65th ANNUAL JAMES C. KIMBROUGH UROLOGICAL SEMINAR



2018 PROGRAM & ABSTRACT BOOK

January 10-14, 2018
The Scottsdale Resort at McCormick Ranch
Scottsdale, Arizona



Society of Government Service Urologists

2018 PROGRAM BOOK



Scientific Program Director: COL Robert C. Dean, MC, USA

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, Timothy F. Donahue, MD

Dear SGSU Members,

Welcome to Scottsdale and the 65th Annual Kimbrough Seminar. It is a distinct honor to serve as the President of the Society of Government Service Urologists. Dr. Robert Dean has 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. However, 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 beautiful Arizona.

With Best Regards,

Tim Donahue, MD



Welcome from the Program Chairman

COL Robert C. Dean, MC, USA

Dear SGSU Members,

We would like to welcome you to the 65th Annual Society of Government Service Urologists, James C. Kimbrough Urological Seminar in beautiful Scottsdale.

Arizona. I would like to thank my colleagues at Walter Reed National Military Medical Center who assisted me in the planning of this meeting. I believe you will agree that we are keeping important SGSU traditions alive while maintaining a robust academic program. I am especially excited to introduce the "audience participation app" to this year's Seminar with the audience participation during the residents' competition and sessions.

Please join us at the Welcome Reception on Wednesday to kick off the meeting. We will have three full meeting days and Sunday is dedicated to the Mock Oral Boards and a few talks for a total of 20.25 hours of CME. Thursday evening is always a highlight with the GU Bowl and Friday evening will be a free night to enjoy Scottsdale scenery and restaurants.

Our Scientific Program continues to allow 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.

Finally, please join us on Saturday at 6:30 PM for the Kathy and Preston Littrell Awards Dinner, where you will meet New York Times Best-Selling author, Mary Roach. Different than in past years, Ms. Roach will not deliver a lecture but instead she wishes to have a conversation with the audience. Ask any question or bring up any topic and Ms. Roach will discuss -- with her enjoyable wit and wisdom. Feel free to review her books, "Grunt", "Bonk", and "Gulp" to name a few. I hope you will find this evening very engaging and entertaining.

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

Best Regards,

COL Robert C. Dean, MC, USA Walter Reed National Military Medical Center

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JAMES CLAUDE KIMBROUGH, MD

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



olonel 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 1 and 11. 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 Chirugie 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

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

VEA1002	MANAUD AAIIAIAEKS	
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
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JAMES C. KIMBROUGH MEMORIAL AWARDS - PREVIOUS WINNERS (cont.)

1986 1987 1987	CPT Thomas A. Rozanski, USA LCDR Thomas J. Stilwell, USNR LT Harold A. Frazier II, USNR	Madigan AMC Mayo Clinic, Rochester, MN 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 1996	PT Ted O. Morgan, USA	Walter Reed AMC
1996	CPT Jay T. Bishoff, USAF	Wilford Hall MC
1997	CPT Raymond S. Lance, USA	Madigan AMC
1997	MAJ John G. Anema, USAF LTC Rhonda Cornum, USA	Wilford Hall MC
1998	MAJ John G. Anema, USAF	Brooke AMC 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, ÚSA	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

^{*}San Antonio Uniformed Services Health Education Consortium

PRINCE D. BEACH, MD

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



olonel 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.

H. GODWIN STEVENSON

SGSU Administrator - 1920-1992



. 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 lan 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

CHRISTINE MANTHOS

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



ajor 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



lare Scanlon was just as much a member of the Army as was her husband, retired 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.

fter 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

2017 LTC Joseph R. Sterbis, MC, USA

2006 Teresa Clark & Sharon Mason

2007 Janie N. Garcia

2008 Patricia A. Harrison

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	Martin L. Dresner, MD
2017	Mitchell Edson, MD

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
12	1964	COL Clarence B. Hewitt, MC, USA Brooke General Hospital
13	1965	COL Prince D. Beach, MC, USA 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

NUMBER 18	YEAR	Dunalia Canaval Harvital
10	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
21	1973	COL Evan L. Lewis, MC, USA 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, NRMC, 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

NUMBER 33	YEAR 1985	Madigan Army Medical Center
33	1909	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, Washtington, 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

NUMBER	YEAR	
45	1997	Tripler Army Medical Center The Fairmont Hotel, San Franscisco, CA COL George E. Deshon, MC, USA
46	1998	National Naval Medical Center-Bethesda Ft. Magrudder 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

NUMBER 55	YEAR 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

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

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 \$45
- Saturday Evening Kathy & Preston Littrell Awards Dinner \$45 If you have not purchased these tickets, you may do so at the registration desk. (Tickets will be collected at the door).

Overview/Highlights:

Topics featured at the Kimbrough Annual Seminar will feature state of the art lectures in various urologic topics - including: Practice Management Updates, Oncology, Pediatric Urology, 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. This year, the Manthos Resident/Young Urologist luncheon Program will feature handon workshop stations with simulators.

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 an hour in advance of your presentation.

Slide Preview Hours:

WED: 2:00 PM - 6:00 PM THURS - SAT: 7:00 AM - 5:00 PM

CONTINUING MEDICAL EDUCATION

Acknowledgement of Commercial Support

Boston Scientific Corp.

Accreditation Statement

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Amedco and the Society of Government Service Urologists. Amedco is accredited by the ACCME to provide continuing medical education for physicians.

Credit Designation Statement

Amedoo designates this live activity for a maximum of 20.25 AMA PRA Category 1 CreditsTM. Physicians should claim only the credit commensurate with the extent of their participation in the activity. (See page 23 to claim your CME certificate)

Objectives - After attending this program you should be able to:

- 1. Appraise new advances and therapies for medical oncology for Genitourinary Cancer.
- 2. Assess sexual health issues in males.
- 3. Review of female urology treatments, issues and successes.

CONTINUING MEDICAL EDUCATION

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 of 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 <u>not</u> listed below, they disclosed that they had no relevant financial relationships.

First Name	Last Name	Commercial Interest	Relationship
John	Barry	Elsevier,Societe Internationale d'Urology	Other Financial or Material Support,Other Financial or Material Support
Maurice	Garcia	Pfizer,Coloplast,Safe Medical Designs,NIH,MI.MMedicus, LLC,American Urologic Association Western Section	Speakers Bureau, Consultant, Founder, Research Grant Overall Principal Investigator, Patent Holder, Other Financial or Material Support
Thomas	Hatch	Waveform Lithotripsy	Stock Shareholder
bbut	Moul	Tolmar,Sanofi,Janssen,Ferring, Abbvie,Theralogix	Consultant,Speakers Bureau,Speakers Bureau,Speakers Bureau,Scientific/Medical Advisory Board Member,Scientific/Medical Advisory Board Member
Andrew	Peterson	Boston Scientific, Boston Scientific, Boston Scientific	Research Grant Site Principal Investigator,Scientific/Medical Advisory Board Member,Speakers Bureau
Alan	Shindel	Genomic Health,Genomic Health	Stock Shareholder, Employee
Sean	Stroup	Neotract, Inc,Intuitive Surgical	Consultant, Consultant
Christian	Twiss	DDI, Inc.	Other Financial or Material Support
Run	Wang	Boston Scientific, Coloplast	Consultant, Consultant
Steven	Wilson	Coloplast, AMT, Sontec instruments, Boston Scientific, Fidelis	Consultant,Consultant,Consultant,Spe akers Bureau,Consultant

CONTINUING MEDICAL EDUCATION

Print Your CME Certificate After The Meeting Instructions:

Go to SGSU.CmeCertificateOnline.com

Click on the

"2018 Kimbrough Urological Seminar"
link and follow instructions

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 10

<u>TIME</u>	EVENT	ROOM
2:00 PM - 6:00 PM	Registration	Coronado Ballroom Plaza
2:00 PM - 6:00 PM	Slide Preview Station	Boardroom
2:00 PM - 4:00 PM	Board of Director's Meeting	Pima Room
6:30 PM - 8:30 PM	Welcome Reception	Bennie's Courtyard

Thursday, January 11

TIME	EVENT	ROOM
7:00 AM - 2:45 PM	Exhibit Hall open	Arizona Ballroom
7:00 AM - 8:15 AM	Networking Breakfast	Exhibit Area
7:00 AM - 5:00 PM	Registration	Coronado Baliroom Plaza
7:00 AM - 5:00 PM	Slide Preview Station	Boardroom
8:15 AM - 8:40 AM	Welcome & Presentations	Coronado Baliroom
8:40 AM - 9:00 AM	Group Picture	
9:10 AM - 10:16 AM	Session I-II: Residents Competition	Coronado Ballroom
10:16 AM - 11:12 AM	Refreshment/Network Break	Exhibit Area
11:12 AM - 11:45 AM	Session III: Residents Competition	Coronado Ballroom
11:45 AM - 12:15 PM	MDxHealth Symposium (non CME)	Coronado Ballroom
12:15 PM - 12:45 PM	Genomic Health Symposium (non CME)	Coronado Ballroom
12:45 PM - 2:45 PM	Manthos Resident & Young	Coronado Ballroom 1
	Urologist Luncheon	
12:45 PM - 2:45 PM	Lunch Break in Exhibit Area	Arizona Ballroom
2:45 PM - 4:20 PM	Session IV-V: Residents	Coronado Ballroom
	Competition	
4:20 PM - 5:00 PM	Session VI-VII: Scientific Sessions	Coronado Ballroom
5:30 PM - 6:00 PM	GU Bowl Official Tailgate Party	Coronado Ballroom Plaza
6:00 PM - 7:30 PM	GU Bowl	Coronado Ballroom

Friday, January 12

**		
<u>TIME</u>	EVENT	ROOM
7:00 AM - 2:00 PM	Exhibit Hall open	Arizona Ballroom
7:00 AM - 8:15 AM	Networking Breakfast	Exhibits Area
7:00 AM - 5:00 PM	Registration	Coronado Ballroom Plaza
7:00 AM - 5:00 PM	Slide Preview Station	Boardroom
8:15 AM - 9:00 AM	Session VIII: Practice Mgt. Update	Coronado Ballroom
9:00 AM - 10:00 AM	Janssen Symposium (Non CME)	Coronado Ballroom
10:00 AM - 11:00 AM	Refreshment/Network Break	Exhibit Area
11:00 AM - 12:00 PM	Session IX: Pediatrics	Coronado Ballroom

PROGRAM-AT-A-GLANCE

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

Friday, January 12 (continued)

TIME	EVENT	ROOM
12:00 PM - 12:45 PM	Session X: Oncology 1	Coronado Ballroom
12:45 PM - 2:00 PM	Astellas/Pfizer Oncology Lunch Symposium (Non CME)	Coronado Ballroom
2:00 PM - 4:00 PM	Session XI: Oncology 2	Coronado Ballroom
4:00 PM - 5:30 PM	Session XII: Podium & Poster	Coronado Ballroom 1
	Presentations & Reception	

Saturday, January 13

TIME	<u>EVENT</u>	ROOM
7:00 AM - 2:00 PM	Exhibit Hall open	Arizona Ballroom
7:00 AM - 8:15 AM	Networking Breakfast	Exhibit Area
7:00 AM - 5:00 PM	Registration	Coronado Ballroom Plaza
7:00 AM - 5:00 PM	Slide Preview Station	Boardroom
8:15 AM - 10:15 AM	Session XIII: Sexual Health	Coronado Baliroom
10:15 AM - 11:25 AM	Refreshment/Network Break	Exhibit Area
11:25 AM - 12:10 PM	Session XIV: VA & Surgical Updates	Coronado Baliroom
12:10 PM - 1:20 PM	CME Lunch Symposium	Coronado Ballroom
1:20 PM - 2:30 PM	SGSU Business Meeting	Coronado Ballroom
2:30 PM - 3:45 PM	Session: XV: Female Urology	Coronado Ballroom
6:30 PM - 9:30 PM	Kathy & Preston Littrell Awards	Arizona Ballroom
	Reception / Dinner	

Sunday, January 14

<u>TIME</u>	EVENT	ROOM
7:30 AM - 11:00 AM	Registration	Coronado Baliroom Plaza
8:00 AM - 9:00 AM	Hasta La Vista Breakfast	Coronado Ballroom
8:15 AM - 9:00 AM	Session XVI: MHG Genesis &	Coronado Ballroom
	Meeting Highlights	
9:00 AM - 12:00 PM	Session: XVII: Mock Oral Boards	Coronado Ballroom 1

Please sign up for Mock Oral Boards at Registration Desk.

INVITED SPEAKERS

Richard K. Babyan, MD

AUA Immediate Past President, Boston Medical Center

Ronald S. Boris, MD

Assistant Professor of Clinical Urology, Indiana University School of Medicine

COL Timothy C. Brand MS, FACS MC, USA

Madigan Army Medical Center

E. David Crawford, MD

Head of Urologic Oncology, University of Colorado

Maurice Garcia, MD

Cedars Sinai Medical Center

Forrest C. Jellison, MD

San Antonio Military Medical Center Dept. of Urology

Gerald H. Jordan MD, FACS, FAAP (hon), FRCS (hon)

Executive Secretary,
American Board of Urology

Judd W. Moul, MD, FACS

James H. Semans, MD Professor of Surgery, Director, Duke Prostate Ctr., Div. of Urologic Surgery, Duke Univ. Med. Ctr.

Col Timothy Phillips, MC, USAF

San Antonio Military Medical Center Dept. of Urology

Matthew B. Rettig, MD

Medical Director, Prostate Cancer Program, Institute of Urologic Oncology, UCLA

Igner Rosner, MD

Dir., Urologic Oncology, Director, Center for Prostate Disease Research, Assoc. Professor of Surgery, USUHS, Walter Reed National Military Medical Center

Alan W. Shindel, MD MAS

Associate Professor of Urology University of California, San Francisco

COL Douglas W Soderdahl, MC, USA

Brooke Army Medical Center, Fort Sam Houston, TX

CDR Sean P. Stroup, MC, USN

Naval Medical Center San Diego

Christian O. Twiss, MD, FACS

Associate Professor of Surgery University of Arizona College of Med.

Run Wang, MD, FACS

President, Sexual Medicine Society of North America, Professor of Surgery Cecil M. Crigler, MD Chair, Urology Dir. of Sexual Medicine Univ. of Texas McGovern Medical School, Houston / MD Anderson Cancer Ctr.

Steven K. Wilson, MD, FACS, FRCS

Editor-In-Chief ISSM Video Journal of Prosthetic Urology, La Quinta CA

David VanderWeele, MD, PhD

Assistant Clinical Investigator Laboratory for Genitourinary Cancer Pathogenesis CCR, NCI, NIH

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EXHIBITOR ACTIVITIES

Visit the Exhibit Area For The Education!

- See first hand the latest in urology technology & services
- Enjoy hearty networking breakfasts
- Re-Energize with lively refreshment breaks
- Visit the exhibitors to win prizes!

The Exhibits are located in the Arizona Ballroom

Schedule of Activities in the Exhibit area

Thursday, Jan. 11 Schedule:

7:00 AM - 2:45 PM: Hours Open

7:00 AM - 8:15 AM: Networking Breakfast

10:15 AM - 11:12 AM: "Vendor Blender" Refreshment Break

12:45 PM - 2:45 PM: Lunch Break in Exhibit Area

Friday, Jan. 12 Schedule:

7:00 AM - 2:00 PM: Hours Open

7:00 AM - 8:15 AM: Networking Breakfast

10:00 AM - 11:00 AM: "Vendor Blender" Refreshment Break

Saturday, Jan. 13 Schedule:

7:00 AM - 2:00 PM: Hours Open

7:00 AM - 8:15 AM: Networking Breakfast

10:15 AM - 11:25 AM: "Vendor Blender" Refreshment Break

Visit with the Exhibitors during the Breakfasts, Refreshment Breaks
Use your "Hello 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.

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Genomic Health

Janssen Biotech

Karl Storz Endoscopy-America

Liebel-Flarsheim

MDx Health

Mission Pharmacal Co.

Pacific Edge Diagnostics

PSS Urology

Richard Wolf Med. Instr. Corp.

Siemens Medical Solutions USA

SonaCare

Tolmar

Uramix

Please visit our Exhibitors and see what's new and exciting. Win prizes! Have fun!

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American Urological Association

GU BOWL

Experience a Great Tradition! The SGSU Annual GU Bowl



Attend Thursday Evening's

GU Bowl Official Tailgate Party 5:30 pm, Coronado Baliroom Plaza

GU Bowl 6:00 pm, Coronado Ballroom







THE SGSU

WELCOMES

THE PARTICIPATION

OF THE VA UROLOGISTS

AND

Urological Society for American Veterans (USAV)

WEDNESDAY, JANUARY 10

Outline of Scientific Program

65th Kimbrough

Annual Seminar * The Scottsdale Resort, Scottsdale, AZ

TIME	EVENT	ROOM
2:00 PM - 6:00 PM	Registration	Coronado Ballroom Foyer
2:00 PM - 6:00 PM	Slide Preview Station	Boardroom
2:00 PM - 4:00 PM	SGSU Board of Directors Meeting	Pima Room
6:30 PM - 8:30 PM	Welcome Reception	Bennie's Courtyard

6:30pm-8:30pm - Bennie's Courtyard

Welcome Reception

Kick-off the meeting with your colleagues in a beautiful setting. Enjoy hosted bar and small bites.

Be sure to bring your Event & Drink Tickets!



THURSDAY, JANUARY 11

Outline of Scientific Program

65th Kimbrough

Annual Seminar * The Scottsdale Resort, Scottsdale, AZ

TIME	EVENT	ROOM
7:00 AM - 2:45 PM	Exhibits Open	Arizona Ballroom
7:00 AM - 8:15 AM	Networking Breakfast	Exhibits Area
7:00 AM - 5:00 PM	Registration	Coronado Baliroom Plaza
7:00 AM - 5:00 PM	Slide Preview Station	Boardroom
8:15 AM - 8:25 AM	Welcome & Opening Ceremonies	Coronado Ballroom
8:25 AM - 8:30 AM	Color Guard & National Anthem	Coronado Ballroom
8:30 AM - 8:40 AM	AUA Keynote Address	Coronado Ballroom
8:40 AM - 9:00 AM	Group Picture	
9:10AM - 10:16 AM	Session I-II: Residents Competition	Coronado Ballroom
10:16 AM - 11:12AM	Refreshment/Network Break	Exhibits Area
11:12AM - 11:45AM	Session III: Residents Competition	Coronado Ballroom
11:45 AM - 12:15 PM	MDxHealth Symposium (Non CME)	Coronado Ballroom
12:15 PM - 12:45 PM	Genomic Health Symposium (Non CME)	Coronado Ballroom
12:45 PM - 2:45 PM	Manthos Resident & Young Urologist Luncheon	Coronado Ballroom 1
12:45 PM - 2:45 PM	Lunch in the Exhibits Area	Arizona Ballroom
2:45 PM - 4:20 PM	Session IV-V: Residents Competition	Coronado Ballroom
4:20 PM - 5:00 PM	Session VI-VII: Scientific Sessions	Coronado Ballroom
5:30 PM - 6:00 PM	GU Bowl Official Tailgate Party	Coronado Ballroom Plaza
6:00 PM - 7:30 PM	GU Bowl	Coronado Baliroom

7:00 AM Coffee & Breakfast in the Exhibits Area!

Enjoy a hearty breakfast, hot coffee and mingle with colleagues and industry reps!

Complete your "Hello Gard" to win prizes!

OPENING CEREMONIES

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

8:15AM - 8:25AM Welcome & Announcements

Program Chairman, COL Robert C. Dean, MC, USA & President, Capt (Ret) Timothy Donahue,

MD

8:25AM - 8:30AM Presenting the Colors & National Anthem

Honor Guard, Luke Air Force Base

AUA Keynote Address

8:30 AM - 8:40 AM

Richard K. Babayan, MD

Immediate Past President,
American Urological Association



SESSION I - RESIDENTS COMPETITION

9:10 AM - 9:43 AM - Coronado Ballroom Papers are seven minutes

Moderators:

LTC Joseph R. Sterbis, MC, USA & Bradley Schwartz, MD Judges: John M. Barry, MD, Richard K. Babayan, MD & COL (Ret.) Martin L. Dresner, MD, FACS

- 9:10AM Major Pansey Uberoi, MC, USAF Incorporation of Mindfulness Exercises to Reduce Anxiety and Pain During Urodynamic Testing: A Randomized Controlled Trial.
- 2 9:17AM LT Chad R. Pusateri, MC, USN
 Placental Membrane Grafts For The Treatment Of Urethral
 Strictures In A Rabbit Model.
- 3 9:24AM CPT Alexandria Hertz, MC, USA Time to Resolution of Microscopic Hematuria After Robotic Prostatectomy.
- 9:31AM CPT Felicia L. Balzano, USA Prolapsed Ureterocele Causing Acute Urinary Retention: A Case Report.

9:38AM Discussion (5 minutes)

9:43AM End of Session

Courtesy Reminder

Please set your cell phone to vibrate mode while sessions are in progress. If you must take a call, do so outside of the meeting room. Thank you for being respectful of the presenters and your colleagues.

SESSION II - RESIDENTS COMPETITION

9:43 AM - 10:16 AM - Coronado Bailroom Papers are seven minutes

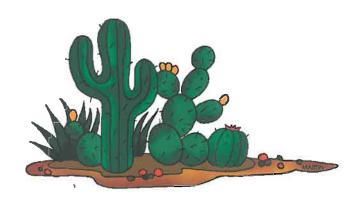
Moderators:

LTC Joseph R. Sterbis, MC, USA & Bradley Schwartz, MD Judges: John M. Barry, MD, Richard K. Babayan, MD & COL (Ret.) Martin L. Dresner, MD, FACS

- 5 9:43AM CPT Joseph J. Fantony, MC, USA Synergistic Immuno-Photothermal Nanotherapy (SYMPHONY): A Novel Treatment For Localized And Metastatic Bladder Cancer.
- 9:50AM LT Paul D. McClain, MC, USN Quality of Life after Surgery for Localized Prostate Cancer.
- 7 9:57AM CPT Grace E. Park, MC, USA
 The Role of Multidisciplinary Care In Mitigating Cancer Patient
 Distress.
- 8 10:04AM CPT Thomas Gerald, MC, USA PSA Screening History And Prostate Cancer Aggressiveness.

10:11AM Discussion (5 minutes)

10:16AM End of Session



10:16 AM - 11:12 AM

"Vendor Blender"

Refreshment Break in Exhibits Area



Complete your
Hello Card
for great prizes!!!

SESSION III - RESIDENTS COMPETITION

11:12 AM - 11:45 AM - Coronado Ballroom Papers are seven minutes

Moderator:

CDR Sean P. Stroup, MD, MC, USN & LTC Steven J. Hudak, MC, USA Judges: John M. Barry, MD, Richard K. Babayan, MD & COL (Ret.) Martin L. Dresner, MD, FACS

- 9 11:12AM Capt Theodore R. Saitz, MC, USAFR A Model for Digital Volumetric Assessment.
- 10 11:19AM Jacqueline M. Zillioux, MD
 Cytoreductive Prostatectomy: Early Experience at a Single Institution.
- 11:26AM MAJ Dantae L. Bowie, MC, USA
 Racial Comparison Of Patient Satisfaction With Medical Care For
 Prostate Cancer Patients Enrolled In A Treatment Decision-making
 Study.
- 11:33AM Leah Williams, MS3
 Implementation of a Novel Perioperative Care Service in a Veterans
 Administration Hospital: Reduced Opioid Utilization after Major
 Urologic Surgery.
 - 11:40AM Discussion (5 minutes)
 - 11:45AM End of Session
 - 11:45AM Non CME Symposium Supported by MDxHealth
 A Genomic Approach to Prostate Biopsies.
 - E. David Crawford, MD, Head of Urologic Oncology, University of Colorado

12:15PM - Non CME Symposium - Supported by Genomic Health
An Update on OncotypeDx GPS and Introducing
AR-V7 Nuclear Detect.

LUNCH PROGRAMS

Manthos Program Simulators Supported by Boston Scientific Corporation

12:45pm - 2:45pm - Coronado Ballroom 1
Manthos Resident & Young Urologist
Lunch Program

Featuring Five Hands-on Simulation Stations

- 1. PCNL Access & Dilatation: Mods.: Bradley Schwartz, MD / Hernan Altamar, MD
- 2. GreenLight Laser BPH Simulator: Mods.: Scott Cuda, MD / Timothy Brand, MD
- 3. Flexible Ureteroscopy Speed Challenge: Mods.: Christopher Allam, MD / Chanc Walters, MD
- 4. Stone Retrieval Techniques: Mods.: Steven Hudak, MD / Amanda Reed-Maldonado, MD
- Mid-Urethral Sling Techniques: Mods.: Forrest Jellison, MDJay Choe, MD



Meet & Greet with Industry ~ 12:45pm - 2:45pm

Lunch provided by SGSU in the Exhibit Area

(Food service until 1:45pm)

Complete your Hello Card for prizes!

SESSION IV - RESIDENTS COMPETITION

2:45 PM - 3:30 PM - Coronado Ballroom Papers are seven minutes

Moderators:

CDR R. Chanc Walters, MC, USN & CDR Hernan O. Altamar, MC, USN Judges: John M. Barry, MD, Richard K. Babayan, MD & COL (Ret.) Martin L. Dresner, MD, FACS

- 2:45PM CPT Katherine A. Carlisle, MC, USA
 Practice of Testicular Prosthesis Placement in Patients Undergoing
 Radical Orchiectomy in a Military Cohort.
- 14 2:52PM CPT Nicholas P. Hopson, MC, USA Fournier's Gangrene: A Standardized Treatment Pathway.
- 2:59PM CPT Stephanie Sexton, MC, USA
 Survey On The Contemporary Management Of Intraoperative
 Urethral Injuries During Penile Prosthesis Implantation.
- 16 3:06PM CPT John Q. Schisler, MC, USA
 Chronic Scrotal Content Pain and Microsurgical Denervation:
 Evaluation of Success, Return to Duty Status and Associated
 Comorbid Conditions.
- 17 3:13PM LCDR John E. Kehoe, MC, USN
 Application Of Lean Six Sigma Metholdology In The Urology Clinic:
 Post Vasectomy Semen Analysis Compliance.
 - 3:20PM Discussion (10 minutes)
 - 3:30PM End of Session

SESSION V - RESIDENTS COMPETITION

3:30 PM - 4:20 PM - Coronado Ballroom Papers are seven minutes

Moderators:

COL Douglas Soderdahl, MC, USA & LTC Chad DeRosa, MC, USA Judges: John M. Barry, MD, Richard K. Babayan, MD & COL (Ret.) Martin L. Dresner, MD, FACS

- 18 3:30PM Capt Amy Reed, MC, USAF
 The Semi-Rigid Ureteroscope as a Sole Dilator for Ureteroscopy.
- 19 3:37PM LCDR Jonathan H. Berger, MC, USN Improving Urology Endoscope Availability.
- 20 3:44PM CPT Karmon Janssen, MC, USA
 Advancements In Ultrasonic Propulsion Technology For Pushing
 Kidney Stones.
- 21 3:51PM CPT Patrick D. Leidig, MC, USA
 Components of Urinary Stones Activate the NLRP3 Inflammasome in Bladder Urothelium.
- 22 3:58PM LT Ryan P. Gillis, MC, USN
 Non-Neurogenic Voiding Dysfunction and Neuropsychiatric
 Disorders.
- 23 4:05PM LT Elizabeth Roger, MC, USN Fibroepithelial Vaginal Polypos in a Newborn Female.
 - 4:12PM Discussion (8 minutes)
 - 4:20PM End of Session

SCIENTIFIC PROGRAM

THURSDAY, JANUARY 11, 2018

SESSION VI -Education / International Papers

4:20 PM - 4:45 PM - Coronado Ballroom Papers are seven minutes

Moderator:

Maj. Richard Knight, MD & COL (Ret) Noah Schenkman, MD

- 24 4:20PM COL(Ret) Joseph Clark, MD
 Single Institution Survey of Applicants' Experience in the Urology
 Match Program.
- 25 4:27PM COL(Ret) Thomas Rozanski, MD Bosnia and the Germany Connection.
- 4:34PM MAJ Robin Schmid, MD, Germany
 Urinary Tract Infections and Sepsis in Patients Following TURP With and Without Perioperative Antimicrobial Prophylaxis: A Comparative Study.

4:41PM Discussion (4 minutes)

4:45PM End of Session

SCIENTIFIC PROGRAM

THURSDAY, JANUARY 11, 2018

SESSION VII - SPECIAL PAPERS

4:45 PM - 5:00 PM - Coronado Ballroom

Moderator:

Maj. Richard Knight, MD / COL (Ret) Noah Schenkman, MD

- 27 4:45PM Al Squitieri, MD, FACS, COLONEL US ARMY (Ret) German Cemetery at Glen Cree Ireland.
- 28 4:52PM Tom Turlington, MD, Brig Gen USAF (Ret)
 Col John Wettlaufer And Col John Weigel Gurus of Combat Urology.

5:00PM End of Session

Attend tonight's



GU BOWL OFFICIAL TAILGATE PARTY - 5:30 PM CORONADO BALLROOM PLAZA

GU BOWL - 6:00 PM CORONADO BALLROOM







FRIDAY, JANUARY 12

Outline of Scientific Program 65th Kimbrough

Annual Seminar * The Scottsdale Resort, Scottsdale, AZ

TIME	EVENT	ROOM
7:00 AM - 2:00 PM	Exhibits Area open	Arizona Ballroom
7:00 AM - 8:15 AM	Networking Breakfast	Exhibits Area
7:00 AM - 5:00 PM	Registration	Coronado Bilrm. Plaza
7:00 AM - 5:00 PM	Slide Preview Station	Boardroom
8:15 AM - 9:00 AM	Session VIII: Practice Mgt. Update	Coronado Ballroom
9:00 AM - 10:00 AM	Janssen Symposium (Non CME)	Coronado Baliroom
10:00 AM - 11:00 AM	Refreshment/Network Break	Exhibits Area
11:00 AM - 12:00 PM	Session IX: Pediatrics	Coronado Ballroom
12:00 PM - 12:45 PM	Session X: Oncology 1	Coronado Ballroom
12:45 PM - 2:00 PM	Astellas/Pfizer Oncology Lunch Symposium (Non CME)	Coronado Baliroom
2:00 PM - 4:00 PM	Session XI: Oncology 2	Coronado Ballroom
4:00 PM - 5:30 PM	Session XII: Podium & Poster Presentations & Reception	Coronado Ballroom 1

7:00 AM

Network Breakfast in Exhibit Area

Bring your Hello Card

to win prizes!

Session VIII: Practice Management Updates

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

Moderator: Hal A. Frazier, MD

- **8:15AM Gerald Jordan, MD** ABU Update.
- 30 8:45AM COL Douglas Soderdahl, MD MHS DHA Update.

9:00AM End of Session

9:00 AM - 10:00 AM

Castration-Resistant Prostate Cancer: Current Considerations and Challenges.

Judd Moul, MD, FACS, Duke University Medical Center

Supported by Janssen - Non CME Symposium

10:00AM - 11:00AM

"Vendor Blender"



Refreshment Break in the
Exhibit Area
Complete your Helle Card
to win prizes!!

Session IX: Pediatrics

11:00 AM - 12:00 PM - Coronado Ballroom

Moderators:

LTC Thomas E. Novak, MC, USA & LTC Robert E. Steckler, USAR

- **11:00AM Col Timothy Phillips, MC, USAF** Pediatrics Update.
- 32 11:25AM MAJ Matthew Kasprenski, MC, USA Management of A Failed Exstrophy Closure: A 50 Year Experience.
- 33 11:37AM MAJ Matthew Kasprenski, MC, USA
 Achieving Urinary Continence And Cloacal Exstrophy: The Surgical
 Cost.

12:00PM End of Session

Session X: Oncology 1

12:00 PM - 12:45 PM - Coronado Ballroom

Moderators:

Capt (Ret) Timothy Donahue, MD & COL (Ret) Stacey Koff, MD

- 34 Lecture in Memory of Jean Fourcroy, MD 12:00PM COL Inger L. Rosner, MC, USA CPDR Update.
- **12:15PM CDR Sean P. Stroup, MC, USN** Prostate Biopsy Complications.

12:35PM Discussion (10 minutes)

12:45PM End of Session



IN MEMORIAM JEAN L. FOURCROY MD, PhD, MPH

June 16, 1930 - October 12, 2016



As the fifth woman to be certified as a urologist in the US, Dr Fourcroy was a pioneer in mentoring women entering the field of medicine and founded the Society of Women in Urology in 1980, which now has 650 members, including over 250 who are board certified urologists.

With four adolescent children, Dr. Fourcroy earned her Bachelors degree at age 34 and entered medical school at Medical College of Pennsylvania at age 42, having completed her PhD in Anatomy from University of California, San Francisco. She then had a long career in clinical practice, teaching, research and regulatory work. She was a Captain at the Bethesda Naval Hospital, served on the faculty at Rutgers University Medical Center, reviewed drug and device applications at the Food and Drug Administration and was on the board of the US Anti-Doping Agency. Her scientific specialties included male and female fertility and performance enhancing drugs. She published numerous articles and edited the book "Pharmacology, Doping and Sports". Illness ended her career at 82.

Dr. Fourcroy was president of the American Medical Women's Association in 1995 and held leadership positions in many professional associations, including Medical Women's International, The American Andrology Society, The Society for the Study of Reproduction and The Washington Academy of Medicine. She received the Presidential Citation Award from the American Urological Association in 1998 and was named 1996 Woman of the Year by the Women's Medical Association of New York City.

LUNCH PROGRAM

12:45pm - 2:00pm - Coronado Ballroom Elevate Care in Advance Prostate Cancer.

William J. Aronson, MD UCLA Department of Urology

Supported by Astellas / Pfizer Oncology - Non CME Symposium

SCIENTIFIC PROGRAM

FRIDAY, JANUARY 12, 2018

Session XI: Oncology 2

2:00 PM - 4:00 PM - Coronado Ballroom

Moderators:

CAPT (Ret) Brain Auge, MD & COL (Ret) Greg Thibault, MD

- 36 2:00PM Ronald S. Boris, MD
 Pseudo-Capsular Thickness in Renal Cell Carcinoma.
- 37 2:30PM Capt (Ret) Timothy Donahue, MD Parastomal Herniation.
 - 2:55PM Discussion (5 minutes)
- 38 3:00PM David VanderWeele, MD, PhD
 New Advances Medical Oncology for GU Cancer.
- 39 3:25PM COL (Ret) Judd Moul, MD
 Polymer Delivered, Subcutaneously Administered Leuprolide
 Acetate Consistently Achieved Low Nadir Testosterone Levels.
- 40 3:31PM COL (Ret) Noah Shenkman, MD Telecystoscopy for Bladder Cancer Surveillance.
- 41 3:37PM Maj. Richard Knight, MD
 Initial Experience With Flexdex For Laparoscopic Radical Prostatectomy.
 - 3:43PM Discussion (7 minutes)
 - 4:00 PM End of Session

FRIDAY, JANUARY 12, 2018

Session XII: Podium/Poster Presentations & Reception

4:00 PM - 5:30 PM - Coronado Ballroom 1
10 minutes of viewing posters, followed by
2 minute podium presentations
Moderators/Judges: COL (Ret.) Martin L. Dresner, MD, FACS,
John M. Barry, MD & COL Burk Zorn, MC, USA

- 42 LT Christine M. Herforth, MC, USN
 Testicular Leydig Cell Hyperplasia: A Case Report.
- **43 CPT Seth Olcese, MC, USA**The Semen Soaked Sailor: A Vasocutaneous Fistula Case Report.
- 44 CPT Erwin Tieva, MC, USA Mucormycosis Of The Penis: A Rare Cause Of Penile Ulceration.
- 45 Capt Doug Cho, MC, USAF
 Renal Denervation for Chronic Left Flank Pain: Successful Liberation
 From Narcotic Use.
- 46 CPT Alexandria Hertz, MC, USA
 Pediatric Urothelial Carcinoma: A Rare Case Of Secondary
 Genitourinary Malignancy In A Wilms Tumor Patient.
- 47 LCDR Eric Biewenga, MC, USN
 Lumbar and Sacral Spinal Medicated Neurogenic Sexual
 Dysfunction; Pathophysiology, Diagnosis and Treatment.
- 48 LCDR Eric Biewenga, MC, USN
 Improving Diagnostic Capture of Organic ED on Ultrasound:
 Corporal Heterogeneity Grading to Assess Penile Fibrosis.
- 49 LCDR Eric Biewenga, MC, USN
 Novel Penile Ultrasound Technique to Explain Mechanism of
 Erectile Dysfunction in Young Patients using Finasteride for
 Androgenic Alopecia.

50 LCDR Eric Biewenga, MC, USN

Characterizing Periurethral Tissue in Cadavers: Potential Negative Impact on Sexual Function by the Mid-Urethral Incontinence Sling Surgery.

51 CPT Karmen Janssen, MC, USA

Benign Cystic Mesothelioma of the Testicle; Rare Pathological Finding in the Male Genital Tract.

52 CPT Karmen Janssen, MC, USA

Effect of Stone Size and Composition on Ultrasonic Propulsion in Vitro.

53 MAJ Matthew Kasprenski, MC, USA

Terminal Markers of Urothelial Differentiation: A Comparison of Newborn and Delayed Bladder Exstrophy Closures to Controls.

54 CPT John Schisler, MC, USA

Single Provider Experience Using Clomiphene For Male Factor Infertility.

55 CPT Alexandria Hertz, MC, USA

Automated Flow Cytometry Urine Analysis: A Shifting Paradigm in Recognizing Microscopic Hematuria.

Discussion Period until 5:30PM



SATURDAY, JANUARY 13

Outline of Scientific Program 65th Kimbrough

Annual Seminar * The Scottsdale Resort, Scottsdale, AZ

TIME	EVENT	ROOM
7:00 AM - 2:00 PM	Exhibit Hall open	Arizona Ballroom
7:00 AM - 8:15 AM	Networking Breakfast	Exhibit Area
7:00 AM - 5:00 PM	Registration	Coronado Blirm. Plaza
7:00 AM - 5:00 PM	Slide Preview Station	Boardroom
8:15 AM - 10:15 AM	Session XIII: Sexual Health	Coronado Ballroom
10:15 AM - 11:25 AM	Refreshment/Network Break	Exhibit Area
11:25 AM - 12:10 PM	Session XIV: VA & Surgical Updates	Coronado Ballroom
12:10 AM - 1:20 PM	CME Lunch Symposium	Coronado Ballroom
1:20 PM - 2:30 PM	SGSU Business Meeting	Coronado Ballroom
2:30 PM - 3:45 PM	Session: XV: Female Urology	Coronado Ballroom
6:30 PM - 9:30 PM	Kathy & Preston Littrell Awards Reception / Dinner	Arizona Ballroom

7:00 AM

Start your day off in the Exhibit Hall with Breakfast! Mix, Mingle & Learn!

Bring your **Helle Card** to win for prizes!

Session XIII: Sexual Health

8:15 AM - 10:00 AM - Coronado Baliroom

Moderators:

MAJ Timothy J. Tausch, MC, USA & MAJ Amanda Reed-Maldonado, MC, USA

- 56 8:15AM Run Wang, MD
 Sexual Medicine Society of No. America Lecture: Penile Prosthesis
 Reservoir Complications.
- 57 8:35AM Steven K. Wilson, MD
 Life Lessons Learned with Prosthesis Surgery.
- 58 9:05AM LTC Amanda Reed-Maldonado, MC, USA Extra-tunical Grafting Procedure for Peyronie's Disease Hourglass and Indent Deformities.
- 59 9:13AM LCDR Eric Biewenga, MC, USN Comparison of Standard Collagenase versus Modified Interferon alpha2B Protocol for Management of Peyronie's Disease at 2 Large Managed Care Organizations.
 - 9:20AM Discussion (10 minutes)
- 60 9:30AM Alan Shindel, MD Management of Disorders of Ejaculation in Men.
- 61 9:50AM Forrest Jellison, MD
 GURS Lecture: Stress Urinary Incontinence: An Update.

10:05AM Discussion (10 minutes)

10:15AM End of Session

10:15am-11:25am
"Vendor Blender"
Refreshment Break in Exhibit Area
Complete your Hello Gard
to Win Prizes!!

Session XIV: Surgical Updates

11:25 AM - 12:10 PM - Coronado Ballroom

Moderators: Jeffrey Jones, MD

- **11:25AM Thomas Hatch, MD**Use of the Intestine in Urologic Surgery.
- 11:45AM Maurice Garcia, MD

 Transgender Genital Surgery and Active Duty: Overview of Surgeries, Hospital Pathway, Duty Limitations During Recovery and Anticipated Time to Full Recovery.

12:05PM Discussion (5 minutes)

12:10PM End of Session

LUNCH PROGRAM

12:10pm - 1:20pm - Coronado Ballroom

Evolving Treatment Paradigms in Advanced Prostate Cancer: Individualizing Treatment Strategies Based on Advancing Clinical Data.

Matthew B. Rettig, MD, UCLA Department of Urology

Supported by Astellas & Pfizer Oncology; Clovis Oncology, Inc., Janssen Biotech, Inc. administered by Janssen Scientific, Affairs, LLC; Tolmar Pharmaceuticals, Inc. - CME Symposium

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

SGSU MEMBERS BUSINESS MEETING







Hear updates on the state of the branches of the Services

Session XV: Female Urology

2:30 PM - 3:45 PM - Coronado Ballroom

Moderators:

COL Burk Zorn, MC, USA & LTC Andrew Medendorp, MC, USA

- 64 2:30PM Christian Twiss, MD Vaginal Mesh Removal and Beyond.
- **3:00PM** LCDR Eric Biewenga, MC, USN
 Successful Treatment of Interstital Cystitis/Bladder Pain Syndrome in Women with Provoked Vestibulodynia (PVD).
- 66 3:07PM LCDR Eric Biewenga, MC, USN
 Retrospective Study of Prevalence and Risk Factors of Clitoral
 Adhesions: Why Women's Health Providers Should Routinely
 Examine the Glans Clitoris.
- **3:14PM** LTC Andrew Medendorp, MC, USA
 Use of Autologous Vastus Lateralis Fascia for Repair of Recurrent Cystocele.
- 68 3:21PM LTC Andrew Medendorp, MC, USA
 Labia Minora Island Flap for Repair of Female Urethral Stricture.
- **3:28PM** Muta Issa, MD
 Patient Satisfaction and Preferred Choice of Provider: Advanced Practice Providers Versus Urologists.
 - 3:35PM Discussion (10 minutes)
 - 3:45PM End of Session

6:30pm-9:30pm - Arizona Ballroom

Kathy & Preston Littrell Awards Reception/Dinner

Featured Guest Speaker

New York Times Best Seller Author Ms. Mary Roach



Ms. Mary Roach, a writer with a witty blend of science and humor, will participate in a moderated town hall style meeting. The format will be conversational with Mary fielding questions from the audience. In addition, for those who have previously purchased her books, there will be an opportunity for book signing. She has written several books including Stiff: The Curious Lives of Human Cadavers (2003), Bonk: The Curious Coupling of Science and Sex (2009), and most recently, Grunt: The Curious Science of Humans at War (2016).

Be sure to bring your Event & Drink Tickets!

SUNDAY, JANUARY 14

Outline of Scientific Program

65th Kimbrough

Annual Seminar * The Scottsdale Resort, Scottsdale, AZ

<u>TIME</u>	EVENT	ROOM
7:30 AM - 11:00 AM	Registration	Coronado Ballrm. Plaza
8:00 AM - 9:00 AM	Hasta La Vista Breakfast	Coronado Ballroom
8:15 AM - 9:00 AM	Session XVI: MHG Genesis &	Coronado Ballroom
	Meeting Highlights	
9:00 AM - 12:00 PM	Session: XVII: Mock Oral Boards	Coronado Ballroom 1

REMINDER TO COMPLETE & TURN IN YOUR EVALUATION FORMS. THANK YOU!

Session XVI: MHG Genesis/Meeting Highlights

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

- 70 8:15AM COL Timothy C. Brand, MC, USA
 MHG Genesis The First 90 Days: Perspectives from a Blue-Collar
 Urologist.
- 71 8:45AM COL Robert C. Dean, MC, USA Meeting Summary Highlights.

SCIENTIFIC PROGRAM

SUNDAY, JANUARY 14, 2018

Session: XVII: MOCK ORAL BOARDS

9:00 AM - 12:00 PM - Coronado Balfroom 1

Director: LTC Joseph R. Sterbis, MC, USA

Need help 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

INCORPORATION OF MINDFULNESS EXERCISES TO REDUCE ANXIETY AND PAIN DURING URODYNAMIC TESTING: A RANDOMIZED CONTROLLED TRIAL

Pansy Uberoi MD, MPH, Forrest Jellison MD: San Antonio, TX (Presentation to be made by Dr Pansy Uberoi)

Objectives: Mindfulness exercises have gained a following in popular culture and have shown to benefit patients with pain syndromes. The present trial compares the effects of mindfulness exercises as they pertain to pain and anxiety levels among patients undergoing invasive in-office procedures, specifically, urodynamics.

Methods: Fourteen patients (age 54.5+/-25 years) were randomized to either psychologist led mindfulness exercises or an empty quiet room prior to undergoing urodynamic testing. Participants completed questionnaires regarding their pain and anxiety levels at baseline, after control/study intervention, and after urodynamic testing. Anxiety questionnaire consisted of both positive and negative factors. Questionnaires on health status and demographics were also completed.

Results: Demographics, past medical history and presenting symptoms were similar between the groups. After undergoing intervention or control, the mindfulness group was noted to have a statistically significant higher score for positive factors on the anxiety questionnaire by 29%. No difference was seen in the responses to negative factors. Anxiety, fear, discomfort and pain were more commonly associated with patients who had never previously undergone clinic cystoscopy. Changes in VAS were not significant between both groups.

Conclusions: This pilot study exhibits a promising method of making diagnostic studies more comfortable for our patients. As we continue to enroll patients we hope to find more differences between the study and control groups. Further studies in larger scale will help better elucidate the specific demographic to target with mindfulness exercises.

Source of Funding: None

PLACENTAL MEMBRANE GRAFTS FOR THE TREATMENT OF URETHRAL STRICTURES IN A RABBIT MODEL

Chad R. Pusateri, DO, Alexander D. Doudt, DO, Steven J. Gaurke MD*, Jack M. Zuckerman, MD: San Diego, CA (Presentation to be made by Dr. Chad Pusateri)

Objective: Several graft materials are available for use in the treatment of urethral stricture disease. Placental membrane is being used in a variety of settings as a tissue bridge in wound healing. We aim to evaluate the effect of implanting decellularized human placental membrane into rabbit urethras. We hypothesize that the urethra will remain patent on cystoscopic examination, urothelial replacement of the placental membrane graft will be observed, and no malignant transformation will be identified.

Materials and Methods: Dorsal onlay free graft urethroplasties utilizing harvested and prepared human placental membrane were performed in 10 New Zealand White rabbits (oryctolagus ouniculus). After three months, the rabbits underwent cystourethroscopy to evaluate urethral patency. The rabbits were then euthanized and the urethras were examined pathologically.

Results: All urethroplasties were performed without complication. Mean catheter time was 5.1 days (1-7). Postoperative hematuria was noted in one rabbit. There were no observed episodes of urinary retention, infection, or renal failure. No stricture formations were observed on cystourethroscopy. On pathologic examination, urothelial replacement was observed in all ten rabbits without malignant transformation.

Conclusions: Dorsal onlay urethroplasty using decellularized human placental membrane can safely be performed in a rabbit model. This pilot study demonstrated urothelial replacement of human placental membrane in the rabbit urethra without stricture formation. Additional studies are needed to validate placental membrane as a potential graft material.

Source of Funding: Institutional. Prepared placental membrane provided by LifeNet Health® (Virginia Beach, VA)

TIME TO RESOLUTION OF MICROSCOPIC HEMATURIA AFTER ROBOTIC PROSTATECTOMY

CPT Alexandria M. Hertz MD, Evalyn I. George BS, CPT Karmon M. Janssen DO, COL Timothy C. Brand MD: Tacoma, Washington (Presentation to be made by Dr. Hertz)

Objectives: There is no current evidence as to when microscopic hematuria resolves following robotic assisted laparoscopic prostatectomy (RALP), or when work-up for potential urothelial malignancy should be performed. Our goal was to establish the timeline for resolution of hematuria following RALP, and to establish a recommendation for timing of a structural work-up for microhematuria after a RALP.

Materials/Methods: A retrospective chart review from a single institution of all patients who underwent RALP from January 1, 2010 to December 31, 2015 was performed. Patients with history of previous work-up of microscopic hematuria, previous genitourinary malignancy or urology surgery, or known infection were excluded. A total of 185 patients' information was then available to be reviewed.. The average number of RBCs was plotted over time since RALP, followed by a 2-tailed student t-test using SPSS statistics software.

Results: The patients had an average age of 61 (range 34-80) and median Gleason score of 3+4=7. 52/185 (28%) had a smoking history while 32/185 (17%) received either adjuvant or salvage radiation therapy. The median follow-up for all patients was 50 months. The evaluation of average number of RBCs over time since RALP demonstrated a significant (p<0.001) difference between months 0 and 3, with resolution of the microscopic hematuria over that time span. The mean number of RBCs over the rest of the time period was 3 RBCs. A total of 57/185 patients underwent evaluation for microscopic hematuria. There were 2 patients who had malignancies on their structural evaluations. One was a urothelial cell of the bladder, and one was a renal cell carcinoma of the kidney. The structural evaluation that led to the diagnosis of bladder cancer was 9 months after RALP, and the case of kidney cancer was 45 months after the RALP). Neither of those patients had a history of smoking or radiation. The majority of work-ups were without abnormal findings (23/57) and the rest of the findings included nephrolithiasis, bladder neck contracture, radiation cystitis, cystitis, disease progression, uretero-pelvic unction stricture, and urachal remnant.

Conclusion: Microscopic hematuria following robotic prostatectomy should resolve within 3 months of surgery. Microscopic hematuria after this time should be considered clinically significant, and be evaluated accordingly, although many of these work-ups may be benign.

Source of Funding: None

PROLAPSED URETEROCELE CAUSING ACUTE URINARY RETENTION: A CASE REPORT

Felicia L Balzano, M.D.*, Forrest Jellison M.D.: San Antonio, TX (Presentation to be made by Dr. Felicia Balzano)

Background: Ureterocele prolapse is primarily diagnosed and treated in childhood. Despite a 1-3% prevalence of ureteroceles in adults, prolapse among female adults is rare.

Case: 54yo female presents to the ED with complaint of obstructive voiding, urine leakage, and pelvic pain. On physical exam she was found to have a 3x2.5cm mass protruding from her urethra with active urine leakage. She was in urinary retention with overflow incontinence. Prior imaging had diagnosed an ureterocele with associated megaureter without any evidence of renal insufficiency. The prolapsed ureterocele was reduced endoscopically into the bladder. After reduction, a 16F foley catheter was placed for 7 days and removed, ensuring that she was emptying her bladder fully. At follow-up she denied any obstructive bladder emptying symptoms. She declined further surgical treatment of the ureterocele and follow-up renal Lasix scan was negative for any obstruction.

Conclusion: This case illustrates that despite the low reported incidence of prolapsed ureteroceles in adults, one must have a high index of suspicion and that a prolapsed ureterocele can be endoscopically managed.

SYNERGISTIC IMMUNO-PHOTOTHERMAL NANOTHERAPY (SYMPHONY): A NOVEL TREATMENT FOR LOCALIZED AND METASTATIC BLADDER CANCER

Joseph Fantony M.D., Steven C. Brousell M.D.*, Yang Liu PhD*, Paolo F. Maccarini PhD*, Gregory M. Palmer PhD*, Wiguins Etienne BS*, Yulin Zhao M.D.*, Chen-Ting Lee PhD*, Xiumei Ma PhD*, Tuan Vo-Dinh PhD*, Brant A. Inman MD, MS*: Durham,

(Presentation to be made by Dr. Joseph Fantony)

Objectives: We developed a novel treatment for localized and metastatic bladder cancer comprised of gold nanoparticle-based photothermal therapy and immunotherapy (SYMPHONY). We demonstrate that it effectively ablates primary tumors, destroys metastases abscopally, and induces potent anti-tumor immunity.

Materials and Methods: MB49 murine bladder cancer cells were injected into the bilateral flanks of C57BL/6 mice and grown until 100 mm3 in size. PEG-functionalized gold nanostars, developed and manufactured by our team, were administered intravenously. A 808-nm laser (0.6 W/cm2) was used to trigger plasmonic heat production from the gold nanostars in one flank 24 hours after injection, while the other flank was left untreated. Anti-PD-L1 antibody immunotherapy was co-administered intraperitoneally and repeated q3days. Mice were assessed for ipsilateral and contralateral tumor response and survival. Flow cytometry, multiplex cytokine profiling, and T cell receptor sequencing were used to characterize the immune response. Mice achieving a complete response were rechallenged with an additional injection of MB49 tumor cells 90 days later.

Results: Gold nanostar-mediated phototherapy alone completely ablated ipsilateral tumors in 4/5 of mice (pT0 at necropsy) but contralateral tumors grew and all 5 mice required sacrifice within 14 days. Anti-PD-L1 therapy alone slowed tumor growth in 3/5 mice, but tumors rapidly began growing again and 5/5 mice required sacrifice by 45 days. Combined treatment (i.e. SYMPHONY) ablated 5/5 ipsilateral tumors and resulted in partial (3/5) and complete responses (2/5) of untreated contralateral tumors, demonstrating a strong abscopal effect. After 90 days of follow-up, the two mice achieving a complete response with SYMPHONY were rechallenged with MB49 and neither developed a tumor over the ensuing 4 weeks indicating strong and effective immune memory. Flow cytometry showed CD4 and CD8 T cell proliferation, decreased myeloid derived suppressor cells, and increased IL2 with SYMPHONY.

Conclusions: SYMPHONY treatment resulted not only in effective ablation of primary tumors but also in immune-mediated abscopal destruction of untreated distant tumors. Strong and permanent anti-tumor immunity developed in some mice, indicating that with further optimization, SYMPHONY may be able to cure more advanced bladder cancers.

Source of Funding: Duke University

Conflicts of Interest: None

QUALITY OF LIFE AFTER SURGERY FOR LOCALIZED PROSTATE CANCER

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(Presentation to be made by Dr. Paul McClain)

Introduction and Objective: This study is a retrospective review designed to assess the impact of treatment type on quality of life (QOL) in a large database of men who underwent surgery for prostate cancer.

Material and Methods: 373 patients underwent robot-assisted laparoscopic radical prostatectomy (RALP), brachytherapy, or cryotherapy for prostate cancer at a single institution from 2010-2014. Five quality of life domains (urinary incontinence, urinary irritative/obstructive, bowel, sexual, and hormonal symptoms) were assessed preoperatively and again at 1-60 months after treatment using the Expanded Prostate Cancer Index Composite (EPIC-26) questionnaire. Outcomes were compared across treatment modalities using univariate and multivariate analysis.

Results: All quality of life domains were affected by prostate cancer treatment. The mean follow-up time after surgery was 41 months. Urinary incontinence worsened significantly in the RALP and brachytherapy groups (p < 0.001). The cryotherapy group achieved a return to baseline urinary continence at 6 months and had significantly better continence QOL than the brachytherapy group at 30 months (p = 0.021). Brachytherapy patients had significantly worse irritative/obstructive voiding symptoms compared to RALP patients at 30 months (p < 0.001), and also experienced a 55% slower rate of return to baseline. Bowel function was significantly worse in brachytherapy patients compared to RALP patients at 30 months (p = 0.037). The cryotherapy and brachytherapy groups had a 36% slower recovery of bowel function. Cryotherapy was associated with the worse sexual function than brachytherapy at 30 months (p = 0.012), although all three groups were affected. Minimal impact on hormonal function was observed long-term.

Conclusion: Due to the high survival of patients who receive treatment for prostate cancer, quality of life is a major concern when choosing therapy. Each prostate cancer treatment studied above has a unique recovery profile. Long term, RALP is associated with the least urinary irritative and obstructive symptoms, whereas cryotherapy is associated with the least impact on urinary incontinence but the greatest impact on sexual function. Brachytherapy was correlated with the greatest decline in bowel function. All three modalities have minimal effect on hormonal function.

THE ROLE OF MULTIDISCIPLINARY CARE IN MITIGATING CANCER PATIENT DISTRESS

Grace E. Park, MD, Anna H. Smitherman, Ph.D.*, George J.S. Kallingal, MD, Janet S Schadee, R.N.*: San Antonio, TX.

(Presentation to be made by Dr. Grace Park)

Objectives: A multidisciplinary approach to cancer treatment has been shown to enhance patient outcomes and satisfaction, but there have been no prior studies specifically looking at their role in mitigating overall distress of patients. Newly diagnosed prostate cancer patients at Brooke Army Medical Center are invited to participate in a Comprehensive Prostate Cancer Clinic (CPCC). The CPCC involves a four-hour visit in which patients receive both group and one-on-one counseling on prostate cancer, including basic medical background of prostate cancer, diagnostic tests, pathologic results, treatment options, coping with a cancer diagnosis, and healthy nutrition. This study aims to 1) evaluate the change in overall distress following participation in a multidisciplinary cancer clinic and 2) determine the relationship between change in patient distress scores and patient-specific factors. The purpose of this study is to identify factors contributing to and mitigating overall distress of newly diagnosed prostate cancer patients within the context of a comprehensive multidisciplinary clinic.

Materials and Methods: All patients and one of their support persons (if one is present) rate their distress prior to commencement of CPCC and immediately following completion of the program. Distress was measured using the Distress Thermometer, a standardized measure established by the National Comprehensive Cancer Network, which asks patients to self-report their overall level of distress related to their cancer diagnosis on a zero (no distress) to ten (extreme distress) visual analog scale. This data was used to calculate change in distress scores after participation in CPCC. Information on patients' age, Gleason Score, and PSA at time of diagnosis was also collected through records review and used to determine the amount of variance in overall distress and change in distress as accounted for by individual factors.

Results: A paired-samples t-test indicated a significant improvement in distress ratings between initial (M=3.60, SD=2.92) and final (M=2.72, SD=2.55) CPCC distress ratings; t(57)=3.39, p=.001. Patients' initial distress ratings directly correlated with their support person's initial distress ratings, r(55)=.43, p=.000, and inversely correlated with patient age, r(55)=-0.40, p=.001. Change in patients' distress ratings directly correlated with time between initial diagnosis and participation in CPCC, r(36)=.54, p=.000, patients' initial distress ratings, p(36)=.60, p=.000, and change in the support person's distress rating, p(36)=.30, p=.036, but inversely correlated with patient age, p(36)=-.30, p=.036, and PSA at date of initial diagnosis, r(36)=-.33, p=.021. Preliminary regression analyses indicate that a significant amount of the variance in change in distress ratings can be accounted for by the support person's initial distress rating, total time between initial diagnosis and participation in CPCC, the patient's initial distress rating, and the support person's change in distress ratings after participation in CPCC.

Conclusion: Results indicate that participation in a multidisciplinary program for patients recently diagnosed with prostate cancer significantly reduces patient distress. There are multiple individual factors related to the degree of change in distress scores following participation in this program.

PSA SCREENING HISTORY AND PROSTATE CANCER AGGRESSIVENESS Thomas S Gerald, MD*1, Allen Burke, MD*2, Huai-Ching Kuo, MS*3, Inger Rosner, MD1,2, Shiv Srivastava, PhD*3, Jennifer Cullen, PhD, MPH*3, Isabell Sesterhenn, MD*2

1Bethesda, MD;2Silver Spring, MD;3Rockville, MD

(Presentation to be made by Dr. Thomas Gerald)

Objectives: In 2012, PSA screening for prostate cancer (CaP) detection was given a "Grade D" recommendation for all men by the USPSTF. Recent U.S. studies report declines in PSA screening with concomitant increases in advanced CaP at diagnosis. This study examined the association between PSA screening history and CaP aggressiveness in a racially diverse, military cohort with equal health care access.

Methods: This retrospective cohort study evaluated CaP patients undergoing radical prostatectomy (RP) from 1994-2014 at Walter Reed National Military Medical Center. Excluding the diagnostic PSA, screening history was categorized as: ≥ 6 PSA's prior to CaP diagnosis (uppermost quartile), 1-5 (lower 3 quartiles), vs. no screening history. Whole-mount prostatectomy specimens were classified using 2014 ISUP Gleason grading system. Multivariable logistic regression (MLR) was used to examine NCCN risk strata (intermediate-high vs. low) and Gleason upgrade from biopsy to RP. Multivariable Cox proportional hazards (Cox PH) analyses were used to model time to biochemical recurrence (BCR). Multivariable models controlled for age at RP, race, family history and obesity (BMI > 30 vs. ≤ 30 kg/m2). The GU and BCR models also controlled for NCCN risk classification.

Results: There were 1,742 eligible patients with a median follow-up and age at RP of 7.0 and 59.8 years, respectively. Prior to CaP diagnosis, 42% and 19% of men had 1-5 and \geq 6 PSA screenings, respectively. MLR showed greater odds of intermediate or high vs. low risk disease for PSA screening history of none vs. 1-5 (OR = 1.33, CI = 1.03-1.72, p = 0.029) but not for none vs. \geq 6 (p=0.34). MLR showed increased odds of GU for none vs. \geq 6 (OR = 1.75, CI = 1.20-2.70, p = 0.004). Multivariable Cox PH models showed incrementally poorer BCR-free survival as screening history decreased (HRNone vs. \geq 6 = 2.08, CI = 1.41-3.13, p < 0.001; HRNone vs. 1-5 = 1.37, CI = 1.05-1.79, p = 0.020).

Conclusions: In this RP cohort, higher risk stratum, increased GU, and poorer BCR-free survival were associated with no PSA screening history. BCR-free survival was incrementally worsened by less PSA screening. A complete absence of PSA screening may lead to more aggressive disease at presentation and poorer clinical outcomes.

A MODEL FOR DIGITAL VOLUMETRIC ASSESSMENT

Theodore R Saitz MD, Kyle A Gillis* MD, Ann Martinez-Acevedo* MS, John M Barry MD: Portland, OR (Presentation to be made by Dr. Saitz)

Objectives: Physicians often apply digital volumetric assessment on digital rectal exam. The ability to accurately assess volume can influence guideline-based decisions for medical and surgical management of benign prostatic hyperplasia. Urologists currently learn digital volumetric assessment through clinical correlation, with no formal digital volumetric assessment training.

Materials and Methods: One, we cut 3 holes in a box. Two, we put 3 identically sized catheters with different volumes of normal saline in the Foley balloons in the box. We then had subjects from groups of different experience with digital volumetric assessment use their gloved and lubricated finger to blindly palpate and digitally assess the volume of each different size Foley balloon in the box, given the range of 1 to 100ml. We then allowed each subject to palpate and examine reference Foley balloons with volumes of 20ml, 40ml, 60ml and 80ml for up to one minute. The subjects then repeated the blind palpation and digital volume assessment. We recorded the subjects' confidence on a scale of 1-10 after each round. We analyzed the mean deviance from the true volume for each group stratified by training specialty and postgraduate year. Statistical analysis was preformed with STATA, where ANOVA tests were used to detect significant differences between groups.

Results: A total of 34 subjects preformed digital volumetric assessment estimates, including 14 general surgery interns, 10 urology residents, and 10 urology faculty. On initial blind assessment the mean deviance from true volume was 22.8ml for surgery interns, 10ml for urology residents and 18.2ml for faculty (Figure 1). On assessment after utilizing reference Foley balloons the mean deviance from true volume was 9.3ml for surgery interns, 8.5ml for urology residents and 15.5ml for faculty (Figure 2). The groups were significantly different on ANOVA modeling after the initial assessment; however, the groups were statistically similar after application of the reference model. All groups' precision improved after use of the reference model. Postgraduate year from training appeared to be associated with improved precision of volume estimate prior to using the reference model; however, this appeared to be less evident after the reference model. Confidence increased after use of the reference model.

Conclusion: Surgery interns were significantly less precise with initial digital volumetric assessment; however, this difference did not remain significant after use of the reference model. All groups' precision of digital volumetric assessment improved with use of the reference model. Further study is required to determine if our model is clinically relevant and possibly advocate that formal teaching of digital volumetric assessment should be applied early in medical training to enhance provider's ability to digitally assess volume.

CYTOREDUCTIVE PROSTATECTOMY: EARLY EXPERIENCE AT A SINGLE INSTITUTION

Jacqueline M. Zillioux, MD*, Noah S. Schenkman, MD, Helen P. Cathro, MBChB,*
Stephen H. Culp, MD*; Charlottesville, VA
(Presentation to be made by Dr. Jacqueline Zillioux)

Objective: The paradigm for local tumor management in metastatic prostate cancer (mPCa) is rapidly changing, including the use of cytoreductive prostatectomy (CRP). Multiple studies have demonstrated a potential survival benefit with definitive treatment of local disease in mPCa. However, with little prospective evidence, local tumor control remains controversial. Our objective was to assess the oncologic and treatment outcome in a cohort of men with mPCa undergoing CRP.

Methods: Men with definitive evidence of mPCa and undergoing CRP were enrolled in an IRB-approved prospective observational trial. Data on final pathology and patient outcome were collected.

Results: We identified a total of 7 patients with mPCa to bone who underwent CRP between 9/2013 and 4/2016 with a median follow-up of 33 months. The majority (5/7) were upstaged on final pathology. Of the 5 patients treated with neoadjuvant androgen deprivation therapy (ADT), 4 showed no treatment effect on final pathology. All remain alive, and 3 currently have undetectable PSAs without current use of ADT.

Conclusions: CRP in men with mPCa may delay need for ADT. Pre-operative ADT does not appear to affect the primary tumor in men with mPCa.

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RACIAL COMPARISON OF PATIENT SATISFACTION WITH MEDICAL CARE FOR PROSTATE CANCER PATIENTS ENROLLED IN A TREATMENT DECISION-MAKING STUDY

Dantae L. Bowie, DO*; Jennifer Cullen, PhD, MPH*; Huai-Ching Kuo, MS*; Lauren M. Hurwitz, MHS*; Yongmei Chen, MD, MS*; Saily i. Eisamanoudi, MPH, MHS,MBA*; Maryellen L. Colston, BA*; Jane L. Hudak, PhD*; Kevin R. Rice, MD; Inger L. Rosner, MD: Bethesda, MD (Presentation to be made by Dr. Dantae Bowie)

Objectives: There is a significant racial disparity in the treatment of prostate cancer between African American (AA) men and Caucasian men. In previous work, Collingwood et al. (Urol Onc, 2013) reported a higher decisional regret in AA men compared to Caucasian men after robotic prostatectomy (RP) (20.6% vs 11.2%, respectively; p = 0.03), citing that shared decision making concerning medical and surgical choices is less common among African Americans. Later, Hurwitz et al. (Urol Onc, 2015) described an ongoing treatment decision-making cohort study in which patients were enrolled within a multidisciplinary clinic and followed longitudinally for decisional regret and quality of life outcomes following treatment of localized prostate cancer. Long-term results from this paper suggest evidence of a relationship between regret and patient satisfaction in treatment decision making. In this current pilot study, our purpose was to examine levels of patient satisfaction with medical care across patient race and treatment type among enrollees in our racially diverse, treatment decision-making study conducted in a military, equal access health care setting.

Methods: Patients enrolled in the Walter Reed National Military Medical Center's IRB-approved treatment decision making study and who completed the validated Patient Satisfaction with Medical Care instrument (PSQ-3) were eligible. PSQ-3 scores (Likert scaled items) were calculated at baseline (day of enrollment, pre-treatment), 3, and 6 months follow-up and compared across racial group and treatment type. Unadjusted mean scores over time were computed. PSQ-3 surveys domains (i.e., general satisfaction, technical quality, interpersonal aspects, communication, financial aspects, time spent with doctor and access/availability/convenience) were examined independently to determine if variation across race or treatment type was present.

Results: Among 171 eligible patients, 54 (31.6%) self-reported as African American and 117 (68.4%) as Caucasian. Over 95% of patient were detected with clinical stage T1c-T2a and almost one-half (49.7%) had a biopsy Gleason sum <=6. Median PSA at diagnosis was 7.0 ng/mL. Over one-quarter (27.5%) of patients selected management on Active Surveillance (AS) while 32% chose radical prostatectomy (RP) and 14% selected radiation therapy (RT). Across treatment type, race, and time PSQ-3 scores demonstrated a high level of patient satisfaction notably for radical prostatectomy in both cohorts at all time periods. One exception was the slightly poorer scores observed for "financial aspects" of care; items in this domain address concerns about affordability of care and ability to pay. Almost 60% of those on AS or undergoing RP, and almost one-half of RT patients, either "agreed" or "strongly agreed" with the PSQ single item: "There is a crisis in health care in the US today".

Conclusions: High levels of patient satisfaction with medical and surgical care were observed across race, treatment type, and time in this longitudinal cohort of patients counseled for treatment decision making in a multi-disciplinary clinic setting. These observations highlight the importance of shared decision making in treatment for prostate cancer, notably RP in AA patients. There are numerous studies supporting the concern that AA patients may have mistrust of the health care system, informed by negative historical experiences which, in turn, could impact their expectations of medical outcomes as well as their treatment follow-up, satisfaction and/or health care seeking behaviors. There was some indication of patient financial concerns, despite patient status as military health care beneficiaries; therefore, counseling for financial concerns may be warranted. This is a timely finding, as new data are emerging showing the significant health care costs imposed on cancer patients and the concomitant worry these patients experience.

IMPLEMENTATION OF A NOVEL PERIOPERATIVE CARE SERVICE IN A VETERANS ADMINISTRATION HOSPITAL: REDUCED OPIOID UTILIZATION AFTER MAJOR UROLOGIC SURGERY

Leah E. Williams, Benjamin M. Dropkin, Bret D. Alvis, Cary Stimson, Kristen Scarpato, Jennifer Robles, Matthew J. Resnick, Christopher G. Hughes, Ann Walia, David F. Penson, and Kirk A. Keegan

Introduction: Opioid misuse and over-prescription within the U.S. Healthcare system has emerged as a critical public health problem. In an effort to improve care across the peri-operative spectrum, a novel, physician-led, Anesthesiology Perioperative Care Service (APCS) was developed and implemented in our Veterans Administration Hospital. The Service has facilitated joint perioperative pain management as well as increased utilization and adherence to Enhanced Recovery After Surgery (ERAS) pathways. We sought to determine the influence of the APCS on opioid utilization following major urologic surgery.

Methods: We conducted a retrospective cohort study using a pre-post design among 103 patients (52 pre- and 51 post-implementation) who underwent major urologic surgery (open radical cystectomy, open radical nephrectomy, and open partial nephrectomy) within the Tennessee Valley Healthcare System (TVHS). Primary outcome measures included total inpatient opioid dose, number of filled opioid prescriptions, and use of opioids one year after discharge. Secondary measures included variation in length of stay (LOS) and 30-day readmission rates as well as measures of patient satisfaction.

Results: After implementation of APCS, patients received fewer opioid doses (291 vs. 121 total orders), filled fewer prescriptions post-discharge (366 vs. 180 pills per patient), and were less likely to still be using opioids one year after discharge (11% vs. 2% of patients). The median length of stay was reduced by two days after open nephrectomies (6 vs. 4 days). All-cause 30-day readmissions improved following cystectomy (75% vs. 29% of patients). Post-implementation patients surveyed were satisfied with pain control after discharge (80% satisfied) and with their overall VA care (100% satisfied).

Conclusions: The novel Anesthesiology Perioperative Care Service has led to meaningful improvements in the care of our Veterans following major urologic surgery. Veterans used fewer opioids pre- and post-discharge and were less likely to be using opioids one year after discharge. They were also less likely to have extended hospital stays or readmissions.

Source of Funding: None

Conflict of Interest / Disclosures: None

Category List: Quality Improvement and Patient Safety MeSH Keywords: Pain, analgesia, perioperative care

PRACTICE OF TESTICULAR PROSTHESIS PLACEMENT IN PATIENTS UNDERGOING RADICAL ORCHIECTOMY IN A MILITARY COHORT

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(Presentation to be made by Dr. Katherine Carlisle)

OBJECTIVE: Contemporary series in the urology literature report that testicular prosthesis are implanted simultaneously with radical orchiectomy at rates of 16-27%. One factor patients may consider when requesting a prosthesis is cost. To that end, we aim to characterize the practice of testicular prosthesis insertion in a patient cohort with equal access to care.

METHODS: A retrospective chart review of consecutive patients age 18 or older undergoing radical orchiectomy from January 2002 to February 2017 at a single institution was performed. Data included age, military status, indication for orchiectomy, placement of prosthesis either concurrently or at a later date, subsequent removal, reason for removal, and performing surgeon.

RESULTS: 177 patients were identified as having a radical orchiectomy for a total of 179 testicular units removed. 76% of patients were active duty at the time of the surgery. 150 patients (84%) underwent orchiectomy for mass, 21 (12%) for pain, and 6 (4%) for other reasons. All patients were offered testicular prosthesis placement at the time or orchiectomy. Overall, 53 patients (30%) accepted a testicular prosthesis of which 85% of prostheses were placed at the time of orchiectomy. Of a total 55 testicular prostheses placed, 47 units (85%) were placed in 46 patients undergoing radical orchiectomy for mass, 4 (7%) prostheses in those for pain, and 4 (7%) prostheses in 3 patients for other reasons. The vast majority, 90%, of the patients who accepted a prosthesis were active duty. A total of 7 (12%) of prostheses were subsequently removed. Of these, 5 (71%) were placed at the time of orchiectomy. Indications for removal included 3 units for infection, 2 for pain, and 2 for poor cosmesis. A total of 17 surgeons performed orchiectomies of which 15 placed prostheses. Roughly half, 47%, of the prostheses were placed by two surgeons, each of whom had a rate of prosthesis placement greater than 30%.

conclusions: The rate of testicular prosthesis placement in our cohort of patients with equal access to care, and no concern over cost, was 30%. This falls within the high end of reported rates in studies of civilian cohorts. This data suggests that patients are not significantly more likely to accept a testicular prosthesis based on access to care. Of great interest, however, is the fact that nearly 50% of the prosthesis were placed by two surgeons with higher than average placement rates, suggesting that surgeon counseling influenced patients' decisions to opt for a prosthetic.

SOURCE OF FUNDING: None

FOURNIER'S GANGRENE: A STANDARDIZED TREATMENT PATHWAY

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Joseph W. Basler MD PhD*: San Antonio, TX

(Presentation to be made by Dr. Hopson)

Objectives: Fournier's gangrene (FG) is a life-altering infectious disease with historically high mortality rates, up to 50% to more recent rates of <10%. However, the lower rates have been typically reported by higher volume hospitals. The standard initial management of FG includes expedited and aggressive surgical debridement coupled with broad-spectrum antibiotics. Recovery is usually prolonged, and patients commonly experience a substantial decrease in quality of life. A standardized treatment pathway is yet to be adopted by those specialties that most commonly see patients with FG. Such a tool will help to improve outcomes, decrease health care costs, and decrease patient recovery time. We present a pathway that we have implemented based on current literature and our own institution's experience.

Materials and Methods: For the development and implementation of a FG treatment pathway, we performed a retrospective review of patients at 3 hospitals in San Antonio, TX, from 2010-2016 based on ICD-9 and ICD-10 procedural and diagnosis codes specific to FG. We identified 84 patients admitted with FG and who underwent surgical debridement for review. We also performed a comprehensive review of the literature via a Pubmed search of FG treatment and outcomes. Finally, we used a logistic regression model for statistical analysis which allowed for univariate and multivariate analyses to identify significant variables that contributed to mortality and length of stay (LOS).

Results: Of the 84 patients who met selection criteria, 5 patients died (6% mortality rate) and all were male. Only 2 patients who died did not have significant comorbidities compounding the effects of FG, while 1 of those 2 died as a result of aspiration pneumonia. With that, only one patient died as a direct result of FG. Over 92% of patients had two or more comorbidities. Though we did not seek to validate the Fournier's gangrene severity index, a score >9 was not associated with increased mortality, though it was predictive of an extended hospital length of stay (LOS). CT scan was performed at presentation for 60 patients, while 14 received no imaging prior to surgical intervention. Over 97% of positive wound cultures (n=68) were susceptible to the combination of vancomycin and piperacillin-tazobactam. Of the 2 patients with cultures resistant to this combination of antibiotics, one patient had spent 29 days in the ICU with end stage liver disease and died 4 days after being diagnosed with FG. Only 4 patients did not receive initial broad spectrum coverage that treated all isolates in the wound culture, which includes the patient just mentioned. The other 3 survived with average LOS of 7 days. General surgery was consulted for 40 (47.6%) of the patients and urology was involved in all but 2 cases. The average number of trips to the operating room was 3.1. A colostomy was created in 10 patients, a suprapubic tube placed in 13 patients, and negative pressure wound therapy was applied in 63 patients. Almost half the patients were treated in the ICU (49%) and 51% received physical therapy. The patients were generally malnourished upon presentation and 69% received in-patient nutrition consults. Plastic surgery evaluated 31% of the patients and 12 received wound closure by that service. Mean length of stay was 11 days.

Conclusions: We have developed an evidence based protocol for the management of Fournier's gangrene that effectively standardizes and streamlines treatment aimed at decreasing patient morbidity and mortality, lowering health care costs and improving long-term outcomes when implemented in a multi-specialty approach at both high and low volume hospitals.

SURVEY ON THE CONTEMPORARY MANAGEMENT OF INTRAOPERATIVE URETHRAL INJURIES DURING PENILE PROSTHESIS IMPLANTATION

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Durham, NC

Presentation to be made by Dr. Stephanie Sexton

Objective: Intraoperative urethral injury is an uncommon event during the placement of an inflatable penile prosthesis (IPP) with an estimated incidence of up to 3%. The conventional teaching is to perform primary repair, place a transurethral catheter, and abort the procedure. Recently, alternative management strategies have been proposed with continuation of the implant following urethral injury. The objective of this study is to evaluate surgeon management of urethral injury during IPP and determine if fellowship training influences practice.

Methods: An online survey was sent to the society listservs of the Genitourinary Reconstructive Surgeons (GURS) and The Sexual Medicine Society of North America (SMSNA). Physicians were queried on their fellowship training, experience with IPP and urethroplasty, IPP surgical approach, and management of urethral injuries during IPP implantation. The response data was analyzed using SAS 9.4 (SAS Institute Inc., Cary, NC). Chi-squared test and Fisher's exact test were used to determine associations between variables.

Results: There were a total of 131 survey responses. Of the responders, 41.2% were GURS fellowship trained, 19.1% were SMSNA trained, 30.5% were non-fellowship trained, and 9.2% trained in other fellowships. 25.4% of participants perform >50 IPPs per year, while 37.7% perform 20-50 and 36.9% perform fewer than 20 per year. Urethral injury during IPP implantation was uncommon, with 26.2% reporting 0 injuries, 58.5% reporting 1-3 injuries, and 15.4% reporting >3 career injuries. Injuries were most commonly encountered during corporal dilation (71.1%), compared to corporal exposure (12.5%), or penile straightening maneuvers (7.0%). There was no statistically significant difference with aborting or continuing implantation among GURS, SMSNA, and/or non-fellowship trained surgeons. Of all responders, 55% abort the procedure after distal urethral injury, while 45% continue the procedure with unilateral or bilateral insertion of cylinders. For those who chose to abort the procedure, the next implant was attempted in <6 weeks in 9.3%, 6-12 weeks in 45.7%, and >12 weeks in 41.1%. Patient factors that increased likelihood of aborting procedure in the case of urethral injury included immunosuppression, spinal cord injury, and clean intermittent catheterizationdependence.

Conclusion: Urethral injury during IPP implantation is a rare but established risk of the procedure. Fellowship training does not appear to have an effect on intraoperative management of this injury.

CHRONIC SCROTAL CONTENT PAIN AND MICROSURGICAL DENERVATION: EVALUATION OF SUCCESS RATES, RETURN TO DUTY STATUS AND ASSOCIATED COMORBID CONDITIONS

John Q. Schisler MD, Ryan W. Speir MD Tripler Army Medical Center, Honolulu, HI (Presentation to be made by Dr. Schisler)

Objective: Service members with chronic scrotal content pain (CSCP) are a common presence in our urology clinic. We report on the efficacy and return to duty(RTD) rates of patients who underwent microsurgical denervation of the spermatic cord for CSCP while looking for a correlation between the RTD rates and underlying comorbid psychiatric conditions.

Materials and Methods: Microsurgical denervation of the spermatic cord was performed on 20 testicular units and 18 patients for CSCP. A candidate for the procedure had no reversible scrotal pathology, failed conservative management, and had a successful spermatic cord nerve block. A pain rating using a scale of 1 to 10 was used to determine efficacy. Chart review and use of the eProfile system were used to determine return to duty rates.

Results: Complete pain relief was observed in 10 (50%) of testicular units, partial relief in 1 (5%), and unchanged in 9 (45%). In the patients with complete relief, only one did not return to full duty because of an MEB for chronic back pain. The one service member with a partial response was able to return to full duty. Out of the 9 patients with no improvement after surgery, 2 returned to duty after eventually undergoing an orchiectomy, 2 returned to limited duty, and 5 were separated from the military after being found not fit for duty due to their CSCP. A comorbid psychiatric diagnosis (depression, anxiety, adjustment disorder with depressed mood) was identified in 6 of the 9 (67%) patients that did not respond to surgery, 3 of the 5 (60%) patients that were separated from the military, and none of the patients that did respond to surgery.

Conclusion: In our clinic, service members with CSCP who benefitted from microsurgical denervation of the spermatic cord were very likely to return to full duty. A comorbid psychiatric diagnosis was seen more frequently in patients who did not benefit from surgery and who did not return to full duty.

APPLICATION OF LEAN SIX SIGMA METHOLDOLOGY IN THE UROLOGY CLINIC: POST VASECTOMY SEMEN ANALYSIS COMPLIANCE

John Kehoe M.D., Sean Stroup M.D., Matthew Christman M.D.: San Diego, CA (Presentation to be made by Dr. John Kehoe)

Objectives: Vasectomy is the second most commonly performed procedure in the Urology clinic at the Naval Medical Center San Diego. Post Vasectomy Semen Analysis (PVSA) is required to confirm procedural efficacy. We utilized the Lean Six Sigma (LSS) methodology to address the problem of suboptimal PVSA compliance (52%) in our vasectomy patient population. The purpose of this presentation is to describe how LSS methodology may be employed for quality improvement in the clinic.

Materials and Methods: Using the established command LSS process, the project charter was approved by the hospital LSS committee and commanding officer as a Rapid Improvement Event (RIE) under the direction of a lead "belt". A multidisciplinary team met on successive occasions to establish: process map, voice of the customer, critical to quality steps, value stream analysis, root cause analysis and applicable solutions. Phone survey was conducted to supplement voice of the customer. The LSS committee monitored progress.

Results: After structured consideration, the project team identified privacy concerns, timeframe of PVSA, and written instructions as the most relevant factors of low compliance and targets for change. In addition, waste was found in the categories of transport/motion, waiting and defects. Changes informed by these findings were: adjusting recommended PVSA from 12 to 8 weeks, enabling and prioritizing home PVSA collection, establishing reminders, and eliminating unnecessary direct involvement of Urology clinic in process.

Conclusions: Lean Six Sigma methodology is a suitable and effective vehicle for analyzing and addressing common processes and problems in the Urology clinic in a structured manner.

THE SEMI-RIGID URETEROSCOPE AS A SOLE DILATOR FOR URETEROSCOPY

Amy Reed M.D.*, Christopher Allam D.O.: San Antonio, TX (Presentation to be made by Dr. Amy Reed)

Introduction: Ureteroscopy (URS) is often the first-line therapy for urinary stones. Failure rates for primary URS range from 8-11% for ureteral stones and may be as high as 35% for renal stones. Ureteral dilation can increase the success rate of primary ureteroscopy and decrease the need for prestenting. We sought to assess the efficacy and safety of using the semi-rigid ureteroscope as the only ureteral dilator for primary ureteroscopy without the need for presenting and secondary procedures.

Methods: A retrospective review of primary URS for stone disease was performed on a series of consecutive patients treated by a single provider from 2013 to 2017. Primary outcome was to evaluate the use, efficacy and safety of using the semi-rigid ureteroscope as a sole dilator for stone treatment with primary URS.

Results: A total of 217 nonstented cases of primary URS were attempted during 2013-2017. The semi-rigid ureteroscope was used in all cases regardless of stone location and the procedure was completed in 209 (96.3%) patients without other forms of ureteral dilation. 8 patients (3.68%) required ureteral stent placement and definitive treatment at another time. 1 patient (0.4%) required a laser endopyelotomy at the UPJ following dilation with the semirigid ureteroscope and the case was able to be successfully completed. No intraoperative ureteral perforations were identified during the cases. Post-operative radiographic follow up was available for 137 (63.13%) patients with 95% of these being renal sonograms. No distinct ureteral strictures were detected in these patients.

Conclusion: Primary URS may fail in up to 11% of nonstented patients and up to a third without a form of active dilation of the ureter. The use of the semi-rigid ureteroscope as the sole dilator in ureteroscopy may decrease the need for presenting and subsequent secondary procedure for stone treatment. We conclude that this technique is an effective and safe method of obtaining ureteral access to facilitate primary stone treatment.

IMPROVING UROLOGY ENDOSCOPE AVAILABILITY

Jonathan H. Berger M.D., Maria T. Stahl* M.B.A., Andrew L. Smith*, Sean P. Stroup M.D., Matthew S. Christman M.D.: San Diego, CA (Presentation to be made by Dr. Jonathan Berger)

Objectives: Today's urology field is notable for cutting edge technology in the operating room—however with that technology comes a cost. Endourologists must cope with the attributes of flexible endoscopes being both expensive and fragile which can lead to poor availability of equipment despite high financial payouts paid in attempts to maintain equipment readiness. Using the Lean Six Sigma (LSS) DMAIC process improvement method, we sought to optimize readiness of flexible endoscopes used by the urology department at a military treatment facility.

Materials and Methods: Following assembly of a multidisciplinary team, the metrics of "percent of flexible endoscopes in inventory ready for use" and "endoscope 'downtime'" were selected. A value stream analysis was undertaken (charting endoscope movement from the end of one OR case to the next request for that endoscope). A review of critical-to-quality elements was undertaken with a root-cause analysis was completed to determine areas of waste and equipment processing delay. Improvement processes were put in place. Post-improvement metrics were measured and a control plan was put in place.

Results: A pre-improvement inventory of urology flexible endoscopes revealed 40.7% (11/27) flexible cystoscopes and 33.3% (5/15) flexible ureteroscopes ready for immediate use. Repair ("down") time for endoscopes was a mean of 157.48 (+/-158.28) days. A post-process-improvement review of the flexible endoscope inventory revealed 100% (22/22) flexible cystoscopes and 75% (12/16) flexible ureteroscopes immediately ready for use. New repair contracts required no more than 1 day turnaround for "minor" repairs and 3-5 days for "major" repairs (with loaner endoscopes available within 48 hours on request at no extra cost).

Conclusions: There are multiple processes improvement tools available for use, applying these tools (specifically the LSS DMAIC in our case) may optimize expensive equipment inventory allowing for increased readiness of equipment which can translate into increased patient care opportunities or ability to decrease overall inventory numbers (and thus high cost savings).

ADVANCEMENTS IN ULTRASONIC PROPULSION TECHNOLOGY FOR PUSHING KIDNEY STONES

CPT Karmon M. Janssen D.O., Barbrina Dunmire* MS, Michael R. Bailey* PhD, Bryan W. Cunitz* PhD, Lei Kapaku*, Mathew D. Sorensen* M.D., Jonathan D. Harper* M.D., COL Timothy C. Brand M.D: Tacoma, WA (Presentation to be made by CPT Karmon Janssen)

Objectives: In our first-in-human trial with ultrasonic propulsion (UP), we moved stones in 14 of 15 subjects and 4 post-lithotripsy subjects passed an aggregate of over 30 stone fragments. Our experience though suggested probe heating was a limitation in the total Push duration and in the rate at which treatment could be delivered with the clinical C5-2 probe. We have developed a new UP probe (SC-50) that provides a more uniform beam design with greater focal extent in depth and reduced probe heating.

Materials and Methods: The calyx phantom consisted of a pipette (12 mm x 30 mm) embedded in a block of tissue mimicking material at two skin-to-stone depths (4.2 cm and 9.5 cm). The probe was positioned below the phantom pushing against gravity. Ten pushes at maximum focal intensity were applied with each probe to three separate targets including ten calcium monohydrate fragments of two different sizes (1-2 mm, 2-3 mm) and a single 4 mm x 7 mm stone. The measure was the number of expelled stones with each push, summed over 10 attempts; the stones expelled were replaced within the calyx before the next Push.

Results: Comparing the two probes under the maximum push duration of the C5-2 probe (50 ms), the results were similar. No stones were expelled the full 30 mm distance with the C5-2 probe and only a few stone fragments were expelled with the SC-50 probe. This is potentially due to the slightly higher focal intensity with this probe. Extending the total Push duration to 3000 ms, available only with the SC-50 probe, results in a 100% of stones expelled independent of depth from 4.5 cm to 9.5 cm.

Conclusions: We have developed a new probe that undergoes reduced probe heating, and thus allows for longer duration pushes, than the first-in-human clinical system. The probe also provides similar focal intensity up to 10 cm depth. The results from this phantom study support that the new UP probe is significantly more efficient at clearing stones over a broad range of clinically relevant depths. The longer duration push has been shown safe in preclinical studies.

Funding: Work support by NIH NIDDK grants DK043881 and the National Space Biomedical Research Institute through NASA NCC 9-58.

COMPONENTS OF URINARY STONES ACTIVATE THE NLRP3 INFLAMMASOME IN BLADDER UROTHELIUM

Patrick D. Leidig M.D., Francis M. Hughes Jr. Ph.D.*, J. Todd Puves M.D., Ph.D.*:

Durham, NC

(Presentation to be made by Dr. Patrick Leidig)

Objectives: Urolithiasis is one of the most common problems treated by urologists. Urinary stones are known to cause inflammation that can lead to deleterious changes within the urinary tract. Common components of urinary stones have been shown to serve as damage associated molecular patterns (DAMPs) and activate the NLRP3 inflammasome in other tissues such as monosodium urate crystals inducing inflammation in joints affected by gout. When activated, the NLRP3 inflammasome activates caspase 1, which cleaves pro–IL-1 β to IL-1 β . This cytokine then induces local inflammation. In the current study, we developed and characterized an *in vitro* model to assess inflammasome activation by common DAMPs (monosodium urate (MSU), calcium pyrophosphate (CPPD), and calcium oxalate (CaOx)) found in urinary stones.

Methods: We established an *in vitro* model by harvesting female rat bladders and isolating the urothelial cells. The cells were plated onto a 96 well plate and incubated for 24 hours at 37°C. They were then treated with various concentrations of MSU, CPPD, and CaOx and incubated for another 24 hours at 37°C. Replicate wells were treated with 1.25mM ATP for 1 hour at 37°C to serve as a positive control and benchmark for maximal response. NLRP3 inflammasome activity was assessed by measuring cleavage of a flurogenic substrate by its active moiety, caspase-1. Results are reported as a percentage of maximum ATP response. Statistical analysis was performed with an ANOVA and Tukey's post-hoc test.

Results: Treatment with CPPD demonstrated the greatest response of the DAMPS with a maximal response of \sim 40% that of ATP. MSU and CaOx were also effective at inducing NLRP3 activity with maximal responses of \sim 25% and 20% that of ATP, respectively.

Conclusions: MSU, CPPD, and CaOx are DAMPs found in urinary stones and induce activation of the NLRP3 inflammasome in bladder urothelium. Activation of the NLRP3 inflammasome is a possible mechanism by which urinary stones induce deleterious changes within the urinary tract.

Source of Funding: NIDDK: R01DK103534 (PI - Purves)

NON-NEUROGENIC VOIDING DYSFUNCTION AND NEUROPSYCHIATRIC DISORDERS

Ryan P. Gillis, MD*; Nicholas Rocco, MD; Matthew S. Christman, MD
San Diego, CA
(Presentation to be made by Dr. Gillis)

Objective: Attention Deficit Hyperactivity Disorder (ADHD) is a common neuropsychiatric disorder that has been associated with an increased prevalence of voiding dysfunction in pediatric populations. However, there is a paucity of studies investigating whether a link exists between dysfunctional voiding and other pediatric neuropsychiatric conditions. We examined whether the diagnosis of seven different mental health disorders corresponded with an increased risk of comorbid urologic diagnoses.

Materials and Methods: We performed a retrospective cohort study using the Military Health System Database. Children of active duty service members aged 5 to 17 years, with outpatient encounters between 1 JAN 2013 to 31 DEC 2015, were included. Using ICD-9 diagnostic codes, children with constipation, fecal incontinence, urinary incontinence, lower urinary tract symptoms (LUTS), nocturnal enuresis (NE), and urinary tract infections (UTI) were selected. Similarly, presence or absence of ADHD, anxiety, depression, obsessive-compulsive disorder (OCD), oppositional defiant disorder (ODD), Asperger Syndrome (AS), and autism in the population were determined. Frequencies and associations between urologic and neuropsychiatric conditions were analyzed with the chi-squared test.

Results: 77,061 patients were identified. Prevalence of ADHD, anxiety, AS, autism, depression, OCD, and ODD during the study period were 4.97%, 1.11%, 0.29%, 0.82%, 0.78%, 0.12%, and 0.30%, respectively. The associations of each urological and behavioral health diagnosis category are shown in Table. Constipation was significantly more common with ADHD and autism. Fecal incontinence was significantly more common in ADHD, AS, and autism. Both incontinence and NE were more common in ADHD and ODD. Patients with a history of depression had higher rates of UTI. Patients with anxiety and OCD had no significant associations with the studied urologic diagnoses.

Conclusions: The treatment of several neuropsychiatric conditions may be complicated by coexistent urological disorders. Children with ADHD, Asperger syndrome, autism, and ODD appear to be at greater risk for one or more of these voiding and/or elimination dysfunctions.

FIBROEPITHELIAL VAGINAL POLYPS IN A NEWBORN FEMALE

Elizabeth I. Roger M.D., Paul D. McClain M.D., Janelle A. Fox M.D.: Norfolk, VA (Presentation to be made by Dr. Elizabeth Roger)

Introduction: Vaginal fibroepithelial polyps in newborn females are rare. There are only four previously documented reports. In this case report, the diagnosis and management of a neonatal female who presented with an interlabial mass is reviewed.

Case Report: A full-term female presented to clinic at ten days of life with two polypoid vaginal masses emanating from the introitus noticed shortly after birth. The masses had no effect on urinary or bowel function. There was no family history of genitourinary anomalies or childhood malignancy. On exam, the urethra was displaced anteriorly by a polypoid lesion with anterior and posterior pedicles covered in vaginal mucosa measuring 2-3 cm. Ultrasound revealed a polypoid lesion in the distal vagina that protruded to the perineum. On MRI, a circumscribed ovoid homogenous mass in the vaginal introitus measured 3.6 x 2.4 cm. The patient underwent cystoscopy, vaginoscopy and EUA with incisional biopsy, with findings of two broad based lesions extending from the mid-to-distal vagina. These polyps were not resected in full out of concern the patient would require distal vaginal reconstruction to achieve negative margins. Pathology ultimately demonstrated fibroepithelial polyps. Post-operative ultrasound revealed a stable 9 mm residual polyp burden. Presently, annual pelvic ultrasounds are planned until puberty.

Discussion: The differential for an interlabial mass in a newborn includes several benign lesions as well as malignant botryoid sarcomas. Fibroepithelial polyps are benign growths of connective tissue surrounded by squamous epithelium. These lesions have been documented in older women but are rare prior to menarche. There have been no reports of subsequent malignancies. To our knowledge, there are only four other reported cases of fibroepithelial vaginal polyps in newborn females managed with local resection. As in this case, extensive resection is problematic in a prepubertal child risking need for revision procedures at puberty. Studies show the growth of these polyps is modulated by hormonal factors. Thus, we recommend observation of lesions not amenable to simple excision.

Conclusion: Fibroepithelial vaginal polyps are benign and rarely grow following complete excision. Although uncommon, they should be in the differential for newborns with vaginal masses. Timing of complete excision should be tailored to extent of the lesion and age of the child.

SINGLE INSTITUTION SURVEY OF APPLICANTS' EXPERIENCE IN THE UROLOGY MATCH PROCESS

Wilson Chan, BS*; Tony Lin, BS*; Joseph Y. Clark, MD: Hershey, PA (Presentation to be made by Dr. Joseph Y. Clark)

Objectives: The civilian urology match is highly competitive and there is a paucity of data regarding applicants' experience on the urology match process. In this study, we provide urology residency applicants' perspective on the urology match, from the initial process of finding information about programs to the final step of ranking programs after interviews.

Methods: A survey was given at the end of the interview day to applicants who interviewed at Penn State Hershey Medical Center during the 2015-2016 and 2016-2017 interview cycles. Questions on the survey included:

- -Resources used to find out about urology residency programs in general
- -Ranking of resource usefulness in finding out about the Penn State Hershey Urology Residency Program
- -Factors applicants used to rank programs
- -Applicants' perception of how programs rank candidates

Results: 73 urology residency applicants responded to the survey.

- -Word of mouth, urology department website, and urologymatch.com were the 3 most common resources used to find information about urology residency programs in general
- -Speaking with residents and interviewers, as well as the presentation given the day of the interview were the 3 most helpful in finding out about the Penn State Hershey Urology Residency Program
- -Top 3 factors applicants used to rank programs were resident satisfaction (100%), faculty/resident relationship and collegiality of residents (tied at 96%), and mentoring (85%)
- -Top 3 factors applicants perceived how programs ranked them were recommendation letters (94%), USMLE scores (90%), and interviews (85%)

Conclusions: This survey of applicants seeking urology residency positions shows the most common resources used in finding out about specific programs, top factors applicants used to rank programs, and most important factors applicants perceived how programs ranked candidates. This information may be useful to prospective medical students applying for urology residency, as well as residency program directors to better understand the process from the applicants' perspective so that they may improve their recruitment process.

BOSNIA AND THE GERMANY CONNECTION (The Opportunities of Deployments)

Thomas A. Rozanski, M.D.: San Antonio, TX (Presentation to be made by Dr. Rozanski)

Deployment missions for military physicians are challenging. Not all deployments are initially viewed with excitement by urologists and their families. However, temporary assignments in peace keeping or combat environments are ripe with opportunity and can be a favorable experience, professionally and personally. A chance deployment for one urologist had a significant impact on the Society of Government Service Urologists and our membership. That opportunity and the positive downrange results will be discussed.

URINARY TRACT INFECTIONS AND SEPSIS IN PATIENTS FOLLOWING TURP WITH AND WITHOUT PERIOPERATIVE ANTIMICROBIAL PROPHYLAXIS; A COMPARATIVE STUDY

Robin C. Schmid M.D.*, Christoph Sparwasser M.D.: Ulm, Germany (Presentation to be made by Dr. Robin Schmid)

Introduction: Transurethral resection of the prostate (TURP) is still the gold standard for surgical treatment of benign prostatic hyperplasia. According to the EAU guidelines, a perioperative antimicrobial prophylaxis (AMP) is recommended to prevent postoperative urinary tract infections (UTI) or a potential urosepsis. This study (being part of an internal hospital quality management) examines whether there is a higher rate of postoperative UTIs, sepsis or other complications in patients without AMP.

Material and Methods: This retrospective study includes 220 patients who underwent TURP at the Military Hospital in Ulm, Germany between October 2009 and March 2011. Among the factors reviewed were descriptive patient data, prostate-specific details, duration of surgery, postoperative catheterization and hospital stay, administered AMP and occurrence of complications. These variables were correlated with postoperative UTIs and sepsis, and compared with current literature and guidelines.

Results: The patient median age was 70.4 years (range 41 to 92). According to administered AMP and their pre- and postoperative urine culture, the patients were divided into five groups (A-E). Out of the 220 patients, 158 (71.8%) received no AMP. Within this group, 19 patients (12%) had positive postoperative urine cultures and therefore postoperative UTIs. AMP was administered to the remaining 62 patients (28.2%), of which six people (9.7%) proved to have postoperative positive urine cultures/UTIs. Compared to the literature we found less complications (9.1% to 11.8%) and similar results regarding sepsis (0.9% to 0.7-2.1%). Statistically significant risk factors of a postoperative UTI were age, pre- and postoperative hemoglobin levels as well as duration of postoperative catheterization and hospital stay. In the multiple logistic regression analysis only the length of the postoperative catheterization was still significant. No relevant differences to the literature were identified regarding to administered AMP and located pathogens.

Conclusion: The duration of the postoperative catheterization proved to be the only statistically significant risk factor for postoperative UT! following TURP. Further highly standardized studies should be conducted to find other risk factors before a personalized, risk-adapted AMP can be recommended.

PAPER #27 GERMAN WAR CEMETERY AT GLENCREE, IRELAND

(Presentation to be made by Alfonse Squitieri, MD, FACS, Colonel US Army Retired)

I was personally shown this German Cemetery in Wicklow County, Ireland by my wife Harriet's first cousin, Syl Holland, now a retired publican (publicans are those who own pubs). (Incidentally, Syl, while visiting Lincolndale, New York, from Ireland, was drafted into the US Army and sent to Korea around 1960 after the Korean War had already ended). According to Syl, this German War Cemetery came into its own during WWII when the Irish people cared for both survivors and deceased Luftwafer pilots when they crashed landed in war neutral Ireland after dropping bombs on England and running out of fuel. The deceased were interred at Glencree. Upon entering through the small Iron Gate and following the concrete path slightly upward one can hear the trickling of flowing water from a small nearby waterfall within the cemetery. A small, serene cemetery, it contains about 160 graves, half of which hold the final resting place for the WWII German aviators.

The following poem was written by Irish Poet Stan O'Brien and is displayed at Glencree.

It was for me to die
Under an Irish Sky
There finding berth
In good Irish earth
What I dreamed and
Planned, bound me
to my Fatherland.
But war sent me
To sleep in Glencree
Passion and pain
Were my loss-my gain:
Pray as you pass
To make good my loss
Stan O'Brien, Author

COL JOHN WETTLAUFER AND COL JOHN WEIGEL GURUS OF COMBAT UROLOGY

(Presentation to be made by Tom Turlington, M.D. Brig Gen USAF (Ret))

Objective: To present to the current Society the legacy of two of our great Military surgeons, as educators and as operational surgeons.

Methods: The information was obtained from family members, military personnel records, interviews, and the personal experience of the author.

Results: This presentation outlines the remarkable career and accomplishments of these two icons of Army and the Kimbrough Society of Urology.

Conclusion: True heroes are not on any athletic field, but in uniform..and sometimes in scrubs!

MANAGEMENT OF FAILED EXSTROPHY CLOSURE: A 50 YEAR EXPERIENCE

Matthew C. Kasprenski M.D., Karl S. Benz M.D.*, Mahir Maruf M.D.*, John Jayman B.A.*, Heather N. DiCarlo M.D.*, John P. Gearhart M.D.*: Baltimore, MD (Presentation to be made by Dr. Matthew Kasprenski)

Objective: This study investigates factors that contribute to a successful repeat bladder closure, and explores the effect of failed closures on continence status in patients with classic bladder exstrophy (CBE).

Methods: The authors reviewed a prospectively maintained institutional database of 1317 exstrophy-epispadias complex patients for CBE patients with a failed primary bladder closure from 1965-2017, who have consequently undergone a repeat closure. Our primary objective was to determine factors associated with successful repeat closure. This study defines a closed failure as the occurrence of bladder prolapse, dehiscence, vesicocutaneous fistula, outlet obstruction, other complications that necessitate a repeat closure, or a combination of the previously mentioned factors.

Results: A total of 170 patients had at least one repeat closures following a failed primary closure (115 male/55 female). The success rate was 126/170 (74.1%) for all second closures, 29/42 (69.0%) for all third closures, 9/12 (75%) for all fourth closures, and 2/3 (66.7%) for all fifth closures. With continued closure attempts, 166/170 (97.6%) patients were successfully closed. The median time to successful closure was 12.9 months (95%CI [11.7-15.7]).

There were 215 osteotomies performed in 153 patients. Fifty-two (34%) of these patients had more than one osteotomy. Fifty (29.4%) osteotomies were performed during the 170 failed primary closures, while 128 (75.3%) osteotomies were done during the 170 second closures and 27 (64.3%) osteotomies were done during the 42 third closures.

96 patients had a continence procedure and an evaluation of their continence status. Of these, 74 (77.1%) patients achieved urinary continence. 23 patients had a BNR alone with 13 (56.5%) achieving continence, 14 patients had BNR with augment and/or stoma with 12 (85.7%) achieving continence, and 57 patients had a continent urinary diversion with 50 (87.7%) achieving continence (p=0.007). When the same set of patients were stratified by successful closure number, 57/72 (79.2%) were continent after a 2nd successful closure, 12/16 (75%) became continent after a 3rd successful closure, and 5/6 (83.3%) became continent after their 4th successful closure (p=0.762).

Conclusion: A successful repeat closure is possible in the majority of cases, especially when used in conjunction with osteotomy. A combined anterior-posterior osteotomy approach was associated with the highest success rate during repeat closure. Continent urinary diversion yielded the highest continence rate.

ACHIEVING URINARY CONTINENCE IN CLOACAL EXSTROPHY: THE SURGICAL COST

Matthew C. Kasprenski M.D., Mahir Maruf M.D.*, John Jayman B.A. *, Timothy S. Baumgartner M.D., John P. Gearhart M.D.*: Baltimore, MD (Presentation to be made by Dr. Matthew Kasprenski)

Introduction: Cloacal exstrophy (CE) is a severe midline congenital abnormality that subjects the patient to numerous surgical corrections for an acceptable quality of life. Candidates for urinary continence undergo multiple procedures, typically as continent diversions, to become socially dry. The authors investigate the number of genitourinary interventions patients with CE undergo to attain urinary continence.

Methods: A retrospective review of a prospectively maintained database of 1311 exstrophy-epispadias complex patients was performed. Patients with CE who have had at least one continence procedure were included. A continence procedure was defined as bladder neck reconstruction with or without augmentation, bladder neck transection with continent urinary diversion, augmentation cystoplasty, or use of injectable bulking agents. Continence was defined as a dry interval greater than 3 hours without leakage at night.

Results: In total, 140 CE and CE variant patients have been managed at the authors' institution. Of the 116 CE patients, 59 received at least one continence procedure, 14 were excluded for incontinent diversion or cystectomy, and the remaining 43 patients are awaiting a continence procedure. At the time of analysis, 42 (71%) patients who underwent a continence procedure were dry. The median number of total surgical procedures to reach urinary continence was 4 (range 2-10). This included 1 closure (range 1-3), 2 continence procedures (range 1-4), and 1 (range 0-4) "other" genitourinary procedures. The median time to urinary continence was 11.0 years (95%CI [9.2-14.2]).

Conclusions: The majority of CE patients can achieve urinary continence. However, multiple continence procedures are likely necessary. Of patients who are candidates for a continence procedure, half of them will be continent by the age of 11.

POLYMER DELIVERED, SUBCUTANEOUSLY ADMINISTERED LEUPROLIDE ACETATE CONSISTENTLY ACHIEVED LOW NADIR TESTOSTERONE LEVELS ≤5 NG/DL

Judd W. Moul1, MD; John A. McLane2*, PhD; Stuart Atkinson3*, MB ChB; Debbie Boldt-Houle3*, PhD; David E. Crawford4*, MD: 1Durham, NC, USA; 2Fort Collins, CO, USA; 3Lincolnshire, IL, USA; 4Aurora, CO, USA (Presentation to be made by Dr. Moul)

Background: Achieving and maintaining low testosterone (T) suppression to castration level is the cornerstone of androgen deprivation therapy (ADT) for advanced prostate cancer (PCa). Modern assay methodology has found levels of T after surgical castration is 15ng/dL and 2016 European Association of Urology guidelines define castration as T<20ng/dL. Additionally, studies demonstrated that reaching nadir T<20ng/dL is correlated with improved duration of response to ADT and clinical outcomes including time to progression or disease specific survival (Klotz), and low nadir T was strongly associated with good prognosis for overall survival (Kamada).

Objective: To examine the effectiveness of polymer-delivered, subcutaneously-administered leuprolide acetate (SC-LA) on T suppression, nadir T was evaluated in 4 pivotal trials spanning 4 dose intervals that last up to 6 months from a single injection.

Method: Eugonadal PCa patients were treated with a single dose of 7.5, 22.5, 30, or 45mg SC-LA lasting 1, 3, 4, or 6 months, respectively in 4 open-label, fixed-dose, pivotal trials. Data were pooled and serum leuprolide acetate (LA) and T levels were evaluated by radioimmunoassay in a central laboratory. T was measured 2-4 times on day 0 and once on days 1, 3, 7, 14, 28, 35 following the 2nd injection. The 45mg group had an additional measurement taken on day 2. Nadir T was the lowest laboratory value obtained during treatment.

Results: Across the 1, 3, 4, and 6 month SC-LA formulations, median serum LA levels were consistently between 0.1 and 1 ng/mL from week 2 until the end of the study. In the pooled analysis, (n=438), 90-95% achieved T \leq 20ng/dL by week 6 and 90-97% maintained T \leq 20ng/dL from weeks 6-24. The pooled analysis showed 99%, 97%, and 91% of patients reached nadir T \leq 20ng/dL, \leq 10ng/dL, and \leq 5ng/dL, respectively, with a median nadir T of 2.9ng/dL. When comparing across each formulation, >88% of patients reached nadir T \leq 5ng/dL.

Conclusions: These results suggest that across all doses, SC-LA achieves consistent and prolonged LA drug delivery above 0.1ng/mL and provides favorable T suppression below 20ng/dL from week 6 through the end of the study, which may be attributed to the ATRIGEL® Delivery System. Multiple T measurements throughout the study confirmed that over 91% of PCa patients who received SC-LA achieved nadir testosterone ≤5ng/dL when pooled. SC-LA suppresses T lower than the 15ng/dL measured after surgical castration. Achievement of low nadir T may have implications for optimizing progression-free survival and extended duration of response to ADT.

Source of Funding: TOLMAR, Inc.

TELECYSTOSCOPY FOR BLADDER CANCER SURVEILLANCE

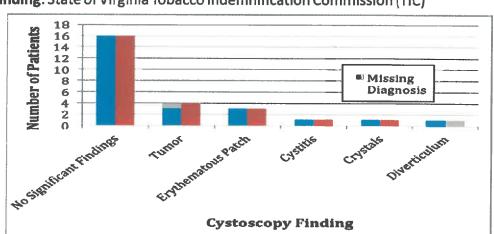
Noah S. Schenkman MD, Haerin Lee* MD, Jennifer M. Lobo* MD, Thomas Corey*
MD; Tracey L. Krupski* MD: Charlolttesville, VA
Presentation to be made by Dr. Schenkman

Introduction: Urology workforce shortages in underserved locations lead to decreased access to surveillance cystoscopy. We validated a telecystoscopy system, using Allied Health Professionals (AHPs) to perform cystoscopy transmitted live for interpretation by a board-certified urologist. We present our most recent data on the dual cystoscopy model for diagnostic agreement, complications, and patient satisfaction.

Methods: In an IRB-approved protocol, patients followed at University of Virginia Hospital living at remote sites requiring surveillance cystoscopy for bladder cancer are consented for dual cystoscopy. The remote site AHP performs the telementored exam, and prior to scope removal, a urologist blinded to the findings performs standard cystoscopy. Complications were assessed with patient phone call at 2 and 5 weeks; satisfaction was measured with the Client Satisfaction Questionnaire (CSQ-8). We compared overall and specific diagnostic agreement between tele-cystoscopy and standard cystoscopy.

Results: Twenty-five patients were consented with 24 having completed follow up calls and 19 completing CSQ-8. One patient (4%) had dysuria at 2 weeks and was treated empirically for UTI. Patients showed high satisfaction with mean score 31 (max. 32) on CSQ-8. Agreement between tele-cystoscopy and traditional cystoscopy was 92% for all findings and 96% for presence/absence of bladder tumors.

Conclusion: Our platform provides a model where AHPs need not interpret findings. Excellent diagnostic agreement and high satisfaction between standard and telecystoscopy suggest that tele-cystoscopy is a feasible model to project urologic manpower to underserved locations.



Funding: State of Virginia Tobacco Indemnification Commission (TIC)

INITIAL EXPERIENCE WITH FLEXDEX FOR LAPAROSCOPIC RADICAL PROSTATECTOMY

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Objectives: The FlexDex is a hand-held laparoscopic needle driver that mimics robotic instrument capabilities. The benefits of laparoscopic radical prostatectomy have been well established since the introduction of the Da Vinci surgical robot. However, access to robotic surgery is not available to all patients with prostate cancer. The technical challenge of performing the urethrovesical anastomosis laparoscopically is arguably the main impetus for using a surgical robot for radical prostatectomy. To bridge the gap between access to robotics and the limitations of straight-stick laparoscopic instruments, the FlexDex instrument was used to perform a laparoscopic radical prostatectomy. This video demonstrates the initial experience with the FlexDex for laparoscopic radical prostatectomy.

Materials and Methods: A 64 year old male with prostate cancer, grade group 1, Gleason 3+3=6, cT1c, PSA 6, involving up to 40% at the right mid prostate elected to undergo a radical prostatectomy rather than active surveillance or radiotherapy. His prostate volume was 72cc by transrectal ultrasound. Given the out-of-pocket costs for robotic prostatectomy, the patient desired to have his prostatectomy at the 48th MDG. The performing surgeon attended a 5-hour FlexDex training session in July 2017. Further training with the FlexDex was performed using a model of the urethrovesical anastomosis and a laparoscopic trainer for several weeks. A proctoring surgeon who has performed more than 200 laparoscopic (non-robotic) radical prostatectomy cases was present during the surgery. Given the patient's history of bilateral laparoscopic inguinal hernia repair, a transperitoneal approach was chosen. A surgical video was created for educational purposes.

Results: The FlexDex was used to suture the median lobe for retraction, the Rocco suture, and the urethrovesical anastomosis (Van Velthoven). The FlexDex proved most useful when suturing directly away from or toward the surgeon. The total surgical time was five hours.

Conclusions: Performing a laparoscopic radical prostatectomy is a difficult operation that requires a highly advanced laparoscopic skill set. The FlexDex does not replace this skill requirement, but rather augments the advanced laparoscopic surgeon with the capability to suture at angles not achievable with a straight-stick laparoscopic needle driver.

TESTICULAR LEYDIG CELL HYPERPLASIA: A CASE REPORT

Alexander D. Doudt D.O., Matthew S. Christman M.D.: San Diego, CA (Presentation to be made by Dr. Alexander Doudt)

Pediatric testicular tumors are rare, usually benign, and tend to be under-reported. Stromal tumors make up 8-13% of all testicular tumors in children with 4% being Leydig cell tumors. There are only a handful reported cases of Leydig cell hyperplasia. Clinically, the diagnosis of Leydig cell hyperplasia is difficult to differentiate from Leydig cell tumor, as both classically present with precocious puberty. Thus, Leydig cell hyperplasia can only be diagnosed on histopathology.

We report a case of a 7 year old boy with a hypoechoic right intra-testicular mass discovered during the work-up for dysuria. Two months prior, he suffered a straddle injury. Testicular tumor markers were normal and there were no signs of precious puberty. The mass slightly enlarged on 1 month follow-up ultrasound. He subsequently underwent a right partial orchiectomy via an inguinal incision at which time a frozen evaluation revealed Leydig cell proliferation. As a result, radical orchiectomy was not performed. Final pathology returned as Leydig cell hyperplasia. Post-operative hormone evaluation was normal and there was no evidence of recurrence at 6 month follow-up.

Leydig cell hyperplasia is a rare, benign testicular mass that is distinct from Leydig cell tumor. Management can safely be performed with testis-sparing surgery.

Source of Funding: None

Conflict of Interest Declaration: The authors have no conflicts of interest relevant to this article to disclose.

THE SEMEN SOAKED SAILOR: A VASOCUTANEOUS FISTULA CASE REPORT

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(Presentation to be made by Dr. Seth P. Olcese)

Background: Vasocutaneous fistulae (VF) are a rare phenomenon with less than 20 reported cases in the literature. We present our experience with this entity occurring after vasectomy.

Case Report: A 34-year-old active duty sailor presented to our urology clinic with complaints of intermittent left scrotal pain and drainage. He reported that his symptoms began shortly after undergoing a vasectomy at his Navy family medicine clinic one year ago. He notes intermittent dull left scrotal pain associated with drainage of creamy, white fluid from the area of his left hemiscrotal incision, which he and his Navy shipmates believed to have a fragrance similar to seminal fluid. He reported that the discomfort and drainage seem to occur every 3-5 days and typically resolve upon drainage from the incision, or with ejaculation. On exam, he was found to have an impeccably manicured mustache, with scrotal exam revealing a small punctum along a well healed left hemiscrotal scar with no surrounding erythema. The vas was palpated immediately adjacent to the punctum, and a small amount of thin milky fluid was expressible. Review of his electronic medical record detailed an open ended technique used for his vasectomy. Given that his history and exam were consistent with a symptomatic VF, scrotal exploration and excision was recommended. Intraoperatively, he was found to have a patent fistula communicating with the testicular end of the vas. The tract was excised and the proximal end of the vas was occluded with a small clip. Pathologic review of the excised tract revealed epithelium with an attached segment of vas deferens consistent with a VF. Upon postoperative follow up one month later, he endorsed resolution of his pain and drainage, and neither he nor his Navy shipmates had noted the recurrence of the scent of semen.

Discussion: Although rare, VF can result from a variety of etiologies, though scrotal trauma and vasectomy appear to be the most common. The open ended vasectomy technique has been suggested to decrease post-vasectomy orchalgia and painful granuloma, however, there might be a theoretically higher risk of VF. Review of the recent literature reveals no reported cases associated with the open ended technique, but that VF has occurred with both clip and suture ligation. VF following vasectomy is most likely secondary to failure to properly return the ends of the vasa to their anatomic location beneath the dartos fascia.

MUCORMYCOSIS OF THE PENIS: A RARE CAUSE OF PENILE ULCERATION

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Introduction: Mucormycosis is an opportunistic fungal infection typically requiring aggressive surgical debridement and IV antifungal for treatment. Skin is the third most common site of infection. There have been 2 other case reports of mucormycosis involving the penis. One occurred in a patient with acute myelogenous leukemia which caused Fournier's gangrene and ultimately death of the patient and the other managed with local debridement and antifungals.

The objective of this case report is to describe a rare case mucormycosis presenting as a penile ulceration.

Methods: Case Report

Results: An 81 year old man with multiple medical conditions including poorly controlled Diabetes mellitus initially presented with complaints of penile pain with urination to clinic. Physical exam was consistent with balanitis and he was prescribed nystatin cream. He was sub sequentially lost to follow up and presented to his primary care manager 6 months later with a complaint of a penile lesion present x 3 weeks with 1 week of penile pain. HgbA1c at that time was incalculable (>20.1%). He was transferred to the ED where exam revealed an 1cm x 1cm ulcerated lesion under the foreskin without surrounding signs of infection otherwise. He underwent initial debridement with biopsies and was discharged home with local wound care. Pathologic examination revealed angioinvasive fungal elements. He underwent 1 additional debridement but eventually required partial penectomy for local control. He also received 10 days of IV antifungals.

Conclusion: Invasive fungal infections of the penis are a rare cause of penile ulceration and require both surgical and medical management.

Source of Funding: None

Disclaimer: The views expressed are those of above named individuals and do not reflect the official views or policy of the Department of Defense or its Components.

RENAL DENERVATION FOR CHRONIC LEFT FLANK PAIN: SUCCESSFUL LIBERATION FROM NARCOTIC USE

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(Presentation to be made by Dr. Doug Cho)

Introduction: Flank pain is a common urologic symptom and may indicate a urologic problem. However, pain refractory to conservative measures is relatively common. Renal denervation is a surgical option that may offer relief to these chronic flank pain patients.

The objective of this case report is to describe the use of robot assisted laparoscopic renal denervation as a means to treat chronic left flank pain without other known etiology.

Methods: Case Report

Results: A 43-year-old female with an extensive history of nephrolithiasis was referred for 6 months of chronic left flank pain after having undergone recent ureteroscopy. The pain was refractory from multiple local injections and required daily narcotic use. Urologic evaluation was negative for nephrolithiasis or upper tract obstruction. No neurologic cause was identified.

She underwent a robot assisted laparoscopic left renal denervation. Post-operative narcotic usage was tracked. She was prescribed Oxycodone IR 5mg tablets. Over the first 8 post-operative days, she used 36 doses. At 3 weeks post-op, she reported using 2-3 tablets per week. At 2 months post-op, she denied any flank pain and was no longer using narcotic medication.

Conclusion: The efficacy of laparoscopic renal denervation for chronic flank pain from other causes outside of HLPS and ADPKD is unclear. Renal denervation may hold significant promise for chronic flank pain without a clear etiology.

PEDIATRIC UROTHELIAL CARCINOMA: A RARE CASE OF SECONDARY GENITORURINARY MALIGNANCY IN A WILMS TUMOR PATIENT

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(Presentation to be made by Dr. Hertz)

Objectives: Long term survival after a diagnosis of Wilms Tumor has increased dramatically following improvements in chemotherapy and radiation treatment. This has also led to an increased incidence of secondary malignancies later in life. Urothelial carcinoma is an uncommon malignancy in the first four decades of life and a rare secondary malignancy following Wilms tumor. This represents a case of a 9-year-old female with history of Wilms Tumor diagnosed with urothelial carcinoma.

Results (Case Presentation): A 9-year-old female with history of stage III Wilms Tumor of the left kidney treated with nephrectomy and adjuvant chemo- and radiation therapy. She was in remission undergoing routine surveillance when an ultrasound demonstrated a 1cm mass in the bladder. The patient was referred to Urology where she was found on cystoscopy to have a 1cm papillary tumor lateral to the left ureteral orifice. The mass was resected at that time. Histologic examination was consistent with high grade urothelial carcinoma with no evidence of invasion. She has been followed with surveillance cystoscopies since her resection with no evidence of recurrence.

Conclusion: Urothelial carcinoma of the bladder is rare in children under 10 years of age and represents an uncommon secondary malignancy after Wilms tumor. To the authors' knowledge, this is the first case of urothelial carcinoma in a child under 10 with a history of Wilms tumor. We present this case as an option for treatment and follow-up.

LUMBAR AND SACRAL SPINAL-MEDIATED NUEROGENIC SEXUAL DYSFUNCTION; PATHOPHYSIOLOGY, DIAGNOSIS, AND TREATMENT

Eric D. Biewenga MD, Sue W. Goldstein BA*, Ashley G. Winter MD*, Rachel S. Rubin MD*, Vera Trofimenko, MD*, Barry Komisaruk PhD*, Jennifer Kissee PA*, Choll Kim MD*, Irwin Goldstein MD*: San Diego, CA (Presentation to made by Dr. Eric D. Biewenga)

Introduction: Neurogenic sexual dysfunction is considered irreversible, secondary to such pathophysiologies as spinal cord injury, multiple sclerosis, post-radical pelvic surgery. We describe a new neurogenic sexual dysfunction caused by sacral or lumbar spine pathology within the cauda equina, identified as radiculopathy of the sacral spinal nerve root (SSNR) that may be cured surgically.

Methods: 14 men and women (mean age 37 +/- 11 years) presented with bothersome neurogenic sexual dysfunctions, including those with hyperfunctioning radiculopathy; persistent genital arousal disorder (PGAD) (n=6), severe genital pain during both arousal and ejaculation/orgasm (n=3), and genital itching (n=1); and hypo-functioning radiculopathy: delayed or absent ejaculation/orgasm (n=4). The diagnostic work-up consisted of neuro-genital testing: genital biothesiometry, sacral dermatome testing, bulbocavernosus reflex latency testing. Sacral and lumbar MRI studies assessed for presence of treatable lumbar and/or sacral spine pathology. Epidural nerve blocks under fluoroscopy at the site of suspected pathology using steroid with local anesthesia for hyper-functioning cases or steroid alone for hypo-functioning radiculopathy identified if there was symptom reduction. Subsequently, minimally-invasive navigational out-patient spine surgery was performed.

Results: Neuro-genital diagnostic testing was abnormal in all 14 patients who underwent spine surgery. Pathophysiologies included Tarlov cyst (n=2), annular tear (n=7), disc impingement (n=2), facet cyst (n=1) and spinal stenosis (n=2). In 12, epidural nerve blocks showed symptom reduction. In 2 cases, intrathecal morphine was used to demonstrate symptom reduction. Of the 14 patients who underwent surgery, 4/6 with PGAD were cured, 2/3 with severe genital pain during both arousal and ejaculation/orgasm were cured, and 1/4 with delayed or absent ejaculation/orgasm were cured. Quality of life regarding sexual function has already been achieved in 7 of 14 cases, although follow up has been less than in a year in half of the cases. There were no surgical complications.

Conclusion: Lumbar and sacral spine pathologies may result in radiculopathy of the sacral spinal nerve root in the cauda equina leading to bothersome neurogenic sexual dysfunction. A diagnostic paradigm involves neuro-genital testing, lumbar/sacral MRI's and epidural nerve blocks. Minimally-invasive navigational out-patient spine surgery may result in cure in some patients.

IMPROVING DIAGNOSTIC CAPTURE OF ORGANIC ED ON ULTRASOUND: CORPORAL HETEROGENEITY GRADING TO ASSESS PENILE FIBROSIS

Ashley G. Winter MD, Rachel S. Rubin MD, Eric D. Biewenga MD, Irwin Goldstein MD: San Diego, CA (To be presented by Dr. Eric D. Biewenga)

Objectives: Corporal erectile tissue fibrosis is associated with reduced expandability preventing adequate compression of sub-tunical venules against the tunica. It is a significant pathophysiologic component of corporal veno-occlusive dysfunction (CVOD), currently clinically quantified during color Doppler ultrasound (US) by elevated cavernosal artery end-diastolic-velocity (EDV) under maximal pharmacologic smooth muscle relaxation. This methodology of CVOD measurement may miss early stage corporal fibrosis in men complaining of inability to maintain an erection during physiologic sexual stimulation. Grayscale US is widely used in other organs to assess presence of fibrotic tissue (i.e., liver cirrhosis). We hypothesize that grayscale US of erectile tissue can reveal heterogeneity that is an early marker for CVOD. We developed an US protocol to assess penile corporal heterogeneity, correlated this to EDV, and characterized patients with positive findings that may not have been captured on traditional hemodynamic-focused Doppler US.

Materials and Methods: Following pharmacologic erection, B-mode grayscale US (Aixplorer 15.4 mHz transducer) was performed. Images were captured in the axial plane at the proximal, mid, and distal shaft with gain of 45%, 55%, 65% (dynamic range 70 kB), followed by gain of 25-35% (dynamic range 49 kB) for high contrast image. Subjects were classified as either homogenous-mild heterogeneous (Group 1, n=69), or moderate-severe heterogeneous (Group 2, n=58). Doppler US of the cavernosal arteries was used to measure EDV. Data were analysed in Stata v13.1.

Results: We reviewed 130 consecutive duplex Doppler US studies in men with ED (age 45 ±16yr, median IIEF 10 [IQR 6-17]). Mean cavernosal artery EDV was 1.9±3.7cm/s and 6.1±7.6cm/s for Groups 1 and 2 respectively, p=0.0001. Among 88 subjects with EDV< 5cm/s, 31 (35%) had moderate-severe heterogeneous tissue. Among 34 subjects with EDV<5cm/s and PSV>30/s, 11 (35%) had moderate-severe heterogeneous tissue.

Conclusions: Moderate-severe corporal tissue heterogeneity on grayscale US corresponds to higher EDV, a surrogate for increased fibrosis, and may serve as an early marker of ED that is location/lesion specific. Adding corporal heterogeneity grading to a Doppler US protocol added positive findings in 35% of patients with ED who otherwise may have been misdiagnosed with an intact veno-occlusive mechanism.

NOVEL PENILE ULTRASOUND TECHNIQUE TO EXPLAIN MECHANISM OF ERECTILE DYSFUNCTION IN YOUNG PATIENTS USING FINASTERIDE FOR ANDROGENIC ALOPECIA

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Irwin Goldstein MD*: San Diego, CA
(To be presented by Dr. Eric D. Biewenga)

Objectives: Post-finasteride syndrome (PFS), has been reported in young men with persistent sexual/non-sexual symptoms despite stopping finasteride prescribed for androgenic alopecia. Since these men typically have normal penile Doppler hemodynamics they are often diagnosed as having psychogenic ED. Animal studies, however, reveal histologic erectile tissue fibrosis after exposure to finasteride. Novel penile ultrasound techniques were used to assess if a similar pathophysiology could explain the ED in young men with PFS.

Material and Methods: 27 men with PFS (mean age 31 years) met inclusion/exclusion criteria: potent prior to but ED since use of finasteride; <40 years old without obvious cardiovascular risk factors; underwent grayscale and color penile duplex Doppler ultrasound with a high frequency probe (Aixplorer 15.4 MHz transducer) during maximal pharmacologic erection. Grayscale imaging was performed using a standard protocol in axial B-mode at multiple gains, with various dynamic ranges, in multiple penile shaft locations to determine presence/absence of erectile tissue homogeneity or heterogeneity. Standard color Doppler parameters of peak systolic velocity (PSV) and end-diastolic velocity (EDV) were concomitantly assessed.

Results: Mean use of finasteride was 3.5 years (range 2 days—12 years). PFS symptoms included ED (100%); IIEF, EF domain scores were on average 14 (range 0—24). Other PFS symptoms included low libido (81%), orgasm dysfunction (66%), cognitive changes (55%), and mood changes (74%). Dihydrotestosterone (DHT) blood test values were low/lower tertile in 56%. 26/27 finasteride users (96%) demonstrated lack of homogeneity and hyperechoic/hypoechoic regions in erectile tissue. One patient (4%) had homogenous erectile tissue. Mean right/left PSV values were 30.3/29.8 cm/sec, with mean right/left EDV values 1.6/1.1 cm/sec during maximal pharmacologic smooth muscle relaxation.

Conclusions: Using novel ultrasound technology, 96% of men with PFS and ED demonstrated heterogeneity in their corporal tissue at maximal pharmacologic erection. This new protocol is able to show that PFS men complaining of ED may have an underlying biologic pathophysiology. Further we hypothesise that finasteride lowers DHT leading to corporal smooth muscle apoptosis and fibrosis similar to animal models, impairing tissue expandability leading to clinically reported venoocclusive dysfunction and ED.

CHARACTERIZING PERIURETHRAL TISSUE IN CADAVERS: POTENTIAL NEGATIVE IMPACT ON SEXUAL FUNCTION BY MID-URETHRAL INCONTINENCE SLING SURGERY

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Objectives: Mid-urethral sling (MUS) surgery is performed to manage stress urinary incontinence and improve quality of life in affected individuals. The role(s) of periurethral structures in sexual responses are not well understood. In this study, periurethral tissue from female cadavers were assessed histologically for location of innervation and glandular structures before and after a mid-urethral sling (MUS) surgical simulation.

Materials and Methods: Thawed cadavers, not embalmed, were assessed prior to or after surgical simulation involving implantation of a transobturator MUS by a urogynaecologist. The implanted MUS was made from a segment of abdominal fascia to allow for staining to enable visualization during microscopy. The excised periurethral tissue (2 x 2 x 4 cm) was bordered by the anterior vaginal wall, urethra, and pubic bone including sections from external genitalia to bladder neck. All tissues were sectioned serially in cross section and stained (i) H&E, (ii) protein gene product 9.5 antibody (PGP 9.5: neuronal marker), (iii) prostate specific antigen antibody (PSA; glandular cells).

Results: Histological analysis revealed that periurethral tissue contains numerous PSA-positive glandular structure, many nerve fibers and bundles, and blood vessels. Glandular structures were highly innervated. Vascular and glandular tissue was found proximal to the entire length of the urethral lumen. The MUS surgical simulation clearly showed that regions containing both glandular tissue and innervation were transected by the implantation of the sling material.

Conclusions: The major findings of this study is that periurethral tissue in women contains significant PSA-staining glands, nerve and vascular elements that could have important functions in female sexual responses and orgasm. In addition, the results demonstrate that placement of the MUS transects these glandular, vascular, and neuronal tissue within the periurethral space. Disruption of female prostatic glandular tissue and innervation may be a root cause of the effects of MUS surgery on female sexual function.

BENIGN CYSTIC MESOTHELIOMA OF THE TESTICLE; RARE PATHOLOGICAL FINDING IN THE MALE GENITAL TRACT

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(Presentation to be made by CPT Karmon Janssen)

Objectives: Benign cystic mesothelioma is an intermediate-grade neoplasm of the mesothelial cells. They are relatively rare tumors that arise from the serosal surface of the pleura, peritoneum, and pericardium. There are reports of occurrence in the male genital tract originating from the tunica vaginalis of the testicle therefore presenting as a scrotal mass or hydrocele.

Materials and Methods: A case report with literature review using Pubmed search engine to describe this rare pathological finding. In this review we present a case of a 61 year old male presenting with a new testicular cystic mass with associated microlithiasis on ultrasound, negative tumor markers who underwent an orchiectomy. Pathology identified benign (1.2 x 0.8 x 0.6 cm) multicystic mesothelioma of the testicle without involvement of the tunica vaginalis.

Results: To our knowledge this is the first described report demonstrating benign cystic mesothelioma of the testicle without involvement of the tunica vaginalis.

Conclusions: Benign cystic mesothelioma are relatively rare in the male population, with majority predominance among females with rates up to 81%. Review of the published literature describe the involvement of the abdominal cavity, spermatic cord and tunica vaginalis. Given the embryological origin of the tunica vaginalis arising from the outpouching of the peritoneal folds suggests the reasoning for similar histological features behind benign cystic mesothelioma of the peritoneum and tunica vaginalis. They typical present as a scrotal mass or hydrocele and can occur at previous sites of surgery or with clinical history of inflammation or infection. Here we describe benign cystic mesothelioma of the testicle without involvement of the tunica vaginalis or spermatic cord which to our knowledge has never be reported. This case is rare and should be now be included as a differential of diagnosis of a cystic testicular mass.

Funding: None

EFFECT OF STONE SIZE AND COMPOSITION ON ULTRASONIC PROPULSION IN VITRO

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Objectives: Ultrasonic propulsion (UP) has been successfully demonstrated in a human clinical trial to reposition stones and facilitate spontaneous passage of fragments. Given the prevalence of kidney stones, and the cost related to symptomatic relief of a patient in acute renal colic, a non-invasive ultrasound treatment for immediate pain relief would be of great benefit. Repositioning an obstructing stone and alleviating the acute pain would allow for temporization and a visit to discuss elective treatments. The purpose of this study was to use a phantom model to evaluate the effect of stone size and composition on the potential limits of UP to expel stones and fragments using a phantom model.

Materials and Methods: The phantom consisted of a 12 mm x 30 mm cylindrical pipette bulb embedded in a tissue mimicking material at 10 cm depth, simulating the ureteropelvic junction (UPJ) or a calyx within the kidney. Four different stone compositions were tested. Three stones of each type with varying size and weight were treated at the maximum probe intensity and push duration from 0.5 s to 5 s. Stone composition (average weight) included Ammonium acid urate (0.16 g), Struvite (0.62 g), Calcium Phosphate (0.28 g), and Calcium Monohydrate (0.26 g). The aggregate maximal size of the three stones was 8-12 mm. The average number of times a stone was expelled over 10 attempts was assessed for each stone type and over the range of stone sizes. If the stone became trapped within the calyx, two additional push attempts were performed. Each time the stone expelled out of the calyx it was manually replaced back into the pipette.

Results: The only stones expelled less than 100% of the time were the heaviest stone (struvite, 0.68 g) that was never lifted high enough for expulsion with a single 0.5 s pulse and the largest stone (calcium phosphate, 12 mm x 7 mm), which occasionally became stuck at the 12 mm orifice of the pipette. Multiple pushes did not result in further expulsion of the stuck stone.

Conclusions: This phantom study showed UP of large stones was rather insensitive to stone size or composition. Exceptions occurred with the heaviest and largest stones. Struvite, the densest and therefore heaviest of the stones tested, required push durations longer than 0.5 s to move the stone out of the phantom. Also, a stone presenting with a wider aspect than the width of the calyx could not be forced through the smaller opening. A limitation of the study is the force was always optimally aligned with the pipette opening, which may be challenging for stones in the UPJ.

Funding: Work support by NIH NIDDK grants DK043881 and the National Space Biomedical Research Institute through NASA NCC 9-58.

TERMINAL MARKERS OF UROTHELIAL DIFFERENTIATION: A COMPARISON OF NEWBORN AND DELAYED BLADDER EXSTROPHY CLOSURES TO CONTROLS

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(Presentation to be made by Dr. Matthew Kasprenski)

Introduction: Successful primary closure in bladder exstrophy (BE) is essential for bladder growth and eventual continence. There is current debate in pediatric urology whether primary closure in patients with BE should be performed as a newborn or in the delayed setting. The urothelium provides a physiologic barrier necessary for proper genitourinary function and plays a pivotal role in signaling smooth muscle development. The authors examined expression of urothelial markers of terminal differentiation in exstrophic bladders obtained at the time of primary closure in both newborn and delayed closures. The goal of this project is to optimize the timing of operative intervention.

Methods: Bladder biopsies were obtained between 2012 and 2017 from 36 BE patients at the time of primary closure; there were 10 newborn closures and 26 delayed closures. These specimens were compared to bladder specimens from normal infants (age range 7 days to 3 years). All bladder specimens underwent histological assessment followed by immunohistochemical staining for uroplakin-II (UP-II) and p63. The specimens were graded by a blinded pathologist in a semi-quantitative fashion using a scoring system of 0-3.

Results: When compared to controls, delayed closures had a lower proportion of UP-II grade 3 expression (0% vs 62.5%; p<0.001) and a higher proportion of UP-II grade 0 expression (81.5% vs 0%; p<0.001). This trend persisted in the neonatal BE closure and control comparison, but the difference was less stark. When compared to controls, neonatal closures had a lower proportion of UP-II grade 3 expression (10% vs 62.5%; 0=0.048) and higher proportion of UP-II grade zero expression (40% vs 0%; p=0.048). When comparing delayed to neonatal closures, a significantly higher proportion of UP-II grade 0 was found in the delayed BE closures (81.5% vs 40%; p=0.013). There was no statistical difference in p63 expression scores when the same three bladder closure groups were compared.

Conclusion: Interestingly, the data suggest that the delayed closure group had markedly decreased UP-II expression compared to the control group and the newborn group, suggesting less urothelial differentiation. This study provides evidence that closure of the bladder in the newborn period may benefit patients from a biologic standpoint.

SINGLE PROVIDER EXPERIENCE USING CLOMIPHENE FOR MALE FACTOR INFERTILITY

David W Barham MD, John Q Schisler MD, Ryan W Speir MD: Honolulu, HI Presentation to be made by Dr. John Q Schisler

Objectives: Clomiphene (Clomid) is an estrogen modulator which has been used since the 1960's for male factor infertility1. Despite its wide spread use, there is limited data to support its efficacy. This study sought to evaluate a single providers experience using clomiphene for male factor infertility.

Materials and Methods: The outpatient pharmacy records at our institution were used to identify all prescriptions from a single provider for clomiphene from July 2015-July 2017. A retrospective review of all charts was performed. Pre and post clomiphene testosterone, follicle stimulating hormone (FSH), sperm concentration, sperm motility, and sperm motility were recorded. The couples pregnancy status and use of assisted reproductive technology was also assessed through chart review.

Results: A total of 31 patients were identified for chart review. The age range was 21-48 years with a mean of 34.2 years. 30 patients received clomiphene for primary or secondary male factor infertility. One patient was a young male with hypogonadotrophic hypogonadism who wished to preserve future fertility. Of the initial 31 patients, 14 had post clomiphene semen analysis and 11 had post clomiphene HPG axis labs. There was a mean increase in sperm concentration of 8.8mil/mL, sperm motility of 12.75%, and normal sperm morphology of -2.22%. Mean improvement of testosterone and FSH levels were 362ng/dL and 5.4miU/mL. Pregnancy status was identifiable in 27 patients with a pregnancy rate of 22.2%. One additional patient underwent ART with 7 viable embryos but had yet to have transfer at time of publication. 71% of all patients underwent ART.

Conclusions: We report a single providers experience with clomiphene for male factor infertility which demonstrates overall improvement in sperm concentration, motility, testosterone, and FSH levels. Just over one in five couples conceived within the 2 year study period. These results are consistent with the current literature showing rates of pregnancy ranging from 9.5-36% with clomiphene 1.

References

1. Willets AE, Corbo JM, Brown JN. Clomiphene for the treatment of male infertility. Reprod Sci. 2013;20:739–44

AUTOMATED FLOW CYTOMETRY URINE ANALYSIS: A SHIFTING PARADIGM IN RECOGNIZING MICROSCOPIC HEMATURIA

CPT Alexandria M. Hertz MD and COL Mark I. Anderson MD Tacoma, Washington (Presentation to be made by Dr. Hertz)

Objectives: The current "gold standard" for identifying microscopic hematuria (defined as 3 or more red blood cells (RBCs)/high power field (HPF)) is with visual microscopy. This is time consuming and prone to inter-person variability along with technique challenges. Flow cytometry is being introduced as an alternative by labs for increased detection and efficiency. The reference ranges for these machines may not correlate with current standards. Our goal was to establish the machines reference interval and compare to current guideline standards.

Materials/Methods: A single institution, as part of a quality assessment project, evaluated the reference range of its new automated urinalysis machine (ARKRAY Aution AU-4050) after it was noticed that there was a significant increase in the number of cases of microscopic hematuria. A reference interval verification 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.

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. A mean number of 2.9 HPF with a standard deviation of 2.3, and a range of 0-15. This is resulted in unevenly distributed data. A 95% confidence interval (2.5% of upper and lower values) was then used to further identify the value that would most accurately capture the appropriate cut-off. This analysis produced an accurate reference interval of 0-8 HPF.

Conclusion: The current American Urological Association (AUA) guidelines of the evaluation of microscopic hematuria utilize a threshold for 3 RBCs/HPF using microscopy. Labs are transitioning to the use of automated machines, a factor that is not currently accounted for in the most recent guidelines. As evidenced in this evaluation, the reference range for these machines can be significantly different than those of the guidelines. Utilizing the current guideline thresholds for the patients could result in a significant number of unnecessary negative work-ups due to this different reference interval.

EXTRA-TUNICAL GRAFTING PROCEDURE FOR PEYRONIE'S DISEASE HOURGLASS AND INDENT DEFORMITIES

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Objective: To describe a novel, tunical-sparing surgical technique -- extra-tunical grafting (ETG) -- for the treatment of penile indentation deformity (ID) and hourglass (HG) deformity and to describe patient-reported outcomes after the ETG procedure.

Materials and Methods: An IRB-approved, retrospective chart review was performed to collect data including pre-operative deformity, operation performed, and post-operative patient-reported perception of deformity, erectile function, glanular sensation, and overall satisfaction with the ETG operation. The patients were followed sequentially post-operatively (range 6 months to 45 months). From October 2013 to June 2017, 36 patients had the ETG procedure performed for HG and ID. Many patients also had penile curvatures. The indications for surgery were difficulty with sexual intercourse due to the deformity or poor cosmesis of the penis. Pre-operatively all patients had erections adequate for intercourse with or without oral or injectable medications. The ETG procedure is performed by exposing the tunica albuginea of the erect penis in the area of deformity and applying a cadaveric fascia graft, singly or in layers, to fill the exposed tunical depressions. The graft is sutured into position with multiple interrupted, long-lasting absorbable sutures. The urethra is excluded from the graft. The neurovascular bundle is left undisturbed.

Results: Results with at least 6 months of follow up could be extracted for 18 of the 36 patients. Seventeen of the patients were then included in this analysis; 1 was excluded as he required excision of calcified tunical plaques, which necessitated incision into the tunica albuginea. Follow up was between 6 and 44 months (ave 21 months). All patients reported satisfactory resolution of their HG or ID. No patients reported worsened erectile function. Two patients (11.8%) reported slight penile hypoesthesia, with one of these having had multiple previous penile degloving surgeries for trauma. No post-operative evidence of tissue rejection or infection was noted in any patient. Ten of the patients reported being "very satisfied" and six "satisfied" with the procedure. One was neutral, and none reported being "dissatisfied". All patients reported that they would recommend the procedure to a friend, and all would repeat the same surgery again.

Conclusions: This procedure is a straightforward approach to HG and ID that does not violate the TA and does not require dissection of the neurovascular bundles. Thus, ETG carries a very low risk of *de novo* impotence or hypoesthesia as highlighted by this patient series. This in combination with high patient satisfaction rates, absence of a second surgical incision for graft harvest, and ease of graft placement makes the ETG procedure a valuable surgical technique for the treatment of complex penile HG and ID deformities.

COMPARISON OF STANDARD A COLLAGENASE CLOSTRIDIUM HISTOLYTICUM (CCH) PROTOCOL VS A MODIFIED INTERFERON ALFA 2B PROTOCOL FOR THE MANAGEMENT OF PEYRONIE'S DISEASE (PD) AT TWO LARGE MANAGED CARE ORGANIZATIONS

Rachel S. Rubin MD*, Ashley G. Winter MD*, Eric Biewenga MD, Eugene Rhee MD*, Irwin Goldstein MD*: San Diego, CA (Presentation to be made by Dr. Eric D. Biewenga)

Objectives: Managed care organizations make decisions based on the cost benefit data of medical treatments for their patients. CCH, the only FDA approved intralesional therapy (ILT) for PD, can be cost prohibitive (>\$3000/injection). The standard CCH protocol based on pivotal clinical trials included 2 injections per cycle with an additional visit for modeling. A recent study with similar outcome data evaluated a modified protocol that reduced the number of CCH injections and patient visits thereby reducing costs substantially. Interferon alfa2b (IFN)(<\$25/injection) has been studied in a small, randomized, placebo-controlled trial to be a safe and effective ILT for PD. The goal of the study was to compare outcomes of the ILT protocols at 2 different managed care organizations in the same community with consideration for both patient outcome and organizational cost.

Methods: Site 1 uses the standard CCH protocol consisting of 4 visits per treatment cycle for up to 4 cycles including pharmacologic erection with measurement, 2 CCH injections, and a visit for modeling. The modified IFN protocol used at site 2 consists of a single monthly visit for up to 6 months including pharmacologic erection, goniometric measurement, pharmacologic detumescence, dorsal nerve block, IFN ILT (0.25 ml, 1.5 million IU/injection) and instructions on home penile modeling in the flaccid state.

Results: At site 1, 26 patients completed the CCH protocol. Mean curvature was 38° (range 28-49°). Average number of cycles was 3 (range 1-4) and mean curvature decrease was 19.5° (range 7-30°) and mean improvement of curvature was 52%. At site 2, 51 patients completed the modified IFN protocol. Mean curvature was XXX (range). Average number of cycles was 3 (range 1-6) and mean curvature decrease was XX15.5° (range 0-45) with mean percent improvement of XXX. The per patient medication cost at site 1 was on average \$18,000, while the average cost per patient at site 2 was \$75.

Conclusion: The two protocols appear to provide similar efficacy, and markedly discrepant costs.

USE OF THE INTESTINE IN UROLOGIC SURGERY

Thomas R. Hatch MD: Portland, Oregon (Presentation by Dr. Thomas Hatch)

Introduction: The intestinal tract has been utilized in urologic surgery for over 75 years. The indications for these procedures have evolved as we have gained experience in surgical technique and outcomes. The history of this evolution is reviewed along with the principles that have led us in certain directions.

Objective: To provide historical perspective with the use of intestine in urologic surgery and to review the current indications and principles that guide specific indications.

Materials and Methods: Numerous individuals have made contributions to our understanding of the use of intestine in urologic surgery. The following procedures and principles are discussed along historical perspective:

Procedures:

Ureterosigmoidostomy
Ileal Conduit
Ileocystoplasty
Gastrocystoplasty
Bladder substitues
-continent diversion
-orthotopic bladder substitutes
Use of the omentum

Principles:

Detubularization
Metabolic consequence of urinary diversion
Malignancy associated with use of the intestine in urologic surgery
Undiversion
Patient selection criteria

Conclusions/Goals: To gain an understanding of the current state of the art with the use of intestine in urologic surgery.

SUCCESSFUL TREATMENT OF INTERSTITIAL CYSTITIS/BLADDER PAIN SYNDROME (IC/BPS) IN WOMEN WITH PROVOKED VESTIBULODYNIA (PVD)

Rachel S. Rubin MD*, Leia Mitchell MS*, Ashley G. Winter MD*, Eric D. Biewenga MD, Andrew T. Goldstein MD*, Irwin Goldstein MD*: San Diego, CA (To be presented by Dr. Eric D. Biewenga)

Objective: There is wide clinical overlap between provoked vestibulodynia (PVD) and IC/BPS as both conditions may include dyspareunia, chronic pelvic pain, and lower urinary tract symptoms. Unlike with IC/BPS evaluation, PVD patients are diagnosed by having confined vestibular pain and positive cotton swab (Q-tip) testing. Successful treatment of PVD has been anecdotally observed to resolve IC/BPS patient bladder symptoms. The goal of this study was to advance our knowledge concerning the association of successful treatment for PVD and subsequent bladder symptom improvement.

Materials/Methods: An IRB-approved anonymous multi-question internet-based survey was sent to 233 consecutive women who were diagnosed and treated for PVD by two sexual medicine physicians.

Results: 75 women responded (32%). Of those, 49 (65%) had >40% improvement in their pain at the time of the study. Initial pain symptoms included dyspareunia (96%), feelings of burning, rawness or cutting in the pelvis (76%), pain with tampons (51%), generalized vulvar pain (49%), urinary frequency (37%), urinary urgency (33%), bladder pain (30%), and relief of bladder pain with voiding (12%). Of responders, 16 (33%) were previously diagnosed with IC/BPS. Following various American Urological Association guidelines for treatment, 71% reported <20% improvement in bladder symptoms with various IC/BPS treatments. 50% of patients were diagnosed with hormonally mediated PVD treated with cessation of hormonal contraceptives (if currently using), and topical estradiol/testosterone creams. Other PVD pathophysiologies included neuro-proliferative PVD (63%) treated with vulvar vestibulectomy and pelvic floor hypertonicity (44%) treated in part with physical therapy. Successful treatments for PVD improved bladder symptoms by ≥ 60% in 79% of patients and by ≥ 40% in 93% of patients. 94% of patients felt misdiagnosed with IC/BPS.

Conclusion: Women with IC/BPS may have underlying PVD as pathophysiology and not intrinsic bladder pathology. Treatment of PVD in turn may improve bladder symptoms. Providers should be trained in performing vestibular Q-tip testing, and PVD should be excluded as a diagnosis in patients suspected of having IC/BPS.

RETROSPECTIVE STUDY OF THE PREVALENCE AND RISK FACTORS OF CLITORAL ADHESIONS: WHY WOMEN'S HEALTH PROVIDERS SHOULD ROUTINELY EXAMINE THE GLANS CLITORIS

Eric D. Biewenga MD, Rachel S. Rubin MD*, Leen Aerts MD PhD*, Sue W. Goldstein BA*, and Irwin Goldstein MD*: San Diego, CA (Presentation to be made by Dr. Eric Biewenga)

Objectives: The glans clitoris is covered by a prepuce that normally moves over the glans surface and can be retracted beyond the corona. Clitoral adhesions, ranging from mild to severe, occur when prepucial skin becomes physically adherent to the glans. Physical examination consistent with clitoral adhesions is based on inability to visualize the entire corona. In this closed compartment, the space underneath the adherent prepuce can become irritated, erythematous, or infected and may result in sexual dysfunction. We set out to determine the prevalence of clitoral adhesions in a sexual medicine practice, and assess risk factors associated with clitoral adhesions.

Methods: Retrospective examinations of vulvoscopic photographs taken between August 2007 and December 2015. Absent clitoral adhesions were determined when prepucial retraction enabled full corona visualization. The study group consisted of those women with either mild, moderate or severe clitoral adhesions based on: > 75%, 25% - 75%, and <25% glans clitoris exposure respectively. Two independent reviewers evaluated photographs; a third analyzed study group health record data.

Results: Of the 1261 vulvoscopic photographs, 767 (61%) were determined adequate for assessment and 614 photographs represented individual patients. The study group with clitoral adhesions consisted of 140 (23%) women of which 44%, 34%, and 22% demonstrated mild, moderate and severe clitoral adhesions, respectively. In the study group, 14% presented with clitorodynia. Risk factors included a history of sexual pain, yeast infection, urinary tract infection, blunt perineal/genital trauma, lichen sclerosus, low calculated free testosterone and other sexual dysfunction including persistent genital arousal disorder (PGAD).

Conclusion: Women with sexual dysfunction should routinely undergo clitoral physical examination. Should the glans corona not be fully visualized, clitoral adhesions should be suspected. Education, counseling and/or referral to sexual medicine specialists should be considered.

USE OF AUTOLOGOUS VASTUS LATERALIS FASCIA FOR REPAIR OF RECURRENT CYSTOCELE

Andrew Medendorp M.D., Lauren Wood M.D.*, Victoria Scott M.D.*, My-Linh Nguyen M.D.*, Ja-Hong Kim M.D.*, Shlomo Raz M.D.*: Los Angeles, CA (Presentation to be made by Dr. Andrew Medendorp)

Objectives: The anterior vaginal wall is a common site for symptomatic pelvic organ prolapse. In spite of multiple surgical techniques for cystocele repair there is a high rate of recurrence. We describe a novel surgical technique for repair of recurrent symptomatic cystocele using autologous vastus lateralis fascia and review outcomes of patients undergoing this procedure at our institution.

Materials and Methods: Patients undergoing symptomatic recurrent cystocele repair with autologous vastus lateralis fascia at our institution from April 2015 to November 2016 were identified. All patients underwent harvest of a segment of fascia approximately 6cm x 4cm in size that was then used to support the central and lateral areas of the anterior vaginal wall. The electronic medical record was retrospectively reviewed to identify patient demographics, perioperative characteristics, complications within six weeks, and short term surgical outcomes. Preoperative cystocele grade was determined using the Baden-Walker system. Complications were graded using the Clavien-Dindo system and those with a grade ≥3 were classified as major complications.

Results: Forty patients were identified. Median patient age was 63 years (range 38-83 years). Median preoperative cystocele grade was 3 (range 1-4). The median number of prior pelvic reconstructive procedures was 4 (range 2-7). Twenty seven patients underwent concomitant pelvic reconstructive procedures at the time of fascia cystocele repair. Median operative time was 123 minutes (range 57-185 minutes). Median estimated blood loss was 100ml (range 50-300ml). Median length of stay was 1 day (range 1-6 days). The rate of minor complications within six weeks was 33%, the most common being transient elevated post-void residual requiring temporary use of clean intermittent catheterization. There was one major complication in a patient found to have left ureteral obstruction requiring subsequent reimplantation surgery. Median length of follow up was 270 days (range 5-788 days). 73% of patients reported no subsequent urinary symptoms. Three patients had subsequent symptomatic cystocele recurrence and underwent additional surgery for anterior vaginal wall prolapse.

Conclusions: Autologous vastus lateralis fascia use for repair of recurrent cystocele can be accomplished with reasonable safety and short term efficacy. Longer term follow up is needed to better assess anatomic durability and functional outcomes.

LABIA MINORA ISLAND FLAP FOR REPAIR OF FEMALE URETHRAL STRICTURE

Andrew Medendorp M.D., Victoria Scott M.D.*, Shlomo Raz M.D.*:
Los Angeles, CA

(Presentation to be made by Dr. Andrew Medendorp)

Objectives: Urethral stricture disease is relatively uncommon in females, but presents unique challenges in reconstruction. We present a video of a surgical technique for managing recurrent female urethral stricture refractory to endoscopic management, using a labia minora island flap.

Materials and Methods: The patient is a sixty two year old female with a history of urethral stricture disease of unknown etiology. She underwent five procedures involving dilation or internal urethrotomy over a ten year period prior to referral to our institution. She reported transient improvement in symptoms after these interventions, followed by a gradual return of stranguria, weak stream, and incomplete emptying. Voiding cystourethrogram revealed narrowing of the mid to distal urethra and cystoscopy was consistent with stricture in this location.

Results: The patient elected an attempt at definitive urethral reconstruction with a pediculated labia minora island flap. She tolerated the seventy four minute procedure well and was discharged home with a catheter the day after surgery. She passed a voiding trial in clinic one month later. She returned to clinic four months after surgery reporting complete resolution of urinary symptoms, cystoscopy at that visit showed a normal caliber urethra and post-void residual volume was 24ml.

Conclusions: Use of a labia minora island flap can be considered for definitive reconstruction in women with recurrent urethral stricture refractory to minimally invasive treatment.

PATIENT SATISFACTION AND PREFERRED CHOICE OF PROVIDER: ADVANCED PRACTICE PROVIDERS VERSUS UROLOGISTS

Jennifer Lindelow PA-C*, Hope Birdsong BSN, MA*, Cassandra Hepp RN*, James Baumgardner PA-C*, Maggie Dear PA-C*, Arielle McKee PA-C*, Brooks Goodgame PA-C*, Cheryl Castleberry RN*, Donald P. Finnerty MD*, Christopher P. Filson MD, MS* and Muta M. Issa MD, MBA: Atlanta, GA (Presentation to be Made by Dr. Muta M. Issa)

Objectives: To evaluate patients' satisfaction and preference regarding delivery of care by Advanced Practice Providers (APPs).

Methods: A12-question survey was offered to patients following teleurology evaluation. The survey addressed satisfaction level (9 questions) and preference (3 questions) regarding delivery of urology care by APPs. Five physician assistants with urology experience (2–15 years) delivered the urological care. We used a linear scale (1 to 5) to rate satisfaction and Yes/No questions to determine preference. In addition, we inquired about any prior experience with APPs. The surveys were administered in person at follow-up urology visits. Patients with significant reading, comprehension, mental or memory challenges were excluded.

Results: A total of 114 consecutive subjects participated in teleurology evaluation. One hundred fulfilled the inclusion criteria and 14 did not (excluded). Median age was 64 years (30–87). Overall, patients conveyed high satisfaction levels with the urological care delivered by APPs. The mean overall satisfaction score was 4.90 out of 5.00. The range of the mean scores was 4.73 to 4.93 for the various components of satisfaction that included medical knowledge, communication skills, listening ability, explanation/answering questions, respect/privacy, courteous/polite and professionalism. Eleven percent (11/100) of subjects preferred APPs, 10% (10/100) reported that they would have preferred urologists (MD) and 79% (79/100) reported no preference for either provider. Patients' prior experience with APPs was similar among the three groups; 63.6% (7/11) for the "prefer APP,"70.0% (7/10) for the "prefer urologist," and 63.3% (50/79) for the "no preference" (p=0.91). Despite the 10% of subjects who would have preferred a urologist to an APP, all surveyed patients stated that they would use and recommend the same APP provider in the future.

Conclusions: Patients report high satisfaction with advanced practice providers for the delivery of teleurology care. Patients' preference for APPs was similar to that for urologists. The majority of patients (79%) reported no preference to either provider.



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