

June 2019

Schellhammer Urological Research Foundation Newsletter

Issue 4

Lectureship Established to Honor Residency Coordinator

SURF is happy to support the Lynn Vass Lectureship. Each year, starting in 2018, Dr. Kurt



McCammon invites a lecturer to come speak to the residents, fellows and faculty urologists to speak on a topic of their choice. The speaker in 2018 was none other than our own Dr. Paul Schellhammer! Dr. Schellhammer's lecture was "Evolving Options for the Treatment of Advanc(ed)(ing) Prostate Cancer". This year, the speaker was Dr. Scott Eggener from the University of Chicago Medical School. His talk was entitled "Everything I Was Taught About Prostate Cancer in Training Was Wrong". The lectureship is named after Lynn Vass, who has been the residency coordinator for the Department of Urology for 31 years. Lynn is the glue that keeps the department together! Her duties are many and include processing new resident applications, setting up interviews with physicians and prospective residents and fellows, and onboarding those selected. She arranges travel to meetings and workshops, tracks resident and fellow activities, coordinates alumni reunions, and ensures that graduation festivities are on point for our young doctors. In addition, she maintains and reports on the academic activities of the attending physicians within our department. But mostly, she is the first friend the residents and fellows make upon coming to the urology department. Lynn

has a gallery of photos in her office displaying the families and new babies of current and past residents and fellows. She is appreciated by many!

To donate to the Lynn Vass Lectureship, please send your contribution to:

SURF Attn: LVL 225 Clearfield Ave. Virginia Beach, VA 23462

Man Caves and Evening Hours: A New Approach to Improving Men's Health Joshua Langston, MD

Everyone in a health profession has heard it before: men just don't go to the doctor. That's part of why they have poorer health and don't live as long as women.

Instead of continuing to lecture men about their health, it is time to meet men where they are. If we really want to improve the health of men in this country, we've got to break down the barriers that prevent them from engaging the healthcare system.

It's a fairly simple concept that they've used in barber shops, tire shops and other industries: we've got to take the existing healthcare industry and look at how we can attract men.

Creating a Man-Friendly Experience

Removing some simple obstacles could get men to the doctor's office more often. For instance, an office could provide evening or weekend hours so patients don't have to miss work.

An office redesign could be another simple solution.
Doctor's waiting rooms are typically bland, uncomfortable and full of home décor magazines. A man who wants to talk about erectile dysfunction may immediately feel out of place.

An office with a "man-cave vibe" might be a more welcoming atmosphere where men feel comfortable and even want to visit. A waiting room with leather



furnishings and sports on television is more likely to lead to return visits for a man and maybe even his friends.

Capitalizing on Reasons Men Visit the Doctor

Should a medical practice resort to feeling "cool"? If we can impact patient outcomes, it is worth a try. A man is less likely to go to a primary care doctor to talk about weight gain or hypertension, but if we can create an approachable environment he may see someone when he experiences erectile dysfunction, hypogonadal symptoms, or voiding dysfunction.

These gateway diagnoses are the few things that will get a man in his 40s, 50s or 60s off the couch and to the doctor. We have to make the most of this opportunity to get the guy's attention and intervene in a positive way. Symptoms of "Low T" might uncover a new diagnosis of diabetes or be the wakeup call a man needs to lose weight and start exercising.

Moreover, it could be a matter of life or death given that erectile dysfunction has been established as an independent marker of cardiovascular disease and associated with increased risk of stroke and all-cause mortality.

The Future is Now

We are launching Men's Health Virginia, a new division of Urology of Virginia, because we believe the health disparities among men warrant action. A few simple tweaks to a traditional medical practice, along with gateway diagnoses that lead men to seek help, can result in an engagement with the healthcare system that can improve quality of life and hopefully its length as well.

Joshua Langston, MD is a urologist with Urology of Virginia and the Medical Director of Men's Health Virginia. His clinical specialties in men's health include treatment for erectile dysfunction, voiding dysfunction, hypogonadism, infertility, and Peyronie's disease. https://www.urologyofva.net/mens-health/

Robotic cystectomy for bladder cancer

Raman Unnikrishnan, MD and Douglas Kelly, MD

Urology of Virginia is now offering the newest technique in bladder removal (cystectomy) for bladder cancer. For the last 18 months, we have been offering patients robotic assisted radical cystectomy. This is a minimally invasive technique that involves using the da Vinci Surgical System to laparoscopically remove the bladder and its surrounding lymph nodes. A recent randomized trial showed that this technique has similar cancer outcomes to an open procedure, with less blood loss and shorter hospital stay. Nationwide, approximately 60% of bladder removal surgeries are now done using robotic assistance and we are pleased that Urology of Virginia has the ability to offer this cutting edge technique.

The da Vinci Surgery System was initially approved by the FDA for general laparoscopic surgery in 2000. Initially, most urologists adopted the da Vinci system for robotic assisted prostatectomy or surgical removal of the prostate in the setting of localized prostate cancer. The da Vinci robot is now used for over 80% of prostatectomy cases in the United States, and over 95% of cases at Urology of Virginia where it has been employed since 2004. Multiple peer reviewed articles have shown better short term outcomes with robotic prostatectomy including significantly less blood loss and shorter hospital stays.

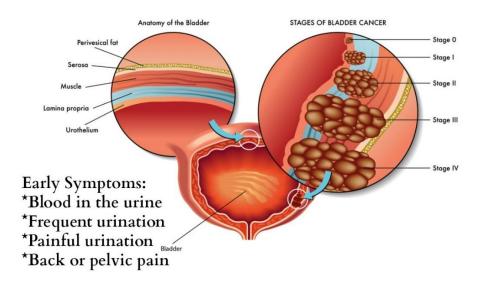


In the mid-2000s, more centers started to gain experience with robotic assisted radical cystectomies. The advantages for robotic assisted cystectomy are less clear as in most cases an incision is still needed to remove the bladder and create the urinary diversion. However, studies have shown that robotic assisted cystectomy results in less surgical blood loss and lower blood transfusion rates with similar cancer control rates when compared to traditional open cystectomy. The most common reason for needing a cystectomy is when bladder cancer invades the muscle wall of the bladder. About 80,000 new cases of bladder cancer are diagnosed each year and a third of these patients would potentially require cystectomy. Cystectomy is considered a major surgical procedure which requires expertise and meticulous attention to postoperative care to avoid complications.

When the bladder is removed, the urine must drain and be collected in a new fashion. There are three main ways to divert the urine after bladder removal. The most common is the **ileal conduit**. In an ileal conduit, a short segment of bowel is isolated with one end attached to the ureters (tubes that transport urine from the kidneys to the bladder) and the other end brought through a small opening, or stoma, in the abdominal wall. The patient then has a bag that collects the urine as it drains out of the stoma. The second option is a **neobladder**, where a segment of small bowel is used to create a reservoir for urine.

The ureters are attached to the reservoir which is ultimately attached to the urethra. Patients then use the neobladder to store urine and urinate either with the help of a catheter or by bearing down to push the urine out with abdominal pressure. The third technique is to create a **pouch** using part of the colon to store the urine. This pouch has a channel brought out to the skin that must be catheterized to empty the reservoir. All three options are possible with robotic surgery and the decision is typically patient driven.

Whether a patient chooses a robotic or open approach, it is important to find an experienced surgeon with a good support structure. These include a hospital with a seasoned surgical team, a well-trained nursing staff. consulting subspecialists, and state of the art facilities. At Urology of Virginia, every effort is made to provide patient counseling with regard to decision-making regarding urinary diversion choice,



along with preoperative preparation and postoperative inpatient and outpatient care and follow-up.

Small Kidney Tumor Management

John Malcolm, MD

Kidney tumors are increasingly common. About 75,000 new kidney cancer cases will be identified in the United States in 2019. In the past, kidney tumors were usually detected only after they had grown to a large size, causing symptoms such as pain or bloody urine. Currently, kidney tumors are most often detected when they are very small, after a person has gotten a CT scan, MRI, or ultrasound of the abdominal area for unrelated reasons. Earlier detection of renal tumors is beneficial because small kidney tumors can be treated without removing the entire kidney, and small kidney cancers are cured more often than large kidney cancers.

Different types of imaging studies can be used to evaluate kidney tumors. Ultrasound, CT scan, and MRI each offer particular benefits in the evaluation of a kidney tumor. In some cases, a single imaging study can properly evaluate a kidney tumor. In other cases, 2 or even 3 different imaging studies will be needed to fully evaluate a kidney tumor.

A kidney tumor may be either cystic (meaning fluid filled), solid, or a combination of cystic and solid. Kidney cysts are usually noncancerous. Solid kidney tumors are most often cancerous (60-80%). The larger a solid tumor is, the more likely it is to be cancerous.

Large kidney tumors are usually treated with removal of the entire kidney (total nephrectomy). However, when a patient is diagnosed with a small kidney tumor (less than 4 cm, or about 1.5 inches) there are numerous management options, including observation, biopsy, partial nephrectomy, ablation, and total nephrectomy.

Observation. Small tumors grow slowly and are unlikely to spread. Therefore, some patients with very small kidney tumors may require only monitoring with periodic imaging studies. For patients with other serious health problems, monitoring a small kidney tumor can be safer than treating it.

Biopsy. In some cases, a needle biopsy of a kidney tumor can help a patient decide between management options. If a biopsy indicates that a tumor is noncancerous, an unnecessary surgery can be avoided. However, biopsy results are not always accurate, and if a biopsy causes bleeding or scarring around the tumor, subsequent surgical treatment can be made more difficult. The exact role of kidney tumor biopsy is currently a topic of debate.

Partial nephrectomy. In most cases, a small kidney tumor will be treated with partial nephrectomy. Partial nephrectomy means removing the part of the kidney with the tumor in it, while preserving the healthy part of the kidney. Partial nephrectomy can most often be performed robotically, using a few small incisions on the abdomen or flank. The operation is performed under general anesthesia.

HOW ROBOTIC ASSISTED NEPHRECTOMY IS PERFORMED







The surgery usually takes 3 to 4 hours and requires 1 or 2 nights in the hospital for recovery. During the operation, the kidney is identified, the tumor is cut out of the kidney, the kidney is then repaired, and finally the tumor is sent to a pathologist to determine the tumor type and to confirm that the tumor was completely removed. If the tumor is completely removed, recurrence is very unlikely, and no additional treatment is needed. After partial nephrectomy, patients commonly experience abdominal pain and soreness for about 2 weeks. Patients can return to light activity (walking, showering, and stairs) in 1 day, but may need 3 to 4 weeks before returning to unrestricted activity. Occasionally, if a small kidney tumor is in a more difficult location, a partial nephrectomy will need to be done through a larger incision in the traditional surgical manner. In this case, there may be more post-operative pain, and recovery may be a little slower. Patients should be aware of 2 unique complications that are rarely (less than 5% of cases) encountered with partial nephrectomy. The first is a short-term urine leak from the kidney at the site of repair. When this occurs, a drainage tube can be placed next to the kidney to allow the urine to drain from the body until the kidney heals. A second complication is called a pseudoaneurysm. Pseudoaneurysm occurs when a blood vessel in the kidney doesn't heal properly. It can result in very red bloody urine. A pseudoaneurysm can be treated with an X-ray procedure that seals the damaged blood vessel.

Ablation. Ablation procedures can be performed to treat small kidney tumors without removing them. Ablation procedures can be performed by either freezing the tumor (cryoablation) or heating the tumor (radiofrequency ablation or microwave ablation). Using a CT scan to guide the procedure, a needle is passed into the tumor and the ablation energy is delivered through the needle to kill the tumor, while limiting damage to the rest of the kidney. Not all tumors can be successfully treated with ablation – certain tumor locations are better suited for ablation procedures than others. Also, tumor recurrences

are more common with ablation, although repeat ablation procedures can achieve cancer control that is similar to partial nephrectomy. Recovery from ablation procedures is usually faster than recovery from surgery.

Total nephrectomy. In rare cases, a small kidney tumor will be managed with removal of the entire kidney. This is generally a faster, easier surgery than partial nephrectomy, requiring only a 1-night hospital stay. Compared to partial nephrectomy, total nephrectomy has a lower risk of complications in the short term. However, in the long-term, loss of the entire kidney may sometimes contribute to insufficient kidney function with other related health problems. Patients must weigh short term risks against long term benefits when deciding between partial nephrectomy and total nephrectomy.

Urologists continue to work to improve management of kidney tumors. Increased use of CT scans, MRI, and ultrasound have resulted in more detection of small kidney tumors. The goal of kidney tumor management is to achieve the right balance between observation and timely, successful treatment, so that death from kidney cancer is prevented and kidney function is preserved.

A developing strategy to control cancer

Paul Schellhammer, MD

The immunotherapy story in the treatment of cancer has exploded over the past decade. A host of new therapies have been FDA approved in the past year and many more are in the pipeline of clinical trials. Immunotherapy and chemo therapy are systemic therapies. They are distributed throughout the body where ever the circulatory system will take them. Their reach is far and wide. However cancers may find a stronghold as a localized area of growth in lymph nodes, bone, liver, or lung as identified by imaging (CT scan, PET scan, bone scan etc.) These outposts of cancer metastases may present foxholes of resistance to systemic therapy because systemic therapy fails to penetrate the core of the mass or the cells have mutated in their new location to a more resistant state. These tumor deposits may not only expand in size but they may be the source of cells that go forth to set up other metastatic outposts.



Enter SABR- Stereotactic **AB**lative Radiation. SABR delivers very high radiation doses over a short period of 1 to 3 days. Precise definition of the radiation field is made possible by MRI imaging and cameras which continuously monitor the field of interest. This precision delivery is essential as the high dose of radiation is ablative (totally destructive) and must not "spill over" to adjacent tissue.

As an example, radiation of a lymph node must avoid the close by blood vessels and intestine, radiation of a vertebral bone metastasis must avoid the spinal cord within the vertebral column, radiation of a central lung mass must avoid the heart. Early experience with stereotactic ablative radiation has been encouraging. Periods of cancer control have been prolonged. Trials are underway to answer the question of the best sequence of SABR with systemic therapies and the number of metastatic deposits that can be attacked. The term oligo metastatic disease is used frequently in conjunction with stereotactic radiation. Oligo comes from the Greek word "few" and is defined as between one and five metastatic deposits. It is this group of patients with oligo metastatic disease that SABR is currently directed.

The four modalities of cancer treatment are surgery, radiation therapy, chemotherapy and immunotherapy. The greatest success for cure of cancer in the future will come from regimens that combine these therapies simultaneously and or sequentially based on ever more precise characterization of the molecular profile of the cancer in question.

Medical Mission to Kenya

William H. Rawls, MD Board Member of Tree of Lives

For the last 12 years I have been involved in a Medical Mission in Limuru Kenya. My church, First Presbyterian of Norfolk has helped sponsor a multidisciplinary 4000 patient HIV Clinic at Nazareth



Hospital in Limuru (about an hour and half from Nairobi the capital city of Kenya). First Presbyterian Church of Norfolk has created a separate corporate entity, Tree of Lives, which assists in overseeing the operations of a children's, family style orphanage, the Holy Family HIV Clinic and indigent care at Nazareth Hospital. The 200 bed hospital had full services except for urology and this significantly impacted elderly men. Many of the senior men in the community with urinary retention were left with

indwelling Foley catheters changed at the hospital monthly. These men did not want to travel to Nairobi for their urologic care and those that did were met with bills they were unable to pay.

With the help of the hospital's medical directors and Dr. James Nyabanda, a true General surgeon specializing in abdominal surgery, orthopedics, neurosurgery and now urology, we have created a full service urologic care center in rural Africa. While Dr. James is not a board certified urologist he has trained with myself and other urologist from the USA and Germany for the last 12 years. He has credentials as a well-trained, respected, capable surgeon who can now care for patients with kidney, prostate and bladder problems. With donations from our local vendors and reasonable pricing from our international vendors, we now have a urologic operating room with the various cystoscopes, resectoscopes and complete video system for continued urologic procedures and teaching.



Eastern Virginia Medical School has been involved since 2013 when Dr. Kurt McCammon traveled to Nazareth to teach and perform complex reconstructive procedures for correction of urethral strictures and congenital urologic problems. Kurt has brought fellows in reconstructive urology to add to the information exchange and teaching experience. In years past Dr. John Liu another partner at Urology of Virginia attended and performed several surgical procedures at Nazareth. This past January a skillful and thoughtful chief resident of urology at Boston University, Dr. Didi Theva travelled with me to Nazareth. She is well trained and very adaptable to a more primitive medical environment.

There is a Global health initiative starting at Eastern Virginia Medical School. In March of 2019, medical students from EVMS went to Nazareth Hospital and preliminary evaluations of the program are positive. GYN residents will also be making the trip as there is a robust OB/GYN department at the facility.

It has been a pleasure to be involved in an aspect of this Global exchange of medical information, technologies and friendships. I have been impressed with the adaptabilities of my US partners and residents to rural African medicine and the knowledge and willingness to adapt from my African colleagues. I truly feel blessed to be in partnership with such a worthy cause. Asante Sana (Thanks a lot).

EVMS GME Graduates

SURF wishes to congratulate the recent graduates of the EVMS Graduate Medical Education program! With the support of SURF, these graduates were able to advance their knowledge and skills by attending meetings and workshops around the globe. Graduation festivities took place at the Town Point Club, Norfolk, VA on Friday, June 14, 2018. This year's speaker and visiting professor was Dr. Shaun Wason, Assistant Professor at Boston University School of Medicine. Dr. Wason is a former physician at Urology of Virginia, and completed his Endourology, Laparoscopic and Robotic Surgery Fellowship with Urology of Virginia/EVMS.



Katherine (Kate) Smentkowski, MD graduates from the residency program at EVMS. She will continue her education in Philadelphia, PA, where she has accepted an Endourology Fellowship at Thomas Jefferson University.



Michael Chua, MD graduates from the Adult and Pediatric Genitourinary Reconstructive Surgery Fellowship at EVMS. He will further his education and has been accepted to the Johns Hopkins Bloomberg School of Public Health's Masters of Applied Science in Global Health Planning and Management Program. Michael will return to his home in the Philippines and continue to work as an urologist in private practice.

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Kamal Nagpal, MD, PhD graduates from the Endourology, Laparoscopic and Robotic Surgery Fellowship at EVMS. He will return to his home in Phoenix, AZ and continue to work as an urologist in private practice.

General Donations to SURF can be made by check sent to

SURF ATTN: Laurie Jackson 225 Clearfield Ave. Virginia Beach, VA 23462