A 37 year old, vaginally multiparous Caucasian woman presented to our department for evaluation of an asymptomatic urethral mass. On physical examination, her external genitalia were normal except for a posterior urethral, firm non-tender 1.5 cm rounded mass that could be palpated at the distal urethra. The tumor protruded slightly out of the urethral meatus, making urethral catheterization difficult. Magnetic resonance imaging with gadolinium contrast revealed a 1.8 cm enhancing rounded mass in the distal urethra, which appeared to be positioned anteriorly [Figure 1]. The mass demonstrated T1 hypo-intense and T2 hyper-intense signal and was suggestive of leiomyoma or polyp, although a malignant etiology could not be ruled out. Excision of the urethral mass was performed through the vagina. The tumor was carefully dissected off the urethral mucosa, and following the identification and ligation of the vascular pedicle the tumor was excised [Figure 2]. A 2 cm hard, firm white mass was sent to pathology and the diagnosis confirmed a urethral leiomyoma.

Urethral leiomyoma is a rare pathology. Leiomyomas associated with the urethra can be classified as either periurethral leiomyoma, which arises from the urethral smooth muscle layer, or para-urethral leiomyoma originating from the anterior vaginal smooth muscle or vesicovaginal septum [1]. Para-urethral leiomyomas are often asymptomatic and do not require excision. In contrast, periurethral leiomyomas often exert a “mass effect on the urethra,” resulting in the following symptoms: acute urinary retention, post-void dribbling, recurrent urinary tract infections, and stress incontinence [2]. A few case reports have demonstrated urethral leiomyoma growth during pregnancy [3].

Our patient presented with an asymptomatic urethral leiomyoma. MRI findings were consistent with our clinical suspicions. Her concerns about leiomyoma growth during future pregnancies influenced her desire for surgical removal in spite of concerns regarding potential surgical complications. Four weeks after excision the patient remains continent and is doing well.

References

Correspondence: Dr. L. Lowenstein, Division of Female Pelvic Medicine and reconstructive Surgery, 2160 South First Avenue, Chicago, IL, 60153, USA. Phone: (1-708) 216-2170 Fax: (1-708) 216-2171 email: llowenstein@lumc.edu