UCLA provides a full range of treatment options for stress incontinence, from individualized regimens in a physical therapy program that focuses exclusively on pelvic floor issues to the most advanced interventional procedures. UCLA is also at the forefront of developing safe, effective and durable new therapies for stress incontinence.

Stress incontinence — in which patients leak urine with increases in internal abdominal pressure such as when sneezing, laughing or exercising — can severely impact quality of life. Among younger women, stress incontinence is often due to anatomic changes related to childbirth. With age, atrophy affects the skeletal and smooth muscle of the urethra, impairing its ability to remain closed. Childbearing and hormonal changes contribute to urinary incontinence affecting far more women than men.

Treatment often begins with a series of lifestyle modifications to alleviate stress incontinence symptoms. These include limiting fluid intake, avoiding caffeine, performing pelvic exercises and practicing prompted voiding.

Choice in urethral sling procedures

Mesh urethral slings to treat urinary incontinence were not included in the FDA warning on the use of surgical mesh for pelvic organ prolapse. Mesh slings remain the gold standard for urinary incontinence surgery.

But many patients are confused about the scope of the FDA warning or are uneasy about mesh slings even when told that they were not included in the FDA warning. "It’s easy to understand patients’ attitudes about the use of mesh and, of course, we don’t really know what further research into the use of mesh may reveal years from now,” states Larissa V. Rodriguez, MD, professor of urology and co-director of the Division of Female Urology, Reconstructive Surgery and Urodynamics.

In addition to performing sling procedures using autologous tissue, physicians at UCLA offer patients alternatives to commercial mesh products by performing surgical repair using non-absorbable sutures as well as a polypropylene sling developed at UCLA and not available elsewhere.
Injectable bulking agent treatment

Injecting bulking agents, such as Coaptite, into the urethra can increase resistance to urinary flow. Using a cystoscope that is threaded through the urethra, physicians can inject directly into the urethral wall.

Bulking agents have evolved to be less immunogenic and have less tendency to migrate away from the treatment area, but are still considered to offer only temporary relief from urinary incontinence symptoms. While these materials are not thought to cause patients harm when they move outside the urethra, they stop being an effective treatment once they migrate and patients may require repeated treatment.

Surgical repair

When more conservative therapies are not effective and stress incontinence continues to impact the patient’s quality of life, a surgical repair procedure can provide durable relief from stress incontinence symptoms.

UCLA surgeons offer a variety of procedures based on patients’ needs and preferences. These include a polypropylene sling developed at UCLA and placed using minimally invasive surgical techniques. UCLA recently published follow-up data indicating that the polypropylene sling, which is not commercially available, is safe and effective at 11 years.

UCLA surgeons also perform bladder-neck suspension surgery using non-absorbable sutures to avoid the use of other foreign materials and their possible complications.

Some patients with previous, unsuccessful surgeries or complex cases of incontinence benefit from a sling procedure using autologous (patient’s own) fascial tissue from the abdominal wall. Autologous tissue can also be used in a spiral sling procedure that provides circumferential compression of the urethra in patients with severe damage.

Developing new therapies

Research is currently underway at UCLA to develop new, more durable injectable bulking materials that are intended to provide better efficacy than the materials now in use.

In addition, UCLA researchers are conducting pre-clinical research on the use of stem cells to enhance the urethra and bladder in a manner similar to the way injectable bulking agents currently do, but to provide relief on a more permanent basis. The goal is to use tissue engineering to stimulate the rebuilding of the urethra tissue.

Using stem cells derived from adipose tissue, UCLA researchers aim to restore urethra function by rebuilding the smooth muscle tissue rather than simply bulking the existing tissue with other substances. Stem cells would be injected into the urethra along with a delivery material that would biodegrade.