.23 mg. The concentration of Evans blue similarly decreased with deobstruction from 28.1 ng EB/mg to 15.9 ng EB/mg after three days of deobstruction. The concentration decreased further with AC2-26 to a mean of 11.68 ng EB/mg.

Conclusion: The interaction between Annexin A1 and NLRP3 has not previously been studied; however, we have demonstrated that Annexin A1 has a dose dependent inhibitory effect on NLRP3 dependent caspase-1 activity. Excitingly, the resolution of inflammation following deobstruction is augmented when treated with AC2-26. Overall these results demonstrate that Annexin A1 can enhance the resolution of inflammation following bladder deobstruction and that it likely does this, at least in part, through direct inhibition of the NLRP3 inflammasome.

Source of Funding: Research support was provided by the National Institute of Diabetes and Digestive and Kidney Diseases (DK103534 to J.T.P.) and intramural funds from Duke University.

ASSOCIATION OF RACE AND LONG-TERM PROSTATE CANCER OUTCOMES
IN A COHORT OF MILITARY HEALTH CARE BENEFICIARIES UNDERGOING
SURGERY: 1990-2017

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(Presentation to be made by Dr. Nathan Oehrlein)

Objectives: To determine differences in long-term prostate cancer (PCa) outcomes between self-reported AA and CA men, and to examine clinicopathologic features across self-reported CA, AA, Asian, and Hispanic men.

Methods: The Center for Prostate Disease Research (CPDR) multi-center national database was the source of study subjects. Eligible patients included all men who underwent radical prostatectomy (RP) as primary treatment for PCa between January 1, 1990 and December 31, 2017. Comprehensive demographic, clinical, treatment, and outcomes data were collected on all enrollees. Unadjusted Kaplan-Meier estimation curves and multivariable Cox proportional hazards analysis with adjustment for key clinical and pathologic factors were used to examine BCR-free, metastasis-free, and overall survival as a function of patient self-reported race (AA vs. CA).

Results: This study included 7,067 men, of whom 5,155 (73%) were CA, 1,468 (21%) were AA, 237 (3%) were Asian, and 207 (3%) were Hispanic. AA men had a significantly decreased time from RP to BCR compared to CA men (HR=1.25, 95% CI=1.06-1.48, P=0.01); however, no difference was observed between AA and CA men for time from BCR to metastasis (HR=0.73, 95% CI=0.39-1.33, P=0.302) or time from metastasis to overall death (HR=0.67, 95% CI=0.36-1.26, P=0.213), controlling for potential confounding variables. Hispanic men had the lowest diagnostic PSA (P<0.001), and Asian men were less likely to be obese (P<0.001), and more likely to have a shorter time from diagnosis to RP (P<0.001), be diagnosed with a lower PCa stage (P=0.009) and grade (P=0.046) and to receive secondary treatment (P=0.017).

Conclusions: In a setting of equal access to and receipt of health care, AA men had shorter time from RP to BCR, but comparable longer term outcomes, including risk of metastasis and overall death.

Funding: DOD CDMRP Hlth Disparities Award #W81XWH-15-1-0381

LEARNING CURVE FOR ROBOTIC-ASSISTED LAPAROSCOPIC
RETROPERITONEAL LYMPH NODE DISSECTION

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(Presentation to be made by Dr. Colin A. McLain)

Objectives: Robotic-assisted laparoscopic retroperitoneal lymph node dissection (R-RPLND) using a low abdominal approach was first developed at the two reporting institutions by fellowship-trained surgeons in 2008-09. Although R-RPLND is a challenging laparoscopic procedure, we hypothesized that surgical times and operative complications would decrease as surgeons became more facile with R-RPLND.

Materials and Methods: We retrospectively reviewed 121 consecutive R-RPLNDs performed at Naval Medical Center San Diego and Mayo Clinic Arizona by four fellowship trained robotic surgeons between 2008 and 2018. Linear regression was used to analyze independent predictors of set-up time, operative time, and lymph node counts. Logistic regression was used to analyze open conversions, overall complications, and high-grade complications. Variables included as independent predictors were: sequential case number, surgeon, clinical stage, chemotherapy status, RPLND template, and BMI. Univariate and multivariate analyses were conducted. Statistical significance was established at $\alpha = 0.05$.

Results: There was no change in setup time with case number ($p=0.317$), but differences were noted between surgeons. Operative times decreased with increasing case number ($p<0.001$) but were negatively affected by clinical stage III testis cancer ($p=0.029$) and history of chemotherapy exposure ($p=0.050$). Surgical times are predicted to decrease by one hour after 44 cases. Lymph node counts were dependent only on the surgeon. Fewer open conversions and less overall complications occurred as experience was gained ($p=0.042$ and $p=0.001$, respectively). No variables were predictive of high-grade complications. There were no in-field recurrences for our testis cancer cohort at a median [IQR] follow-up of 12 [2-24] months.

Conclusions: Consistent with the learning curves shown for other technologically advanced surgical techniques, experience appears to improve surgical times and lower complication rates for R-RPLND. Attention to variations in individual surgeons' techniques for R-RPLND may provide opportunities to improve setup time and lymph node yield. Disease characteristics play a role in operative times, but do not predict the likelihood of a peri-operative complication. These findings suggest that this procedure can be successfully adopted, safely performed, and continually improved by experienced robotic surgeons.

Source of Funding: None

SAFE TRANSITION TO OPIOID-FREE PATHWAY IN PATIENT UNDERGOING ROBOTIC-ASSISTED LAPAROSCOPIC PROSTATECTOMY: A RETROSPECTIVE ANALYSIS OF A US VETERANS AFFAIRS MEDICAL CENTER PATIENT COHORT

Introduction:

Opioids are commonly used for control of post-operative pain, though not without risks. Our objective was to reduce opioid use following RALP.

Methods:

Before implementation of this single-institution quality improvement project, local anesthesia (LA) was not used. Patients generally received oral opioids for pain control, plus IV opioids as needed. With the new pathway, LA was administered around each incision at the end of the case, both subcutaneously and into the transversus abdominus plane. Acetaminophen was scheduled, as was ketorolac if GFR >60mL/min. Outcomes were analyzed for cases over a seven month period, three months before and after the transition month. Statistical significance was achieved at a p-value < 0.05.

Results:

59 patients undergoing RALP were included in the retrospective analysis, with 31 receiving LA. There was no significant difference between the LA and no LA groups for age, BMI, or surgery duration. Bupivacaine 0.25% was used in all except in two cases when Ropivacaine 0.25% was used at an average dose of 1.6mg/kg. 83.9% of patients who received LA did not use opioids, compared to 17.9% of patients without LA ($p < 0.001$). There was a significant difference in pain scores on POD 0, 1, and 2, with patients who received LA rating their pain 2.1, 2.7, and 2.1 points lower for each day ($p = 0.003$, <0.001 , 0.008 , respectively). Patients receiving LA were advanced to a regular diet faster (10.2 vs 16.4 hours; $p = 0.001$). The RR was lower with LA (6.5 vs 21.4%), though this did not reach statistical significance ($p = 0.093$).

Conclusion:

This demonstrates that post-RALP pain scores and opioid use can be safely and significantly reduced with use of LA and non-opioid medications, which can potentially be applied to other minimally invasive surgery.

PAPER #28

MODERATE TO SEVERE INCONTINENCE AFTER PROSTATECTOMY: PREDICTING RESOLUTION USING EARLY POST-OPERATIVE FACTORS

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(Presentation to be made by Dr. Elizabeth Roger)

Introduction and Objective: The natural history of moderate to severe post-prostatectomy incontinence (PPI) has not been adequately studied. Our aim was to predict which patients may benefit from prompt surgical interventions for incontinence. We hypothesized that men using ≥ 3 pads and reporting significant bother symptoms shortly after surgery would be least likely to regain continence long term.

Materials and Methods: The study population included men with localized prostate cancer treated with radical prostatectomy at a single center from December 1999 to April 2018. EPIC-26 and UCLA quality of life surveys were completed at multiple time points post-op, up to 60-months follow-up. Associations between health outcomes and pad use were assessed using Pearson's chi square tests. The interaction of pad use post-surgery and bother score on achieving continence was considered in the forward selection multinomial logistic model.

Results: 1,568 patients were assessed at 30 months and 689 at 60 months. At one month following surgery, 1,034 reported using < 3 pads and 534 reported ≥ 3 pads. 32% of robotic prostatectomy patients ($n=404$) reported ≥ 3 pads compared to 55% of laparoscopic prostatectomies ($n=67$). Patients using < 3 pads were 7.17 times more likely to become continent (defined as using 0-1 pads) by month 30 compared to patients using ≥ 3 pads (95% CI 5.151-9.991). Patients using < 3 pads had a 0.87 probability of regaining continence by month 60, while patients using ≥ 3 pads had a 0.13 probability. High bother score at any time post-surgery was significantly associated with using ≥ 3 pads ($p<.0001$). Age, extra pad use, and high bother score at one-month follow-up were all significant predictors of achieving continence by month 60 (p 0.01, <0.0001 , 0.0002 respectively). Patients with extreme bother scores and use of ≥ 3 pads at one month had a lower probability of recovering continence than patients without these characteristics ($p<0.0001$).

Conclusion: Patients who require ≥ 3 pads and are highly bothered are less likely to recover continence or improvement in their quality of life. This cohort should be appropriately counseled. These men may benefit from early surgical interventions for PPI at six months post-operatively.

Source of Funding: None

PAPER #29

ROUTINE POSTOPERATIVE HEMOGLOBIN ASSESSMENT POORLY PREDICTS TRANSFUSION REQUIREMENT AMONG MINIMALLY INVASIVE RADICAL PROSTATECTOMY PATIENTS

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(Presentation to be made by Dr. David Barham)

Introduction: An advantage of minimally invasive radical prostatectomy over open surgery is less intraoperative blood loss. At our institution, hemoglobin values are routinely checked 4 and 14 hours after prostatectomy. The relevance of this practice in a contemporary cohort of patients undergoing minimally invasive radical prostatectomy is assessed.

Methods: We retrospectively reviewed data of patients undergoing laparoscopic or robotic radical prostatectomy at our institution between January 2010 and September 2018. We identified 3,631 patients with pre- and postoperative hemoglobin values and assessed the role of routine hemoglobin values on the decision for transfusion within 30 days. 2019 Medicare reimbursement rates were used for cost analysis.

Results: Of 3,631 patients in our cohort, 44 (1.2%) required blood transfusion. At 4 hours after surgery, median hemoglobin decrease for patients who did not receive transfusion was 8.0% (interquartile range 4.8–11.4) and for those who did was 12.5% (interquartile range 9.5–19.2); at 14 hours the median decrease was 14.2% (interquartile range 10.0–18.4) vs 33.1% (interquartile range 22.6–38.6), respectively. Routine hemoglobin assessment played no role in the decision to transfuse in 18 (41%) of patients. No patients were transfused based on 4-hour values alone. Omitting one hemoglobin assessment could result in institutional savings of \$37,000 during this period.

Conclusions: As transfusion following minimally invasive radical prostatectomy is rare, scheduled postoperative hemoglobin assessments in the absence of symptoms are unnecessary to recognize bleeding events. As the largest hemoglobin difference between men who did and did not receive transfusion was seen 14 hours after surgery, this single postoperative hemoglobin evaluation is sufficient.

PAPER #34

TRENDS IN HYPOGONADISM AMONG ACTIVE DUTY MALES FROM 2006-2015

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(Presentation to be made by Dr. Charles Rinehart)

Objectives: The use of testosterone replacement therapy has increased dramatically, both within the military and in the civilian population over the last two decades. Despite reports describing the overall trends in testosterone replacement therapy, little is known about this trend as it relates to various service related occupational and demographic groups. In this study we aim to measure the association of the rate of hypogonadism among an active duty military population in relation to age, race, marital status, rank, branch of service, and occupation between the years 2006-2015.

Materials and Methods: We examined incidence data from the Defense Medical Epidemiology Database over a ten year period from 2006-2015, examining all ICD9 diagnosis codes corresponding to hypogonadism among the active duty male population. The rate of hypogonadism among this cohort was regressed on calendar year (CY), in combination with each of the following predictors (individually): age, race, marital status, rank, branch of service, and occupation. Sensitivity analysis was performed by defining hypogonadism based on the occurrence of the diagnosis in the servicemembers' charts (first occurrence versus any occurrence). STATA®12 was used for the analysis.

Results: When hypogonadism was defined by any occurrence, calendar year was significantly associated with the incidence rate ($R^2 = 0.939$, $F(1, 8) = 122.25$, $p < 0.001$). Age, race, marital status, rank, service, and occupation were all found to be significantly associated with incidence rate in multivariate analysis with CY; only race was not predictive (see table). Sensitivity analysis demonstrated the same significant findings when hypogonadism was defined by first occurrence.

Conclusion: The rate of hypogonadism increased significantly from 2006-2015 among active duty male service members. Age, marital status, rank, service, and occupation all appeared to be significant predictors of hypogonadism among this population. More research is needed to better understand what specific factors might predispose these specific subgroups to higher rates of hypogonadism.

Source of Funding: None

PAPER #35

50 YEARS OF STUFF FROM PAST UROLOGY MEETINGS

Al Squitieri, MD FACS, Colonel MC US Army, Retired

At THE SGSU 1970 IN SAN ANTONIO - I won the contest – “name the disease” - what was shown was a live goldfish swimming in an overnight urinary collection bag - anyone in the audience want to take a crack at this? Go ahead if you choose - somewhere along the line I will say - THE DISEASE - ICTYURIOSIS "FISH IN THE URINE"! THE PRIZE IN THOSE DAYS - A BOTTLE OF JIM BEAM BOURBON.

One of my first meetings was either a Western Section AUA or an AUA in Las Vegas - John Dorsey, president announced from the podium - "all you women out there - better be good to your husbands. Look around you out here and see what's available on the open market". Also at that meeting I met and sat right next to Dr Miley B. Wesson who was introduced as the oldest living member of the western section. Harriet and I got in late and I sat right next to him - after his introduction he asked me where I was from? Fort Dix, sir. He said: "I was in the army once, treated Pancho Villa for syphilis down on the border - I treated him with salvarsan - we did not have penicillin in those day - I had my 6 gun in my bag - he was really cracked me up!

About 5 years later I ran into Dr Wesson in the Norwich Eaton suite - the watering hole provided by Eaton Labs the thirsty attendees - we cannot do this anymore - new rules and regulations (taking some of the fun but not all of it out of the practice of urology. Then, Thelma, Dr. Wesson's nurse, asked me to watch him while she went shopping for a half hour which turned into an hour and a half and the old geezer wanted to go back to his room after having a few.

If he had to walk, we'd still be en route today - so my colleague, Dr Mel Herman of both army and navy past fame, got a wheel chair and we rolled him back - his room was on the 20th floor, farthest away from the elevator bank of the Fontainebleau Hotel in Miami and I was convinced Thelma was trying to kill the old geezer – I heard that he did pass away soon after that meeting.

Something else happened to where I thought I would be found dead in the basement , just having made a tel call - worst neck and chest pain I ever had - knocked me down onto the floor - wow, what a shitty place to die and no one around either. After a few minutes I noted that if I move my head a certain way - no pain - diagnosis slipped a disc in the neck- I always had bad arthritis of the neck I made I back to my room and lay on the floor and the maid came in as the bed hid me from view and she said "sir - are you ok and I said, yes, I think so - please don't hit me with your vacuum cleaner. That night Chuck Hulse, urology consultant to army and air force in San Antonio said “ Al - have Harriet paint a little bow tie on that thing - collar - you can ear it to the ball” - which I did, without the bow tie.

ROBOTIC MANAGEMENT OF CALYCEAL DIVERTICULUM: A CASE REPORT

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(Presentation to be made by Dr. Chad Pusateri)

Objective: We are presenting a case of flank pain due to nephrolithiasis within a calyceal diverticulum which required a robotic-assisted partial nephrectomy for definitive treatment. Calyceal diverticula are outpouchings of the collecting system within the kidney. Stones may form within these diverticula and are frequently managed endoscopically or percutaneously. Our patient presented with a nephrolith that did not communicate with the collecting system, so traditional management options were not feasible.

Description: The patient is a 22-year-old male with an upper pole stone within a calyceal diverticulum who had undergone two prior ureteroscopies for management of the calculus. However, he had persistent stone burden, pain, and nausea. On CT, the nephrolith appeared intraparenchymal and in an area that did not communicate with the collecting system. A laparoscopic approach was utilized to perform a nephrolysis and remove the calculus. Intraoperatively, a communication between the upper calyx and perirenal space was identified and the stone burden was removed. Post-operatively, the patient recovered well and is now pain free.

Comment: Traditional management methods were not ideal in our patient due to the positioning of the stone and the lack of a communication with the collecting system. This case illustrates a complication of calyceal diverticula requiring a non-traditional approach to attain remission of symptoms. Due to the unique location of the nephrolith and lack of communication with the renal collecting system, we obtained 3-D reconstructive images for further evaluation. Prior to performing robotic-assisted partial nephrectomy for complex stones, 3-D reconstructive images may aid in surgical planning.

PAPER #43

IgG-4 RELATED INFLAMMATORY PSEUDOTUMOR: A CASE REPORT OF A PERI-RENAL MASS MASQUERADING AS UPPER TRACT UROTHELIAL CELL CARCINOMA

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(Presentation to be made by Dr. Brock Boehm)

Objectives: Immune-mediated fibroinflammatory conditions are known to affect multiple organ systems, as seen in the IgG-4 related disease. While tubulointerstitial nephritis and membranous glomerulonephritis are the more common intrinsic renal diseases, this IgG-4 mediated disease can lead to retroperitoneal lesions and fibrosis. Our goal is to understand how to better diagnose, exclude malignancy, and preserve renal function in a rare Urologic disease.

Materials and Methods: A pertinent clinical history, physical exam, and review of cross-sectional imaging was performed. Immunohistochemical analysis of the specimen was thoroughly performed with expert analysis by our consulting pathologist. A review of current literature was obtained to provide additional insight and understanding on this rarely observed Urologic disease.

Results: Our 69 year old male patient was noted to have a 7cm mass replacing the left renal sinus and causing moderate left hydronephrosis. Initial concern was for upper tract urothelial cell carcinoma. However, left ureteropyeloscopy demonstrated normal left renal and ureteral architecture and excisional biopsy of a PET avid left cervical lymph node noted reactive follicular hyperplasia without evidence of metastatic lesions. Final pathology from a left radical nephrectomy was significant for an IgG-4 related inflammatory pseudotumor.

Conclusions: IgG-4 related diseases are known to represent a systemic disease that leads to lymphoplasmacytic inflammation and fibrosis within the affected tissues. At this time, there is no standardized method for the diagnosis and treatment of patients with retroperitoneal involvement. Additional research is needed to identify improved diagnostic modalities, the role of immunosuppressive therapy, and the surgical management in this disease process.

Source of funding: None

PAPER #44

INCIDENCE OF PROSTATE CANCER IN A COHORT OF RADICAL CYSTOPROSTATECTOMY SPECIMENS WITH POST-BCG GRANULOMATOUS PROSTATITIS: A POSSIBLE PROTECTIVE FACTOR?

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(Presentation to be made by Dr. Helal Syed)

Objectives: Adenocarcinoma of the prostate is the most common non-cutaneous malignancy of American men with a lifetime incidence of 11.6%. Previous authors have associated the presence of both acute and chronic inflammation of the prostate on transrectal ultrasound-guided biopsy with subsequently greatly increased risk of prostate cancer on later biopsies when compared to this general lifetime incidence using data from the Prostate Cancer Prevention Trial. We sought to delineate any changes in prostate cancer risk from the presence of granulomatous prostate inflammation in patients with a history of non-muscle invasive bladder cancer (NMIBC) treated with BCG who subsequently progressed to radical cystoprostatectomy.

Methods: We used pathology data from 18 patients with a history of intravesical BCG for NMIBC who subsequently underwent radical cystoprostatectomy (RC) at two institutions from 2002-2016. We calculated the prevalence of prostate adenocarcinoma in our population and also calculated relative risk of having prostate cancer when compared to a previous study population using data that was investigating chronic inflammation in patients in the placebo arm of the Prostate Cancer Prevention Trial.

Results: In our RC specimens, 18 patients were found to have documented granulomatous prostatitis upon RC; of these 7 (38.9%) were noted to have incidental prostate adenocarcinoma of whom 6 of 7 (33.3%) had very low risk disease. The relative risk of prostate cancer in those with granulomatous prostatitis when compared to those with chronic inflammation of the prostate was 0.77 (RR=0.77, 95%CI = 0.43 – 1.39).

Conclusion: Our findings, though not significant, contrast with previous authors who noted an increased risk of prostate cancers, specifically intermediate and high risk classifications, in patients with a history of chronic inflammation on prostate biopsy and represents a novel finding that we are currently exploring in a larger cohort of RC patients who have a history of BCG immunotherapy for NMIBC.

**POSTMORTEM SPERM RETRIEVAL: AN ANALYSIS ON INTEREST IN THE
MILITARY**

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PURPOSE: Despite increasing requests for postmortem sperm retrieval (PMSR) for future reproduction, physician guidance on how to appropriately address these cases is lacking in the United States. In order to gain a better understanding of a high-risk populations' perception and interest in PMSR and subsequent paternity, we surveyed a military population to assess the rates of various attitudes about PMSR, to identify factors influencing these attitudes, to assess if PMSR is discussed amongst couples, and to assess if knowledge of imminent danger influences these attitudes.

METHODS: A questionnaire was distributed to men and women 18-40 years of age presenting to their primary care physician (PCP) or male infertility specialist at a military treatment facility. Information was collected on demographics, deployment status, religion, current paternity, history of infertility, previous knowledge of PMSR, male interest in consent for sperm retrieval, female interest in request for sperm retrieval, and influence of financial burden. Multiple regression analyses were used to determine the interest in PMSR and the above variables.

RESULTS: Almost two thirds of men reported willingness to consent to PMSR whereas only 15% of women showed interest in request for PMSR. Approximately half the surveyed population said cost would influence their attitude towards PMSR but would discuss PMSR with a partner after this survey. Deployment status did not affect attitude toward PMSR ($p=0.894$). Men were more likely to consent to PMSR as age increased ($p=0.019$). The likelihood of further discussion of PMSR in men was associated with an initial interest to consent ($p=0.000$). Relationship status, previous paternity, and infertility did not influence men's attitude. Women showing initial interest in PMSR pursuit were more likely to discuss PMSR after taking the survey. Age, relationship status and previous maternity did not influence women's attitudes ($p>0.05$).

CONCLUSIONS: PMSR remains a contentious topic in medicine today. Men's interest in PMSR increased with age. However, deployment status, relationship status, previous paternity or maternity, and male infertility did not influence attitudes. Generalizations towards which men would be more interested or likely to consent to PMSR in the event of their death cannot be made based on the results of this study. Further legal guidance is needed to assist healthcare teams in addressing requests for PMSR in an ethical, expeditious manner.

A DELAYED PRESENTATION OF NON CLASSICAL CONGENITAL ADRENAL HYPERPLASIA IN A PATIENT WITH TESTICULAR ADRENAL REST TUMORS

Authors: Chloe Michel, MD, Matthew Christman, MD, Justin De Grado, MD

Background: Congenital Adrenal Hyperplasia (CAH) is caused by a deficiency in 21-alpha hydroxylase in more than 90% of cases, resulting in impaired conversion of 17-hydroxyprogesterone to 11-deoxycortisol. Consequently, there is insufficient cortisol production and resulting adrenal hyperandrogenism that manifests early in life with adrenal insufficiency and virilization. Urologic concerns of CAH include precocious puberty, infertility, and testicular adrenal rest tumors. The etiology of testicular adrenal rest tumors is hypothesized to be ectopic adrenal cortex tissue that becomes responsive to chronically elevated adrenal corticotropin hormone (ACTH). Development of these tumors is suspected to contribute to infertility by mass effect. Although testicular adrenal rest tumors are relatively common in patients with CAH, it is uncommon for these to be diagnosed in Non Classical Adrenal Hyperplasia (NCCAH). Unlike CAH, NCCAH is diagnosed later in adulthood due to partial functionality of the 21-alpha hydroxylase enzyme. Precocious puberty is the most common presentation of NCCAH. Patients with NCCAH and adrenal rest tumors only require treatment if they are diagnosed with consequential infertility.

Case presentation: Approximately 15 years ago, a 20-year old man underwent a CT urolithiasis scan in the emergency room for flank pain that revealed an incidental finding of bilateral adrenal hyperplasia. Initially, the patient did not undergo further evaluation of this incidental finding. Five years later, a CT scan was repeated, again for flank pain, that demonstrated nephrolithiasis and persistent, although slightly diminished, bilateral adrenal hyperplasia. The patient was subsequently evaluated by a Urologist, who recommended that he undergo a dedicated adrenal CT scan, which revealed no significant interval change when it was performed nine months later. Approximately one year later, the patient presented again to a Urologist with complaint of bilateral testicular pain and a completed testicular ultrasound that revealed bilateral heterogenous vascular masses within the mediastinum testes. The patient subsequently underwent right side testicular biopsy to definitively rule out malignancy, and Leydig cell hyperplasia was identified. This finding, in concert with the patient's known bilateral adrenal hyperplasia, prompted a referral to endocrinology and further adrenal laboratory work up. The patient was ultimately diagnosed with NCCAH and initiated on steroid therapy. He underwent annual testicular ultrasound for several years after initial diagnosis of NCCAH, however he had been lost to follow-up for the previous three years. He has still been unable to father a child since initial diagnosis. The patient is now pending follow-up with a fertility specialist in addition to repeat semen analysis and hormone levels.

Discussion: Diagnosis of NCCAH as a sequelae of initial adrenal rest tumor diagnosis is unusual. Treatment for NCCAH is primarily only indicated in patients struggling with infertility. The etiology of the patient's obstructive azoospermia could be secondary to seminiferous tubule hyalinization from a chronic obstructive process from tumor presence, or subsequent scar formation after testicular biopsy. Given that seven years of steroid suppression therapy has not improved the patient's fertility, it is possible that his testicular disease was too far progressed at the time of diagnosis. Although NCCAH may have fewer disease related complications when compared to classic CAH, the delayed nature of diagnosis might have a worse prognosis for fertility intervention.

Disclosures: None

"I'M JUST HAPPY TO SEE YOU"

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(Presentation to be made by Dr. Zhengran Jiang and Bryan Kaps)

Introduction: Idiopathic partial corporal thrombosis is an uncommon clinical diagnosis with a pathophysiology that is not fully understood and a treatment plan that is not well established.

Methods: A healthy forty year old man presented to the emergency room with acute penile shaft mass and pain. He had recently been more sexually active, but denied trauma, use of erectile dysfunction medication, or illicit drugs. After a history and physical was performed, laboratory work, a scrotal ultrasound, and a pelvic MRI were completed.

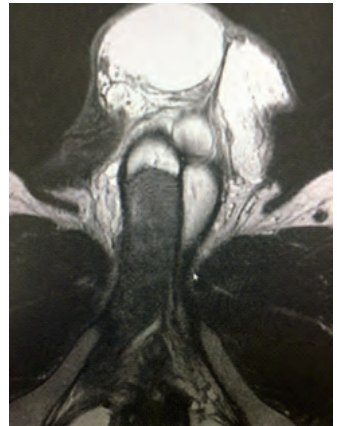
Results: On exam he was found to have a flaccid penis but rigid and tender proximal corpora on the right side. Upon initial assessment, a scrotal ultrasound failed to characterize the finding. An MRI revealed a right proximal corporal thrombosis.

A literature review was performed using PubMed and other search engines including keywords "corporal thrombosis" and similar terms.

Anti-coagulation was started for treatment of both pain and the thrombus, but due to the patient's high-risk occupation as an ocean lifeguard, he was started on anti-platelet therapy, daily 325mg acetylsalicylic acid. During follow up at 6 months the patient denied erectile dysfunction and physical exam had returned to normal.

Conclusions: Idiopathic partial corporal thrombosis is an unusual diagnosis suspected to be caused by certain activities like cycling, microtrauma, sexual activity, an underlying hypercoagulable state, and a congenital corporal web. Treatment includes anti-coagulation, usually in combination with anti-platelet therapy, and, rarely, surgery.

Source of funding: None



PAPER #48

CASE REPORT OF A HEALTHY 22 YEAR OLD MALE WITH NECROTIZING FASCIITIS IN INGUINAL CANAL

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Presentation to be made by Dr. Michael Bork

OBJECTIVE: Present a case report on a 22 year old M with a necrotizing soft tissue infection of the inguinal canal.

METHODS: Case report.

RESULTS: A 22 year old M with no past medical history presented to the emergency department with right groin pain after physical training. He was discharged home on clindamycin with a diagnosis of cord hematoma by the emergency department.

He sub sequentially returned 3 days later with repeat examination now showing ascending induration, worsened swelling, and pain out of proportion to physical exam. A CT scan showed spermatic cord inflammation and multiple fluid collections without subcutaneous air. A LRINEC score of 7 correlated with intermediate risk of necrotizing fasciitis (NF). The patient was taken to the OR emergently for excision and debridement of necrotic/infected tissue in the right groin. He was admitted to the ICU with planned return to the OR the following day demonstrating adequate resection. The spermatic cord and testis were noted to be viable/uninvolved intraoperatively. A wound vac was applied at that time. Tissue cultures were positive for methicillin sensitive *S. aureus* (MSSA) and Group A *Streptococcus* (GAS). He was discharged uneventfully 5 days after presentation.

This patient had MSSA and GAS NF with no obvious cause or risk factors. His condition was managed with early broad spectrum antibiotic therapy, prompt surgical debridement, and wound vac use.

CONCLUSION: NF is a surgical emergency that is most commonly found in patients who have significant risk factors. It should be included in the differential diagnosis for all patients with concern of infection. Utilization of the modified LRINEC scoring system can aid in the medical decision making process. This case is a reminder that surgical emergencies can have innocent presentations that may be overlooked without proper due diligence.

SOURCE OF FUNDING: None

**OLIGOMETASTATIC RENAL CELL CARCINOMA TO SUPERIOR PUBIC RAMUS
FOLLOWING NEPHRON-SPARING SURGERY FOR pT1b TUMOR**

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(Presentation to be made by 2LT Bandi)

Objectives: Increases in renal mass detection have led to subsequent variability in viable treatment options, resulting in discussion about optimum management in patients where kidney function can be maintained. Consequently, masses that would have previously been treated with radical nephrectomy are being treated with nephron sparing options. This represents a case of recurrence as oligometastatic of pT1b renal cell carcinoma following a robotic partial nephrectomy.

Results (Case Presentation): A 49-year-old male with a history of renal cell carcinoma of the left kidney was treated with robotic partial nephrectomy to resect a 4.5 cm lower pole mass. Nine years later he was found to have an expansile mass in the right superior pubic ramus and medial acetabulum with a soft tissue component which was confirmed to be RCC metastases on biopsy. After discussion with multidisciplinary tumor board the decision was made to treat this incidence of oligometastatic disease surgically with potential systemic therapy after. A multidisciplinary surgical team was then arranged with orthopedic oncology, orthopedic joint team, urology, and plastic surgery. He was treated with embolization of the tumor followed by a resection of the ramus and total hip arthroplasty, involving cystoscopy, ureteral stent emplacement, and spermatic cord mobilization in order to access the lesion. This was followed by complex abdominal wall reconstruction by plastic surgery.

Conclusion: Renal masses that were previously treated with radical nephrectomy are now risk-stratified, based mainly on the size of the tumor, which can be used to guide treatment. While there is no agreement regarding the efficacy of partial nephrectomy on long-term outcomes, this case highlights the difficulty of adopting nephron sparing treatments. It also represents a rare case of metastasis greater than five years from initial resection.

Source of Funding: None

BENCHMARK EARLY COMPLIANCE FOLLOWING IMPLEMENTATION OF AN OPTIMIZED CLINICAL CARE PATHWAY FOR RENAL SURGERY PATIENTS

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(Presentation to be made by LCDR Blair Townsend, MD, MBA)

Objectives: As an Academic Center of Excellence for the International ERAS society, we sought to apply our radical cystectomy ERAS experience to renal surgery. Currently, a dedicated ERAS algorithm for renal surgery does not exist. We report our initial experience and compare compliance with various defined peri-operative clinical care variables before and after application of a formal protocol.

Methods/Materials: Following Departmental agreement on compliance measures, from 10/1/2018-5/31/2019, we prospectively collected data on 23 peri-operative compliance measures in 94 consecutive partial and radical nephrectomy patients using a defined protocol. This was compared to 100 nephrectomy patients before 10/1/2018. The 23 pre-, intra-, post-operative compliance measures can be found in the Table. This data was entered into the Research Electronic Data Capture (REDCap) renal surgery database, exported, and analyzed using Fisher's exact tests and two-sample tests. Importantly, compliance outcomes are continuously fed back to staff and providers monthly.

Results: There was no difference in sex, race, age, smoking status, previous surgery, prior radiation, prior chemotherapy, surgeon, approach or ASA class based on whether or not an enhanced recovery protocol had been used. Overall compliance across 23 pre-, intra-, and post-operative clinical care variables was increased after implementation of a dedicated enhanced recovery protocol (60.0% v 46.4%, $p < 0.001$). The most significant improvements in compliance after protocol implementation were preoperative patient education, bowel prep, oral carbohydrate intake, and post-operative early mobilization and reduction in discharge pain medication ($p < 0.001$).

Conclusions: Our initial experience reveals improved compliance with implementation of a defined clinical care pathway for renal surgery. At baseline this compliance is much less compared to our protocol compliance following cystectomy suggesting that further evaluation is needed to define individual merits and barriers to compliance measures for this unique population.

Source of Funding: None

PAPER #51

ZOON BALANITIS CAUSING SCROTAL DERMATITIS CURED WITH CIRCUMCISION

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(Presentation to be made by Dr. Lyons)

Objectives: Plasma cell balanitis (aka Zoon balanitis) is an uncommon benign reaction thought to be caused by chronic irritation and inflammation, heat, poor hygiene, and/or chronic *Mycobacterium smegmatis* infection. By definition it is limited to the glans, but we present a case with spread of the condition to the scrotum.

Methods: An otherwise healthy 23 year old Hispanic male initially presented to NMCS D Dermatology for a year-long red, non-tender or pruritic, rash on the glans penis. Treatment with OTC nystatin, topical fluocinonide, and topical pimecrolimus did not improve the condition. A punch biopsy performed by Dermatology showed histology consistent with plasma cell balanitis (Zoon). He was referred to NMCS D Urology for consideration of circumcision after medical treatment failure. On evaluation, with full retraction of the foreskin, the glans had a red, beefy, and shiny appearance. The scrotum had a similar appearance of the skin where the small portion of exposed glans contacted the scrotum in the flaccid state. This scrotal skin was otherwise asymptomatic.

Results: The patient underwent an uncomplicated sleeve-type circumcision under anesthesia due to patient preference. Pathology of the redundant foreskin confirmed plasma cell balanitis. Upon follow up at 30 days the patient had healed well from surgery and the glans, as well as the scrotal lesions, had improved and appeared normal when compared with the unaffected penile and scrotal skin.

Conclusions: Zoon balanitis is a rare finding, typically seen limited to the glans in uncircumcised middle and older-aged men. While spread of the skin condition to the scrotum has not been reported, we show definitive treatment by circumcision improved the condition at both sites.

Source of funding: None

ACTINOMYCOSIS IN PERI-STOMAL ABSCESS: A NOVEL COMPLICATION OF
MITROFANOFF PROCEDURE

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(Presentation made by Timothy Wright)

Introduction: The Mitrofanoff procedure (appendicovesicostomy) is an effective method of urinary diversion, particularly in the pediatric population. Peri-stomal abscess of the Mitrofanoff channel has been documented rarely in the literature, and is primarily noted in the peri-operative period. We report a case of a pediatric patient with a Mitrofanoff peri-stomal abscess who presented 2 years after her procedure with cultures positive for *Actinomyces*.

Case Presentation: The patient is a 6 year old female with a history of neuropathic bladder due to congenital sacroccygeal teratoma. She was managed initially with prophylactic antibiotics, clean intermittent catheterization (CIC) and anticholinergic medication; however, she had ongoing difficulties with intermittent catheterization and recurrent urinary tract infections (UTI). At the age of 4 she underwent appendicovesicostomy. For over two years following the procedure there were no complications; the patient was catheterizing well through her stoma, she had resolution of her UTIs and she was able to discontinue prophylactic antibiotics. However, 30 months after her diversion she presented with a fever and was started on oral cefixime for urinary tract infection due to *Escherichia coli* (ampicillin and trimethoprim/sulfamethoxazole resistant). After 4 days on cefixime without improvement, she returned with progressive redness and swelling around her Mitrofanoff stoma, and the decision was made to admit her to the hospital for IV antibiotics. She was started on vancomycin and ceftriaxone. Abdominal wall ultrasound revealed findings consistent with cellulitis without abscess. However on hospital day two, the area began to drain and bedside aspiration was performed and sent for culture. Cultures of the aspirate came back positive two days later for pan-sensitive *E. coli* and antibiotics were adjusted to ampicillin/sulbactam. Three days after the aspiration, the patient was demonstrating minimal improvement. She was taken to the OR for formal incision and drainage of the area, and a pocket of abscess was irrigated around the stoma. On the sixth hospital day, the original wound aspiration anaerobic culture resulted positive for *Actinomyces* spp and *Odoribacter splanchnicus*. She completed 10 days of Unasyn and was transitioned to IV penicillin for 14 days, followed by oral penicillin for an additional 6 months. The patient tolerated the treatment well with resolution of her symptoms and has had no recurrent abscesses since that time.

Discussion: This patient, presenting with a complicated medical history including neuropathic bladder and appendicovesicostomy, is, to our knowledge, the first documented case of *Actinomyces* causing an abscess associated with a Mitrofanoff stoma. Abdominal actinomycosis is a relatively unusual occurrence in adults, and the documented cases of *Actinomyces* causing appendiceal abscesses in children are even rarer. Those accounts which do exist, however, have all affected appendices that are still within the GI tract, making this case unique.

Conclusion: This patient's presentation delineates an important consideration for future providers managing patients with similar presentations, as *Actinomyces*, found in the ileocecal region of the gastrointestinal tract, may only grow on anaerobic culture, and warrants a prolonged treatment course.

AUTOMATED FLOW CYTOMETRY URINE ANALYSIS: REASSESSING THE GOLD STANDARD OF MICROSCOPIC HEMATURIA

Alexandria M. Hertz MD, Mark I. Anderson MD, Timothy C. Brand MD
Tacoma, Washington- to be Presented by Dr. Hertz

Objectives: The current guidelines for identifying microscopic hematuria (defined as 3 or more red blood cells/high power field) is with visual microscopy. Flow cytometry is being introduced by labs for increased accuracy, detection and efficiency. The reference ranges for these machines may not correlate with current standards. Our goal was to establish the machine's reference interval and to compare our machine's reference interval to the gold standard and whether utilizing this range would negatively impact evaluation of hematuria.

Materials/Methods: The reference range verification of an automated urinalysis machine (ARKRAY Aution AU-4050) was run through EP Evaluator. A proposed normal interval of 0-3 HPF was given and 405 consecutive samples were run and evaluated for the number of RBCs and compared to the reference interval. After this reference interval was established a retrospective review of the evaluations for microscopic hematuria from January 2017 to September 2017 (the period where the new machine was in use but traditional standards were being used to recommend evaluation) was performed. Descriptive statistics and analysis of variance (ANOVA) were performed to evaluate the findings.

Results: 405 urine samples were evaluated with the finding of 32.8% of the samples falling outside of the reference range of 0-3 HPF. This is resulted in unevenly distributed data. A 95% confidence interval was then used to delineate a value. This produced a reference interval of 0-8 HPF.

229 patients underwent evaluation of microscopic hematuria during the time period. 72% of those had a completely negative work-up. 8 of 229 had cystoscopy or CT findings consistent with a malignancy. Only one of those patients was between the traditional threshold and our new limit for evaluation. On linear regression, there was not found to be any statistical difference between the thresholds of 3 RBCs vs 8 RBCs ($p=0.0524$).

Conclusion: The current guidelines for evaluation of microscopic hematuria may no longer be relevant with the use of new technology. Identifying a new reference range based on the machine is accurate and safe with regards to evaluations of hematuria.

EXTRAVESICAL COMMON SHEATH REIMPLANTATION FOR SURGICAL MANAGEMENT OF DUPLICATED URETERS

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Objective: Characterize our institutional experience with extravesical common sheath re-implantation (EVCSR) for management of complete ureteral duplication.

Methods: We retrospectively evaluate 91 patients with a duplicated collecting system who underwent EVCSR. Patient demographics, management prior to re-implantation, affected kidney characteristics (grade and location of reflux), procedure characteristics, concomitant procedures, complications, and subsequent growth of the kidney are reported. Patients without post-operative follow-up were excluded.

Results: Ninety-seven patients were identified who underwent an EVCSR between February 2000 and October 2018. Six patients were lost to follow-up and excluded from analysis leaving 91 patients for analysis. Patients were followed for a mean 60.6 months (0.25 to 487.8). Our patients were predominantly female (74%) and all patients who reported their race were Caucasian (36.3%). The circumstance leading to the diagnosis of a duplicate collected system was documented in 55 patients included urinary tract infection (69.1%), prenatal ultrasound (29.1%), and voiding problems (1.8%). Co-existing conditions included VUR (93.4%), calyceal dilation (24.2%), ureterocele (16.5%), megaureter (6.6%), ectopic ureter (2.2%), debris in renal pelvis (1.1%). The mean grade of reflux was higher in the left upper (LU) and lower (LL) poles compared to the right upper (RU) and lower (RL) poles (3.15 vs 2.15, and 3.0 vs 2.9). However, the difference between these groups was not significant ($p=0.3000$). Thirteen patients had a surgical procedure prior to EVCSR (1 not performed at our institution) including transurethral resection of cystocele (76.9%), heminephrectomy (15.4%), cutaneous ureterostomy (7.7%). Most patients had a unilateral procedure (78%) with majority of the patients having a left duplicated system (66.2%). Concomitant procedures included contralateral re-implant 8.8%, takedown of cutaneous ureterostomy 2.2%, closure of fascial defect 1.1%, re-implant of an ectopic ureter 1.1%. Patients were a mean 2.9 years old (4.4 months- 16 years). The average surgical and anesthesia time (in 62 patients with a documented time) was 1.6 hrs and 2.2 hrs, respectively. Bilateral procedures were longer than unilateral procedures by 12.4 minutes. This difference, however, was not statistically significant ($p=0.6188$). Most patients had ambulatory surgery (73.1%) with a mean length of stay of 35.4 hours in patients who were admitted. Reflux decreased postoperatively in 12 of 13 (92.3%) poles with reflux and increased in 1 of 139 (0.7%) affected poles. Interval growth was noted bilaterally after a mean 58-month interval (left 0.8, right 1.01 cm). With 3 of 57 left kidneys decreasing in size and no right kidneys decreasing in size). Seventy-one of 91 (78%) patients had no postoperative complications. Documented complications included UTI 18/91, bladder spasms 1/91, mild dysuria (1/91). In the 18 patients with a post-operative UTI, 14 had febrile UTIs. Six patients had a second procedure requiring anesthesia including 2 deflux injections (febrile UTI), 1 video-urodynamics under anesthesia to evaluate for dysfunctional voiding (febrile UTI), 1 stent removal, and 1 retrograde pyelogram.

Conclusion: EVCSR can be successfully and safely utilized for patients with completely duplicated ureters with improved radiologic outcomes and good clinical outcomes.

TESTOSTERONE THERAPY IN MEN WITH GLEASON 6 AND 7
PROSTATE CANCER

John P. Mulhall MD MSc FECSM FACS*, Carolyn A. Salter MD, Nicole Benfante MS*, Patrick Teloken PhD*, Boback Berookhim MD*, and Lawrence Jenkins MD*

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(To be presented by Dr. Carolyn A. Salter)

Objectives: The administration of exogenous testosterone (T) to men who have undergone radical prostatectomy (RP) for prostate cancer (PC) remains controversial. Besides small case series there are no large population, long-term studies assessing the safety of this treatment in this population. We have adopted a policy of allowing the decision regarding T therapy in men post-RP to be a negotiated one with a comprehensive discussion of the data and the pros and cons. This prospective study was undertaken to define the safety of exogenous T therapy in men post-RP.

Materials and Methods: Men were considered candidates for T therapy if (i) they had two early morning total T level <300 ng/dl (ii) had symptoms/signs of TD (iii) had pathologically organ-confined, Gleason 6-7 PC and (iv) an undetectable PSA level post-RP and pre-commencement of T therapy. Once men opted for treatment they had labs tested 4 weeks later. T dose was titrated to achieve a serum level of 500-600ng/dl. Patients had serum T levels and PSA checked every 6 months.

Results: A total of 360 patients have been prescribed T therapy to date. Mean age and pre-RP PSA levels were 59.12 years and 46 ng/dl respectively. Baseline total T levels were 228.94 (80-296) ng/dl. 48% had a Gleason Score (GS) of 6, 42% had GS 7 disease. Median time post-RP before T therapy was 9 (IQR 9, 112) months. 28% were using clomiphene, 56% transdermal T and 16% intramuscular T to achieve therapeutic T levels. Mean post-treatment total T was 520.280 (396-920) ng/dl. Median duration on T therapy at last follow-up was 38 (IQR 6, 112) months equating to mean duration post-RP of 6641 months. A single man had a PSA recurrence at a time point 2.5 years post-RP.

Conclusion: In this series, to date, when patients are carefully selected (Gleason ≤7, organ confined disease, post-RP undetectable PSA level), the administration of exogenous T for the treatment of TD appears to be safe 3 years post-T administration.

Source of funding: none

**SURVEY OF OPIOID PRESCRIBING PATTERNS AFTER NON-ENDOSCOPIC
UROLOGIC OFFICE PROCEDURES**

Theodore Crisostomo-Wynne, MD, Jonathan Berger, MD, Tacoma, WA
(Presentation to be made by Dr. Crisostomo-Wynne)

Introduction: The use of prescription opioids has come under increasing scrutiny as long term adverse sequelae, even perhaps from short term prescriptions, become evident. The American Urological Association has published a position statement that opioids should be used in the lowest potency at the lowest dose only when necessary. Prior publications have suggested that non-opioid pain strategies may be sufficient for many urology procedures. This study sought to describe the opioid prescribing patterns of urologists and urology residents for vasectomies (and other non-endoscopic urologic office procedures).

Methods: An anonymous online survey was electronically distributed to urologists practicing within the Department of Defense, Public Health Service (PHS), and Department of Veterans Affairs (VA) via emails associated with membership profiles of the Society of Government Service Urologists (SGSU). Urologists were asked to answer questions pertaining to demographics, pain control practices for office-based vasectomy, circumcision, or other non-endoscopic procedures, and complete a Likert scale of factors influencing practice patterns. Data is described and analyzed with multinomial logistic regression.

Results: Respondents included those serving in the Army (21), Navy (35), Air Force (15), PHS (1), and the VA (20) for total of 99 respondents (out of 616 recorded SGSU members). 65% were attendings with more than 5 years in practice, 27% were attendings with five or less years, 8% were residents/fellows. The majority performed office-based vasectomy (88%) and circumcision (59%). Of those who performed vasectomies, 37% reported prescribing opioids > 90% of the time while 44% report prescribing opioids < 5% of the time. There was no significant difference between attendings with five or less years in practice and more experienced attendings regarding prescribing opioids for vasectomy or circumcision. When prescribed, the median number of opioid tablets prescribed was 8 (IQR, 5-8)--and was typically hydrocodone (39.8%) or oxycodone (26.5%). Of the choices given "concern for patient's pain" was the most important factor in opioid prescribing practices.

Conclusions: Despite increasing scrutiny of prescriptions for opioids, there is a wide variance between urologist prescribing patterns of opioids for pain control following similar procedures.

Source of Funding: none with perceived partner bother ($p < 0.001$) and inversely co

PAPER #61

INITIAL EVALUATION OF CLINICAL OUTCOMES BEFORE AND AFTER IMPLEMENTATION OF AN ENHANCED RECOVERY CLINICAL CARE PATHWAY FOR RENAL SURGERY

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(Presentation to be made by LCDR Blair Townsend, MD, MBA)

Objectives: We sought to reduce the variability in peri-operative care delivered to nephrectomy patients through implementation of a standardized enhanced recovery clinical care pathway similar to that currently used at our institution for radical cystectomy. We evaluated the association of protocol implementation with important clinical outcomes for renal surgery including length of stay, 30-day readmissions and complications.

Methods/Materials: Retrospective and prospective data was collected from two patient cohorts and entered into our Research Electronic Data Capture (REDCap) renal surgery database. The first cohort consisted of 100 patients who had a nephrectomy performed prior to 10/1/2018, before protocol initiation. The second cohort consisted of 94 consecutive patients who underwent nephrectomy between 10/1/2018-5/31/2019 following implementation. These cohorts were further divided by operation type (partial and radical nephrectomy) and approach (open and laparoscopic/robotic). Fisher's exact tests were used for categorical outcomes and median two sample tests were used for continuous outcomes.

Results: Before protocol implementation a larger proportion of patients underwent partial nephrectomy (62.0%) while a larger percentage underwent radical nephrectomy after implementation (58.5%) ($p=0.006$). There were no further differences in demographics or patient characteristics between the cohorts (Table 1). We found no differences in length of stay, 30-day readmission or complication rate between cohorts before and after implementation of an enhanced recovery pathway when considering all nephrectomies in aggregate (Table 2). Additionally, when looking at type of nephrectomy (partial and radical) there were no differences in length of stay, 30-day readmission or complication rate based on approach (open and laparoscopic/robotic).

Conclusions: Our initial experience reveals no significant improvement in primary length of stay, 30-day readmission or complication rate with implementation of an enhanced recovery clinical care pathway for renal surgery. Future work in this unique population will include evaluating a larger cohort to define key components and their relative merits along with cost and surgeon variability.

Source of Funding: None

URETHRAL MOBILIZATION AND ADVANCEMENT WITH TEARDROP MEATOPLASTY FOR HYPOSPADIAS REPAIR

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Objective: Characterize our institutional experience with urethral mobilization and advancement with teardrop meatoplasty for hypospadias repair.

Patients and Methods: We retrospectively evaluated forty-two patients with hypospadias who underwent a urethral mobilization and advancement repair (UMAR). We modified the procedure to include a teardrop meatoplasty (maintenance of a 2mm epithelial cuff surrounding the mobilized urethral meatus with a 3 mm proximal extension) to reduce the risk of meatal stenosis in December 2015. We provide a description of the teardrop meatoplasty technique. Patient demographics, location of hypospadias, procedure characteristics, concomitant procedure, urinary complications, and cosmetic complications were evaluated. Patients who presented for redo hypospadias repair after primary surgery at another institution and those who received testosterone preoperatively were excluded.

Results: Forty-six patients with UMAR at our institution from September 2013 to June 2018 were identified. Three patients referred from an outside institution for redo hypospadias repair and 1 patient with pre-operative testosterone therapy were excluded leaving 42 patients for analysis. Mean follow up was 1.24 (0.19-2.89) years. Teardrop meatoplasty was performed in 16 of 42 (38%) patients (7 coronal, 7 glandular, and 2 mid-penile hypospadias) overall and 16 of 28 (57.1%) patients after December 2015. Most patients had coronal hypospadias (43.9%). Pre-operatively, 76.2% of the patients had chordee and 73.8% of the patients had a prepuce hood. All patients had an ambulatory procedure (no inpatient admission). The average anesthesia and procedure times were 1.9 hrs and 1.17 hrs, respectively, with the longest procedure time occurring in mid-penile hypospadias repair (2.6 hrs). However, hypospadias type does not significantly predict procedure length ($p=0.117$). Additionally, hypospadias type does not significantly predict urinary complications including dysuria/straining, urinary tract infection, and urethral obstruction ($p=0.428$). Patients with a teardrop meatoplasty were significantly more likely to be free of urethral dysfunction at post-operative follow up than those without this technique (12 of 16 (75%) vs 5 of 26 (19.2%) ($OR = 12.6$ $p=0.001$). Residual chordee was observed post-operatively in 1 of the 32 (3.1%) patients with pre-operative chordee. Cosmetic complications requiring re-operation occurred in 1 of 42 (3.1%). No patients included in our analysis experienced postoperative hematuria, hematoma, ischemia, UTI, ventral bulging, urethral stenosis, bladder spasms, urethral fistula, stricture, or excessive scar formation.

Conclusion: UMAR with teardrop meatoplasty can be successfully and safely utilized for patients with distal hypospadias as an outpatient procedure with good cosmetic and urinary outcomes.

**VARIANCE IN OPIOID PRESCRIBING IN PATIENTS UNDERGOING ROBOTIC
MINIMALLY INVASIVE UROLOGIC SURGERY**

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Introduction: Opioid prescribing patterns have been under increasing study as the dangers of excessive and inappropriate opioid prescribing has been shown in the literature to lead to harm. We have previously reported on prevalence of excessive opioid prescriptions after minimally invasive urologic surgery. The objective of this retrospective review is to describe the variation in postoperative opioid prescriptions after robotic minimally invasive surgery.

Methods: A single institution retrospective review was performed for 143 adults who underwent urologic robotic minimally invasive surgery. All patients' records who underwent robotic surgery during the defined time period were reviewed. Records were excluded if the surgery was converted to open technique. For each case the type, amount, and prescriber for opioid prescription upon discharge were recorded. Dosage is reported in total oral morphine equivalents (OME). Differences in prescriptions between prescribers were analyzed. Prescribers were given their own group if they had five or more separate postoperative prescriptions. Descriptive statistics, analysis of variance and chi square tests were used as appropriate to analyze data and determine difference in prescribing patterns and demographics between groups.

Results: There were a total of 143 robotic cases over the observed period; of these there were 118 robotic assisted laparoscopic prostatectomy, 11 robotic partial nephrectomy, 5 robotic pyeloplasty, 4 robotic nephrectomy, 3 robotic adrenalectomy, and 2 robotic abdominal sacrocolpopexy. The cohort was mostly male with 134 males and 9 women. Mean age was 60 years (19–86 years), mean length of stay 1.4 days (0–12 days), mean total prescribed OME was 209 (0–450). There were five prescribers who met criteria for a unique group, a sixth group of the remaining prescribers was including in the analysis as a pooled group. There was a statistically significant variance between total OME prescribed between groups ($p < 0.001$). There was no statistically significant difference in age ($p = 0.94$), sex ($p = 0.72$), surgery performed ($p = 0.45$), complications ($p = 0.36$), length of stay ($p = 0.08$), tobacco ($p = 0.59$) or alcohol use ($p = 0.16$) between groups.

Conclusions: This study demonstrates that prescribing patterns for opioids after minimally invasive surgery are variable between prescribers, even with similar patient populations undergoing similar surgery. With the known harms of inappropriate prescribing this study provides additional evidence for further protocols and guidelines for opioid prescribing after minimally invasive urologic surgery.

Source of Funding: none

THULIUM FIBER LASER LITHOTRIPSY

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(Presentation to be made by Dr. Fried)

Objectives: Urinary stone disease effects approximately 10% of the United States population. For over twenty years, the infrared, Holmium:YAG laser has been the gold standard for ureteroscopic treatment of urinary stones, for several reasons. First, the Holmium laser can effectively fragment all major stone compositions. Second, the laser has a relatively good safety record for use in endourology. Third, the Holmium laser can be used as a single laser platform for multiple applications including ablation of both soft and hard tissues (e.g. BPH and lithotripsy). Fourth, there is a readily available robust silica optical fiber for delivery of the laser energy through the urinary tract. Despite all of these attractive clinical characteristics, the Holmium laser still suffers from several major technical limitations. These limitations include a laser wavelength of 2120 nm that does not closely match a water absorption peak in tissue, thus yielding suboptimal tissue ablation rates. The laser also produces a non-uniform, multimode spatial beam profile which limits use of the laser with 200-micrometer-core optical fibers or greater. The Holmium laser has a low wall-plug efficiency of about 1-2% which results in undesirable thermal effects in the laser rod, leading to the need for a high-voltage power supply and noisy water cooling system. These thermal effects also limit operation of the Holmium laser to pulse rates of about 20-30 Hz or less per laser, thus requiring multiple laser rods for high pulse rate operation, at considerable added cost. The complex combination of bulk optical components, high-voltage power supply, and water cooling also results in higher than desired maintenance costs. For the past 15 years, my laboratory has been studying the Thulium fiber laser (TFL) as a potential alternative to the Holmium laser for lithotripsy. This talk will review the characteristics of the Holmium and TFL and provide preclinical studies directly comparing these two lasers.

Materials and Methods: The Thulium fiber laser (TFL) operates at a wavelength of 1940 nm, with a peak power of up to 500 W and an average power up to 50 W. The TFL can emit pulse energies from 0.2 - 6.0 J, pulse durations of 0.2 - 12 ms, and pulse rates of 1 - 2000 Hz. The laser energy originates within a small core of the Thulium-doped, silica fiber, enabling the output energy from the laser to be coupled into small, disposable surgical optical fibers for use in lithotripsy.

Results: The TFL wavelength of 1940 nm more closely matches a major water absorption peak in tissue yielding a 4 times lower stone ablation threshold for uric acid (UA) and calcium oxalate monohydrate (COM) stone compositions tested. The more uniform TFL spatial beam profile enables transmission of higher laser power through smaller (50, 100, and 150 micrometer core) optical fibers for more flexibility and greater ureteroscope flexion for potential applications requiring extreme bending of the flexible ureteroscope (e.g. lower pole of the kidney). The smaller fibers also consume a smaller cross-sectional area within the single working channel of the ureteroscope, thus enabling use of higher saline irrigation rates for improved visibility and safety, as well as simultaneous use with other instruments (e.g. stone extraction baskets). The TFL has a wall-plug efficiency of about 10%, enabling the laser to be high power, compact, air-cooled, quiet, and operated from a standard 110-volt outlet, for ease of use in the operating room. Direct comparison between the TFL and Holmium laser using dusting parameters (0.2J/50Hz/10W, 0.2J/80Hz/16W, and 0.4J/80Hz/32W) demonstrated that the TFL provided higher COM ablation rates for all parameters studies, as well as a higher percentage of smaller stone particles than the conventional Holmium laser.

Conclusions: Preclinical studies demonstrate that the Thulium fiber laser represents a viable alternative to the current gold standard Holmium:YAG laser for lithotripsy. Clinical studies are currently in progress.

Source of Funding: None

DOES PERCENTAGE OF SEMINOMA AT ORCHIECTOMY IMPACT PATIENT MORBIDITY AND PATHOLOGIC OUTCOMES AT POST-CHEMOTHERAPY RETROPERITONEAL LYMPH NODE DISSECTION FOR MIXED GERM CELL TUMOR?

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(Presentation to be made by Dr. Sean Kern)

Introduction: Post-chemotherapy retroperitoneal lymph node dissections (PC-RPLND) for pure seminoma are widely considered to have an increased potential for complexity and morbidity, placing patients at increased risk and often finding only necrosis. We sought to determine if the percentage of seminoma in the orchiectomy specimen predicts necrosis on PC-RPLND for non-seminomatous germ cell tumors (NSGCT) and the associated impact on patient morbidity.

Methods: Patients with seminoma in the orchiectomy specimen who underwent PC-RPLND for NSGCT at Indiana University from 2009-2019 were identified to assess pathologic findings, required ancillary procedures at the time of PC-RPLND, and post-operative outcomes. Patients were categorized into quartiles to assess if increasing percentage of seminoma predicted necrosis.

Results: Of the 112 patients identified, pathologic analysis revealed necrosis in 30/112 (26.8%), malignancy 20/112 (19.9%), and teratoma 62/112 (55.4%). As percent seminoma increased by quartile, necrosis was more prevalent (23.7%, 25%, 31.6%, 35.7%), as was the size decrease in in post-chemotherapy retroperitoneal masses. For patients with greater than 90% seminoma, necrosis was found almost 45% of the time. The incidence of concurrent nephrectomy during PC-RPLND was greatest in the 4th quartile. There was no significant difference in pre-operative serum tumor markers, patient age, length of stay, or Clavien-Dindo classification outcomes.

Conclusions: As percent seminoma in the orchiectomy specimen increased, the incidence of necrosis and the need for concurrent ancillary procedures increased. However, it did not seem to change the hospital course or post-operative morbidity. Unfortunately, these results show that PC-RPLND cannot be eliminated even in patients with very high orchiectomy seminoma percentages as over half of these patients had teratoma or viable malignant elements in the retroperitoneum.

Source of Funding: None

ESTABLISHING A HEREDITARY RENAL SYNDROME CLINIC: ONE INSTITUTION'S EXPERIENCE IN PATIENT IDENTIFICATION, RISK ASSESSMENT, GENETIC TESTING AND SURVEILLANCE OUTCOMES

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(Presentation to be made by Dr. Sean Kern)

Introduction: Approximately 8-10% of patients with RCC may be linked to a hereditary predisposition. These estimates are speculated to be low due to few centers with established multidisciplinary clinics for hereditary RCC. We sought to establish a referral center for all patients with suspected hereditary conditions placing them at higher risk for kidney cancer. Our goals were to recognize patients with a potential hereditary condition, facilitate genetic counseling, provide informed consent and accurate genetic testing, and increase imaging compliance rates.

Methods: The Renal Hereditary Syndrome Clinic (RHSC) was established in 2016 and included a urologic oncologist, medical geneticist, and a genetic counselor. Patients were referred for a family history of kidney cancer or a kidney syndrome, multifocal renal cell carcinoma, or early onset renal cancer less than 46 years old. The data from our initial experience was reviewed to establish the rate of positive genetic testing and surveillance compliance rates.

Results: The RHSC enrolled 46 patients over a 42 month period with an average age of 41.2 years. 21 patients (45.7%) enrolled were found to have predisposing germline variants. 9 patients declined genetic testing after being counseled in the RHSC or have pending genetic testing results. 26/46 patients (56.5%) were referred after renal tumor surgery. The pathologic diagnoses included clear cell (14), chromophobe (3), papillary type I (4), papillary type II (1), translocation RCC (1), renal angiomyolipoma (2), multifocal oncocytoma (1), and unclassified renal cell carcinoma (1). Twelve of the surgical patients (46.2%) had a family history significant for malignancies. 17/26 (65.4%) patients in the surgical group underwent genetic testing with four positive results (23.5%), two with *FH* mutations, and one *VHL* and *TSC* mutation. The remaining 20 patients (43.5%) were nonsurgical, referred for positive family history of a renal malignancy only (1/20); with a positive family history of genetic mutation(s) (10/20); associated features of hereditary renal disease (6/20), and (3/20) already diagnosed with a genetic mutation prior to being enrolled in the RHSC. In both the surgical and non-surgical groups, 21 (45.7%) patients seen in the RHSC have a hereditary cancer predisposition syndrome. The most common diagnoses were HLRCC (12), BHD (4), *VHL* (4), *TSC* (1).

Conclusions: The RHSC has served to identify surgical patients at risk for hereditary renal syndromes and to provide genetic counseling and testing for nonsurgical patients. In our surgical and non-surgical patients, genetic mutations were seen in 23.5% and 85%, respectively. Interestingly, the *FH* mutation and HLRCC was the most common syndrome identified. Among all patients followed in the RHSC with hereditary cancer predisposition syndromes, 95.2% of patients adhered to their recommended surveillance and follow up regimens. Early results suggest increased testing positivity and compliance rates compared to national averages. Evaluating patients with suspected hereditary renal diseases in a multidisciplinary clinic may increase imaging and follow-up compliance rates while better identifying at-risk patients with a strong family history. Clinicians should have a low threshold for referral to multidisciplinary hereditary cancer clinics.

Source of Funding: None

PAPER #70

OUTCOMES FOLLOWING RETROPERITONEAL LYMPH NODE DISSECTION FOR CLINICAL STAGE II PATIENTS EXPERIENCING A LATE RELAPSE FOLLOWING UPFRONT PLATINUM BASED CHEMOTHERAPY

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(Presentation to be made by Dr. Ryan Speir)

Objective: Late Relapse following complete response to upfront radiation or chemotherapy for clinical stage II germ cell tumor is rare occurring in only 1-5% of cases. It is characterized by its resistance to additional chemotherapy and poor prognosis. We sought out to evaluate the histopathologic, intraoperative and survival outcomes in clinical stage II germ cell tumor patients requiring retroperitoneal lymph node dissection (RPLND) for late relapse (LR) after upfront radiation or chemotherapy.

Methods: The Indiana University Testis Cancer Database was queried from 2012-2018 to identify all patients who presented with clinical stage II GCT, received radiation or chemotherapy following orchiectomy, relapsed >2 years after initial diagnosis, and underwent their first RPLND in treatment of the LR. Clinical, operative, pathologic, and treatment characteristics were reviewed.

Results: Twenty-three patients met inclusion criteria. The mean age at RPLND was 38.8 years. Testicular primary was pure seminoma in 2, nonseminomatous GCT in 17, and unknown in 4 patients. The median time from diagnosis to relapse was 127.5 months (IQR 92-157 months). At relapse, serum tumor markers were elevated in 13 patients (56.5%). Ten patients (43.5%) were given cisplatin-based chemotherapy at LR while RPLND was initial management of LR in 13 (56.5%). A bilateral template RPLND was performed in 7/23 (30.4%) patients, while the remaining 16 patients underwent modified template surgery. At RPLND, 4 (17.4%), 4 (17.4%), and 15 (65.2%) patients demonstrated fibrosis, teratoma, and viable malignancy, respectively. The most common malignancy identified was yolk sac tumor (n=11/15, 73.3%). On the last follow-up, 6 patients (26.1%) recurred: 3 in the chest, 1 in the spine and 2 in the retroperitoneal surgical field. 5 patients (21.7%) died of disease. Of the 10 patients who received chemotherapy at the time of the late relapse, 70% had elevated STM. 60% had cancer in the specimen, while the other 40% had necrosis. 4/10 (40%) had a recurrence with all 4 dying of disease. Of the 13 patients who did not received chemo, 38.5% had elevated STM, 8/13 (61.5%) had cancer in their specimen with 4/13 (31%) having teratoma and the other 1 patient (7.7%) having necrosis. 2/13 (15.4%) had a recurrence, with ½ dying of their disease. The remaining patient is NED following surgical resection of pulmonary and supraclavicular disease.

Conclusion: While clinical stage II patients experiencing a LR have a high rate of active malignancy, appropriate surgical management is imperative and must be complete. The high rate of recurrence and death in this patient population stresses the need for multidisciplinary management from the outset to optimize patient outcomes.

Source of Funding: None

PAPER #71

LONGITUDINAL HEALTH RELATED QUALITY OF LIFE AFTER RADICAL CYSTECTOMY UTILIZING THE FACT-BL-CYS INSTRUMENT: COMPARISON OF ILEAL CONDUIT, INDIANA POUCH, AND ORTHOTOPIC NEOBLADDER.

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Introduction: With multiple options for urinary diversion following radical cystectomy, health related quality of life (HRQOL) is an important consideration during the shared decision-making process with patients being treated for bladder cancer. We aimed to characterize the HRQOL reported by patients who underwent a radical cystectomy for bladder cancer with respect to ileal conduit, Indiana pouch, or neobladder urinary diversion utilizing the Functional Assessment of Cancer Therapy-Bladder Cystectomy (FACT-BI-Cys) validated patient health survey at various time points postoperatively.

Methods: The FACT-BI-Cys survey was administered to 146 patients with bladder cancer undergoing radical cystectomy and urinary diversion at Indiana University from 2015-2018. Surveys were then completed prior to radical cystectomy and longitudinally throughout the post-operative course and retrospectively reviewed.

Results: Of the 146 patients completing questionnaires with a mean of over 12 months, 84 (57.6%) received an ileal conduit, 31 (21.2%) an Indiana pouch, and 31 (21.2%) an orthotopic neobladder. 76.7% of the patients were male. The mean (SD) FACT-BI-Cys (0-168) pre- and post-operative scores amongst all diversion types were 120.15 (23.82) and 123.75 (22.88), possibly indicating perceived improvement in quality of life after treatment for bladder cancer with cystectomy. Patients who received an ileal conduit had the largest percent increase in HRQOL scores (5.96%), followed by Indiana Pouch (1.1%). Neobladder patients had an average decrease in HRQOL scores by (3.2%). There was no significant difference in Physical Well-Being subscores or the Social/Family Well-Being subscores between diversion types. The highest Functional Well-Being subscores were seen in the ileal conduit group, there was no change seen in the Indiana pouch group. In evaluating the treatment-specific cystectomy instrument results, the highest subscore increase was seen in the ileal conduit group and there was a decrease in subscores seen in the neobladder group. Emotional Well-Being scores increased amongst all diversion groups.

Conclusions: To our knowledge this is the first longitudinal analysis comparing quality of life in patients after receiving an ileal conduit, Indiana pouch, or neobladder urinary diversion utilizing a standardized, validated, treatment-specific patient health survey. Proper preoperative counseling is critical to ensure understanding about the benefits of continence vs noncontinent diversion types within the first year postoperatively.

Source of Funding: None

PAPER #73

LATE DOSING OF LUTEINIZING HORMONE-RELEASING HORMONE AGONISTS AND TESTOSTERONE LEVELS >20 NG/DL IN PROSTATE CANCER

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Objectives: Luteinizing hormone-releasing hormone (LHRH) agonists are the most frequently used drugs for the delivery of androgen deprivation therapy (ADT) for prostate cancer (PCa). Achieving and maintaining effective testosterone (T) suppression to the levels attained with surgical castration is the cornerstone of ADT for advanced PCa. Increasing evidence suggests achieving and sustaining very low T levels at <20 ng/dL with ADT is desirable and correlates with improved disease-specific survival in patients with advanced PCa. However, T levels may rise above castration level (50 ng/dL) between injections, especially if a subsequent dose is delayed. When patients have disease progression indicated with an increase in prostate-specific antigen (PSA) level, it is unclear whether the progression is due to late injections or inadequate treatment efficacy. This current study evaluated the timeliness of LHRH dosing, subsequent rate of T breakthroughs and frequency of T and PSA testing prior to dosing in patients with Pca.

Methods: A retrospective review of electronic medical records and associated claims data (1/1/07-6/30/16) of LHRH agonist injections (n=85,030) evaluated the frequency of late dosing (defined as occurring after day 32, 97, 128, 194 for 1-, 3-, 4-, 6-month formulations, respectively), T tests >20 ng/dL and frequency of T/PSA tests prior to dosing.

Results: 26.9% of injections were late: 14.4% were ≤1 week late, 3.1% were between 1-2 weeks late and 9.4% were >2 weeks late. 43% of T values exceeded 20 ng/dL for late injections; while only 21% exceeded this level for early/on-time injections. 83% of LHRH injections had a PSA value drawn prior to dosing; however, only 13% had a similarly timed T assessment.

Conclusions: Across LHRH agonists, greater than a quarter of injections were late. When LHRH agonist dosing was late, the proportion of T tests with T >20 ng/dL increased compared to when the dosing was early/on-time. Late injections were correlated with ineffective T suppression (above 20 ng/dL) over 40% of the time. For all injections, T levels were not monitored as frequently as PSA levels. Considering the clinical benefits of maintaining effective T suppression throughout the course of ADT, clinicians should administer treatments following labeled dosing instructions, routinely monitor T levels and consider prescribing treatments with proven efficacy through the dosing interval to maintain T below castration levels.

Source of Funding: Tolmar Pharmaceuticals, Inc.

**BIOCHEMICAL RECURRENCE RATES IN MEN WITH HIGH GRADE PROSTATE
CANCER ON TESTOSTERONE THERAPY**

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Objectives: Testosterone therapy (TTH) in men with prostate cancer (PC) is controversial, especially in men with high risk PC, with little data exiting in the literature to guide clinicians. This study assessed biochemical recurrence rates (BCR) in men with high risk PC on TTH.

Materials and Methods: *Patients:* We included all men who underwent radical prostatectomy (RP) with high risk PC (HRPC), defined as a Gleason sum (GS) 6-7 with unfavorable pathology: positive surgical margins (SMS+), lymph node involvement (LNI+), seminal vesicle involvement (SVI+); or GS ≥ 8 with any pathology status. BCR was defined as a PSA level of ≥ 0.1 ng/mL. *Testosterone Therapy:* Low T was defined as a total T (TT) level < 300 ng/dL on two occasions using LCMS collected prior to noon. Men were divided into 3 groups based on T levels and TTH: those with normal TT levels and no TTH (NT); men with low TT who did not receive TTH (LT); men with low TT who received TTH (LT+). *Statistics:* Clinical and pathological data were analyzed. Chi-square and ANOVA were performed for group comparisons. A series of proportional hazards models were estimated to assess the unadjusted and adjusted associations of predictors to time-to-BCR. Each predictor was fitted in an unadjusted model, then significant predictors from unadjusted models were included in a single adjusted model.

Results: *Patients:* A total of 1,563 men with HRPC were included in the study. The mean age of the study cohort was 61.9 ± 7 years. 44% of patients had low T. *Testosterone Therapy:* Men with low TT levels (regardless of whether they were on TTH), did not differ significantly from those with normal T level in pathology status, but had lower Gleason scores ($p < 0.001$) and were less likely to be SVI positive. Of the men on TTH, 28% were \geq GS 8. *BCR:* A total of 1119 (72%) patients experienced BCR within 0.1-15.3 years. 67% of the NT group, 80% in the LT- group and 41% of men in the LT+ group. Older age, higher Gleason sum, LNI+, SVI+, SMS+, ADT use were associated with faster BCR rates in unadjusted models. After covariate adjustment, low T, TTH, were not associated with BCR.

Conclusion: These data suggest that patients with HRPC with low T on TTH have no higher rates of or time to BCR.

Source of funding: none

PAPER #75

JOINT IMPACT OF DIAGNOSTIC PSA AND RACE/ETHNICITY ON 25+ YEAR PROSTATE CANCER OUTCOMES FOLLOWING RADICAL PROSTATECTOMY

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(Presentation to be made by Dr. Jacob McFadden)

OBJECTIVES: Use of race-specific reference ranges for prostate-specific antigen (PSA) testing has been debated. In a diverse cohort of men diagnosed with prostate cancer (PCa) over a >25 year period, we compared diagnostic PSA ranges and disease progression after radical prostatectomy (RP) among African-American (AA), Caucasian-American (CA) and Hispanic men. We sought to explore differences in disease presentation and treatment outcomes in an equal-access setting.

METHODS: Eligible men underwent RP for treatment of newly diagnosed, biopsy-confirmed PCa between 1990-2017. Kaplan-Meier estimation curves were used to model biochemical recurrence (BCR)-free survival and metastasis-free survival as a function of both PSA levels and racial/ethnic group (AA, CA, and Hispanic).

RESULTS: High median PSA levels were observed among AA men at the beginning of the study period, but by 2009-2017, the median PSA for AA men dropped to 5.3 ng/mL, similar to CA men (5.2 ng/mL, $p=0.873$) and Hispanic men (5.2 ng/mL, $p=1.0$). Hispanic men were rarely observed to have PSA levels >20ng/ml at diagnosis.

When examining the joint roles of race/ethnicity and PSA level at PCa diagnosis on biochemical recurrence (BCR)-free survival, PSA was a strong predictor for both AA ($p<0.01$) and CA men ($p<0.01$), but not for Hispanic men ($p=0.09$). Among men with PSA >10ng/ml, a trend toward more favorable BCR-free estimates was observed for Hispanic men when compared to AA (log $p=0.3182$) and CA men (log $p=0.4621$). PSA was predictive of metastasis-free survival for AA men ($p=0.01$) and CA men ($p=0.03$); no difference was observed for metastasis-free survival between AA and CA men (log $p=0.7078$).

CONCLUSIONS: A regression to similar median diagnostic PSA levels over our study period for CA, AA, and Hispanic men that underwent RP suggests adjustments in PSA reference ranges for race/ethnicity are not necessary. Interestingly, PSA appears less predictive of BCR for Hispanic men, and higher PSA values in Hispanic men may not portend worse BCR-free survival estimates when compared to AA or CA men in an equal-access setting.

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PAPER #76

TESTOSTERONE THERAPY IN MEN ON ACTIVE SURVEILLANCE FOR PROSTATE CANCER

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(To be presented by Dr. Salter)

Objectives: The role of testosterone (T) therapy in men with prostate cancer (PC) is debated. There is a paucity of long-term data in men on active surveillance (AS) for PC. This analysis attempted to define the safety of T therapy in this population.

Materials and Methods: Men on active surveillance for PC who had T deficiency constituted the study population. Men were treated with exogenous T (topical, intramuscular) agents or clomiphene if they had low or low-normal luteinizing hormone levels. T dose was titrated to achieve a serum level in the middle tertile of the reference range. Patients had serum T levels checked every 6 months and PSA levels checked every 3 months in the first year and every 6 months thereafter.

Results: A total of 86 patients have been prescribed T therapy to date. Mean age and pre-radical prostatectomy (RP) PSA levels were 55.1 years and 52 ng/mL respectively. Baseline total T levels were 240.60 ng/dL. 92% had a Gleason Score (GS) of 6, 8% had GS 7 disease. Mean duration on AS before T therapy was commenced was 13.15 months. Post-treatment total T levels were 515.190 ng/dL. Mean duration on T supplementation at last follow-up was 19.21 months. Mean PSA level change per patient was 0.60.3 ng/mL with 26% of men experiencing a PSA level increase ≥ 1 (70% baseline total T levels <200 ng/dL). 16% of AS men on T therapy opted for definitive therapy for their prostate cancer.

Conclusion: These data suggest that T therapy does not result in significant PSA changes in men on active surveillance for PC. Conversion rates to definitive therapy appear to be no higher than the general AS population.

Source of funding: none

Please join us for a CME-accredited luncheon symposium
presented by **Robert Dreicer, MD.**

Navigating the Prostate Cancer Disease Continuum

Evolving Strategies in the Management of HSPC and CRPC

SATURDAY

January 18, 2020

12:00 pm – 1:15 pm

University Ballroom

PRESENTER

**Robert Dreicer, MD, MS,
MACP, FASCO**

Section Head Medical Oncology
Deputy Director, University of
Virginia Cancer Center

Professor of Medicine
and Urology
University of Virginia
School of Medicine



The approval of several novel agents, as well as evolving treatment paradigms, has given prostate cancer patients and their healthcare providers many new and effective therapeutic options. At present, the ultimate goal of the clinician is to provide quality care by assessing the risks and benefits of each treatment option, while maintaining the continuity of care across time and various treatment modalities. For the multidisciplinary care team including urologists who are now at the forefront of prostate cancer management and treatment, this can be challenging as research and best practice treatment developments often outpace traditionally accepted clinical practice.

Dr. Dreicer will present an interactive, informative presentation focusing on improving understanding of the available treatments, both current and emerging, and how these agents interface with disease pathophysiology to drive a more personalized medicine approach.

This activity has been supported by an educational grant from Astellas and Medivation, Inc., a Pfizer Company, Genomic Health, Janssen Biotech, Inc., and Sanofi Genzyme.

There is no fee for participating in this activity and no pre-registration is required.

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&

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Convention Center, Salon I

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