Ensuring Women With Incontinence No Longer Have to Suffer in Silence

Urinary incontinence — the accidental leakage of urine — is extremely common, particularly among older women. It’s also highly treatable. And yet, says UCLA Urology’s A. Lenore Ackerman, MD, PhD, assistant professor and director of research for the Division of Female Pelvic Medicine and Reconstructive Surgery, many people are either embarrassed to bring up the topic with their physician or assume it’s an inevitable consequence of aging that they must live with. Too often, physicians are trying to manage so much that they can’t find the time to bring it up with their patients, Dr. Ackerman adds. And when the problem is discussed and patients decide to pursue treatment, in many cases the initial approaches can be ineffective, prolonging the symptoms and causing many to give up without any resolution.

As a result, tens of millions of women across the country suffer in silence. “Too little attention has been paid to how widespread urinary symptoms are and how terribly incontinence can impact quality of life,” Dr. Ackerman says. “It contributes to depression and relationship problems, and is a leading cause of admissions for older adults into nursing homes, as well as a contributing factor to falls. Many will withdraw from certain types of activities, and their friends and

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family don’t understand why. We’re doing a huge disservice to a large proportion of the population by not acknowledging how common this is and improving the way we address it.”

Dr. Ackerman, who sees primarily peri- and postmenopausal women with incontinence,voiding dysfunction, and pelvic floor disorders, is doing her part in addressing this major public health issue not only in her clinical practice, but also through her laboratory and clinical research. Her studies aim to assist patients and non-specialist physicians in diagnosing urinary symptoms with greater specificity so that treatments have a better chance of success.

She points out that there are many treatment approaches, ranging from pelvic floor muscle exercises and lifestyle and behavioral modifications to medications and interventional therapies such as Botox injections and nerve stimulators. And, although problems with urinary leakage are typically categorized as either stress incontinence (leakage when coughing, laughing, sneezing, or exercising) or overactive bladder, which includes urge incontinence (the frequent and/or sudden need to urinate to the point of disruption, and sometimes an inability to reach the bathroom), there are many sub-categories, each of which likely has a different optimal therapy.

"Someone with stress incontinence needs to be treated differently from someone with overactive bladder,” Dr. Ackerman says. “But even among individuals with overactive bladder, there is a growing recognition that it represents multiple diseases. People with diabetes, multiple sclerosis or a prior stroke may all develop bladder symptoms that look like urgency, but the causes are different. Someone who runs to the bathroom and always leaks isn’t necessarily the same as the person who feels that urge only with one trigger and only a person who doesn’t actually leak, but feels the need to go to the bathroom much more frequently than they used to.

“Right now we tend to treat everyone the same way, and that leads patients to have to experience unnecessary side effects from ineffective treatments — and in many cases, to become frustrated and drop out of care before they get to the treatment that would work.”

Dr. Ackerman’s clinical research involves what’s referred to as phenotyping of lower urinary tract symptoms — characterizing the symptomatic profiles of the many types of urinary incontinence and the optimal therapeutic approach for each, so that both diagnosis and treatment become more accessible to primary care physicians and patients. “Increasingly, we are moving toward precision medicine in the treatment of overactive bladder, but we haven’t seen that as much in benign urological conditions,” Dr. Ackerman notes. Her goal is to create an automated resource, incorporating machine learning and artificial intelligence, in which patients’ self-reported symptoms are used to inform more specific diagnoses, provide educational information, and point toward the best treatment options. By characterizing different patterns of symptoms, Dr. Ackerman has developed an initial algorithm for classifying patients, and is using machine learning to refine it over time. The next step involves correlating treatment outcomes with these symptom classifications so that in the future, a patient’s symptom profile can be used to determine the best approach.

Dr. Ackerman’s laboratory work takes the phenotyping concept a step further by probing for ways to use the urinary microbiome — the microbial environment in the urinary tract — to classify patients with even greater precision. “Sometimes, for example, patients will report pelvic pain, and it’s difficult to pinpoint exactly what is going on,” Dr. Ackerman explains. “We have begun using microbiome testing to further categorize patients, and now have preliminary data to suggest that it might help us do a better job of choosing treatments. Ultimately, we hope to use these microbial phenotypes as an additional prognostic factor, in the same way that cancer tests are now being used to predict responses to different types of chemotherapy.”

As a medical student at Yale University, Dr. Ackerman was drawn to urology by the opportunity to make a difference in people’s quality of life. She chose UCLA Urology for her residency, and during her clinical rotation in female pelvic medicine and reconstructive surgery, fell in love with the patient population.

It doesn’t take more than a few minutes spent with Josephine Santa Anna to recognize that for all of her 93 years, she isn’t lacking in energy. But as she got older, she began to experience overactive bladder, an all-too-common condition that made her reluctant to leave her home. Santa Anna constantly felt the need to urinate, and often there wasn’t enough time to reach the bathroom. Before planning an outing, she had to map out where she could find the nearest facility. And since she was frequently wet regardless, there were many times when she simply chose to stay in. “I was embarrassed,” Santa Anna explains. “One time one of my neighbors saw me and said ‘Josephine, did you sit down on water? Your pants are all wet.’”

After years of suffering, Santa Anna learned from her daughter, a nurse who had gone to school at UCLA, about Dr. Shlomo Raz, a world leader in the treatment of voiding dysfunction who at the time headed UCLA Urology’s Division of Female Pelvic Medicine and Reconstructive Surgery. Dr. Raz, along with his then-clinical fellow A. Lenore Ackerman, MD, PhD, addressed the problem through sacral neuromodulation. The procedure involves surgically implanting a “bladder pacemaker” device that stimulates the sacral nerve with mild electrical pulses to inhibit the abnormal signals that can set off the cycle of urinary urgency.

The device had a dramatic impact, but it also came with a shelf-life — at the time, approximately 5-7 years. So when Santa Anna recently began to experience a recurrence of her symptoms, she went back to UCLA. By then Dr. Raz had retired, but Santa Anna was pleased to learn that Dr. Ackerman was now a member of the UCLA Urology faculty and could replace the older device with one that was smaller, more comfortable and more durable.

“My Santa Anna remembered me from when I was a clinical fellow, and I was honored that she trusted me with her care when she needed to return,” Dr. Ackerman says. Once again, the results were dramatic. “I don’t think she realized how much the effects of the previous device had worn off until we got it back and working again.”

“Dr. Ackerman is wonderful — she takes her time to patiently explain everything, and she really cares,” Santa Anna says. “I wish more people knew that there is good treatment for this problem. I know a lot of ladies who are going through the same issues.”

For more information, visit www.uclaurology.com. To make an appointment, call (310) 794-7700.
Dr. Lee is currently the primary investigator of a national study, funded by the Patient Centered Outcomes Research Institute, aimed at engaging women on the issues of importance to them when considering surgery for urinary stress incontinence. The project seeks to empower patients to become partners in the research, guiding the questions that are asked. Dr. Lee has also promoted patient-centered care and advocacy in her role as women’s health chair and president-elect of the Washington State Urology Society, and as guest editor of special issues on women’s health for the journal Urology.

She attributes part of her growth as a women’s health urologist to her experiences traveling to Uganda with Medicine for Humanity, which was founded by Dr. Christopher Tarnay, a urogynecologist who is co-director of the UCLA Center for Women’s Pelvic Health with UCLA Urology’s Dr. Victor Nitti. Through the organization, Dr. Lee has helped to build the local capacity of surgeons to treat fistulas and other pelvic floor problems. “We’re there to help train doctors and heal women,” Dr. Lee says, “but in the process we learn so much, and ultimately we are the ones healed by the experience.”

Dr. Lee says it’s her patients who keep her motivated. “To be able to help women live the lives they want after they were held back by their leakage, prolapse, or pain is incredibly rewarding,” she says. “I’m grateful for my UCLA training, which was the launchpad to everything.”

...elevates everything we do.

UCLA Urology excels at both [patient care and bench science], and the synergy ...
Kudos

A. Lenore Ackerman, MD, PhD, UCLA Urology assistant professor and director of research for the Division of Female Pelvic Medicine and Reconstructive Surgery, received the prestigious AUA 2021 Rising Stars in Urology Research Award for her project titled “The Urinary Microbiota and Host Inflammation in Lower Urinary Tract Symptoms.”

Andrew Goldstein, PhD, UCLA Urology assistant professor and UCLA assistant professor of molecular, cell and developmental biology, received a $156,000 Concept Grant from the Department of Defense in support of his research, “Working Models of Papillary Kidney Cancer by Transformation of the Proximal Nephrion.” Dr. Brian Shuch, UCLA Urology associate professor and the Henry Alvin and Carrie L. Meinhardt Chair for Kidney Cancer Research, will serve as a co-investigator for this study:

Ja-Hong Kim, MD, UCLA Urology associate professor, was senior author of a manuscript, “Fear and frustration among women with recurrent urinary tract infections: Findings from patient focus groups,” published in the September issue of the Journal of Urology with co-authors Victoria C. S. Scott, Lauren W. Thum, Taylor Sadun, Melissa Markowitz, Sally J. Maliski, A. Lenore Ackerman, and Jennifer T. Anger. This publication was also featured in UCLA Health. Dr. Kim was chosen to serve as a plenary panelist discussing management of cystocele during abdominal sacrocolpopexy at the American Urological Association’s (AUA) annual conference.

Steven Lerman, MD, the Judith and Robert Winston Chair in Pediatric Urology, director of the Clark Morrison Children’s Urological Center at UCLA and chief of UCLA Urology’s Division of Pediatric Urology, was selected to serve as one of the UCLA David Geffen School of Medicine (DGSOM) Educators for Excellence for 2021-22, in recognition of his educational accomplishments and commitment to teaching. Dr. Lerman will join a cadre of outstanding educators who will serve as the core teaching faculty for the Foundations of Practice course.

Leonard S. Marks, MD, UCLA Urology professor, and his research team composed of Wayne Brisbane, Merdie Delfin, Ely Felker, Samantha Gonzalez, Michael Gorin, Adam Kinnard, Lorna Kwan, David Marshall, Shyam Natarajan, Jon Prescott, Alan Priester, Anthony Sisk, Laura Kim, Ren-Dih Shu, Richard Stock, Richard Stock, Nelson Stone, Jonathan Stone, Elizabeth Tran, and Michael Wilson, had seven abstracts accepted to the AUA annual conference, held in September.

Desiree Sanchez, MD, and James Weinberger, MD, UCLA Urology residents, earned the 2021 Excellence in Teaching with Humanism – Residents and Fellows Award from the Medical Student Council of DGSOM. They were recognized at the Hippocratic Oath Ceremony in June.

These students mentored by Kymora Scotland, MD, PhD, had their abstracts accepted and will be giving presentations at major conferences: Rebecca A. Takele (poster presentation at AUA conference), Brian Shuch (poster presentation at the Société Internationale d’Urologie, Dubai); Georgina Dominique (AUA annual meeting), Karan Thaker (AUA Wester Section, Indiana Wells, CA, and Congress of the Société Internationale d’Urologie, Dubai); Jacob Komberg (Congress of the Société Internationale d’Urologie, Dubai); and Sapna Thaker (AUA Society for Infection and Inflammation in Urology).

Joseph D. Shirk, MD, UCLA Urology assistant professor, has been appointed associate chief of urology at the Greater Los Angeles VA Medical Center.

Brian Shuch, MD, UCLA Urology associate professor, director of the Institute of Urologic Oncology Kidney Cancer Program, and Henry Alvin and Carrie L. Meinhardt Chair for Kidney Cancer Research, was elected surgical oncology co-chair of the National Cancer Institute Genitourinary Cancers Steering Committee’s Renal Cancer Task Force.

Rena Sturm, MD, UCLA Urology assistant professor, received a 2021-22 UCLA CTIS Institutional KL2 Translational Science Award for her grant, “Biocompatible Electrospun Urethral Scaffold Design: Bioengineering, Structural and In Vitro Evaluation.”

James M. Weinberger, MD, UCLA Urology resident, and co-authors Robert H. Shahinyan, Shangyang Christopher Yang, Jesse N. Mills, and Sriram V. Eleswarapu, had their abstract “Trends in Marketing, Pricing and Deployment of Shockwave Therapy for Erectile Dysfunction in U.S. Metropolitan Cities” chosen to be a part of the AUA21 press program in Las Vegas. It was one of only three abstracts selected to be on a panel with a moderator to discuss the study and take questions from reporters. The abstract will be presented at the AUA annual conference in September. Dr. Weinberger is mentored by Drs. Sriram Eleswarapu and Jesse N. Mills.

Dr. Thomas Gaither will spend his research year employing qualitative research methods to develop a measure of anorectal sexual function. Under the mentorship of Dr. Mark S. Litwin, UCLA Urology professor and chair, he will develop and validate a new psychometric instrument to measure anorectal sexual function. “We anticipate this instrument will be adopted to assess the natural history of anorectal sexual function and its response to various pathways and treatments,” Dr. Gaither says. He also recently joined the UCLA Gender Health Program’s research team, where he analyzed the intake forms of more than 800 transgender and nonbinary individuals, assessing both their medical and surgical needs. The results of this research will be published in the Journal of General Internal Medicine. Dr. Gaither and his colleagues plan to continue efforts toward defining success after gender-affirming surgery.

For his research year, Dr. Peter Muraki will work with Dr. Brian Shuch, UCLA Urology associate professor, director of the Institute of Urologic Oncology Kidney Cancer Program and Henry Alvin and Carrie L. Meinhardt Chair for Kidney Cancer Research, to determine the best management for small renal masses. “Small renal masses are being increasingly identified incidentally on imaging studies, and it is unclear exactly which masses require treatment,” Dr. Muraki explains. “If the determinants of tumor growth can be elucidated, many patients could be spared from unnecessary surgeries or interventions. We have the opportunity to not only avoid the morbidity of unnecessary complications, but also decrease associated health care costs. In the future I aim to apply these findings to all patients I care for.”

Dr. John (JT) Sigalos is devoting his fourth year to leading the research endeavors of the Men’s Clinic at UCLA, under the mentorship and guidance of Drs. Jesse Mills and Sriram Eleswarapu, where he will focus on new investigational methods to identify causes and possible therapeutic interventions for male factor infertility. “Many men experience infertility or sub-fertility with normal semen analysis, or have poor-quality semen for unknown reasons,” Dr. Sigalos notes. Using next-generation sequencing technologies, his group will evaluate the semen in healthy, presumably fertile men seeking vasectomy and compare these results to men seeking infertility evaluation with both normal and abnormal semen analysis results. “We hope this initial work will better elucidate factors contributing to male factor infertility beyond what is seen with standard semen analysis,” Dr. Sigalos says. “I hope this work will be an initial step in sparking a career dedicated to helping men achieve their goals of starting a family.”

Dr. James Weinberger will spend his research year working with Dr. Victor Nitti, the Shlomo Raz Professor of Urology and director of UCLA’s Division of Female Pelvic Medicine and Reconstructive Surgery. With support from an HH Lee research grant award, Dr. Weinberger will lead a clinical trial investigating telemedicine as a platform to deliver guideline-recommended care for patients with overactive bladder. “This is a paradigm shift in the management of a highly prevalent and costly disorder.”

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At the halfway point in their training, UCLA Urology residents step away from the clinics and operating rooms to spend a year conducting research. Following are the paths chosen by UCLA Urology’s 2021-22 fourth-year residents:

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“It was so rewarding to work with these women, whose symptoms have historically not received as much attention as they should, and to see the impact we could have,” Dr. Ackerman says. She stayed at UCLA for her clinical fellowship training under Dr. Shlomo Raz, a world leader in the field who has since retired. “Dr. Raz was so dedicated to finding ways to make things better for his patients, and he made them feel at every visit that that was his job,” Dr. Ackerman says. “When I was introduced to these women and this tremendous opportunity to improve their lives through both patient care and research, I knew this was what I wanted to do with my career.”

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The Men’s Clinic at UCLA

COVID-19 infection can affect the penis and cause erectile dysfunction (ED). At the Men’s Clinic at UCLA, specialists perform comprehensive evaluations of COVID-related ED and provide rehabilitative therapy.

The Men’s Clinic at UCLA is a comprehensive, multidisciplinary health and wellness center located in Santa Monica, now with locations in Burbank and Santa Clarita. For more information or to make an appointment, call (310) 794-7700.

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