Awarded film presentations from IUGA and ICS

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Abstract

Video presentations from IUGA and ICS concern among others: a transvaginal urethral diverticulum excision in a 42 year-old female patient complain of a host of symptoms from lower urinary and genital tracts, urethrolysis for synthetic peri-urethral bulking agent collection (Dura sphere) in women with a previous history of stress incontinence with no improvement after the sling placement. Other videos were related to cystoscopy with fulguration of the trigone lesions (inflammation, pus pockets, bullous lesions, small encrustations) for the treatment of recurrent urinary tract infections due to trigonitis in women not responding to several courses of antibiotic treatment, transvaginal approach to urethral reconstruction after midurethral sling complication and robotic assisted and uterus sparing sacrocolpopexy.

Key words: video presentation, urethrolysis, cystoscopy, sling complication, robotic sacrocolpopexy

The first video presentation is “Transvaginal urethral diverticulum excision in female patient”. A urethral diverticulum is a focal outpouching of the urethra and is frequently under-diagnosed [1]. The pathogenesis of this condition is poorly understood. It is hypothesized that urethral diverticulum may form from the paraurethral glands after urethral or vaginal surgery, obstetric trauma and when the obstructed duct of a paraurethral gland leads to an abscess, which ruptures into the urethral lumen [1–3]. Women with this disorder frequently complain of a host of symptoms from lower urinary and genital tracts: recurrent urinary tract infection, dysuria, dyspareunia [3–5]. Accurate diagnosis is based on history and clinical evaluation. The diagnosis of female urethral diverticulum is based on ultrasonography (US), multi-detector computed tomography (CT), and magnetic resonance (MR) imaging. The authors have demonstrated history of a 42-year old woman with palpable vaginal mass and voiding difficulty following fourth vaginal birth [5]. The woman had a palpable mass in 4 × 5 cm diameter at the anterior vaginal wall. The urethrography revealed a cystic mass filled with contrast. The mass (37 × 45 mm diameter) arising from posterior urethral wall was observed on transvaginal ultrasound. Than the urethroscopy was performed and the ostium of the diverticulum on posterior urethral wall at level of middle third of the urethra was occurred. During the procedure the periurethral fascia was incised transversely after the dissection and mobilization of the vaginal mucosa. The connection of the diverticulum to the urethra was identified and the mass was completely removed. The hegar dilator (No: 6) was placed to prevent suturing of posterior urethral wall before closure. The urethral defect was repaired with continuous absorbable suture. Para-urethral surrounding tissue was used to create 2 additional closure layers to prevent cavity formation between anterior vagina wall and posterior urethra wall. The periurethral fascia and vaginal mucosa incisions were repaired with absorbable sutures. There was no complication and the patient was discharged at post-op second day. Foley catheter was removed on postoperative day 21. At follow-up 12 months after operation the women had no urogynecologic complains [5].

The next video presentation is “Urethrolysis for synthetic peri-urethral bulking agent collection” from University of Illinois at Chicago [6]. The authors presented the case of a 63-year old women with a history of stress incontinence with no improvement after the sling placement and a subsequent peri-urethral Durasphere injection who presented with sharp, vaginal pain, bladder spasms and incontinence. Durasphere is a sterile, non-pyrogenic bulking agent composed of carbon-coated zirconium oxide beads in a carrier gel. The device is injected submucosally at the bladder neck in females. A periurethral submucosal mass at the bladder neck was revealed on MRI and transvaginal ultrasonography six month after her urethral bulking therapy [6]. During the operation a circumferencial incision was made around the urethral meatus. The urethra was then mobilized laterally and circumferentially from the meatus to the

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bladder neck with sharp and blunt dissection. Then the periurethral DuraspHERE mass was identified near the bladder neck and the leakage of pus was noted. The urethrocytostoscopy was carried out to ruled out the communication of DuraspHERE mass with the urethral lumen. The spherical bulge at the bladder neck was found during the cystoscopy. Repeated cystoscopy, after the mass excision, showed no bulge at the bladder neck. The urethra was then plicated bilaterally on the lateral walls using 4.0 vicryl interrupted sutures and the Interceed mesh Absorbable Adhesion Barrier was used for reducing the incidence of postoperative adhesions and to guide the healing process. The patient was discharged home the following day. An indwelling Foley catheter was removed 10 days after the procedure. Two weeks post-operatively the patient had no complaint of pain as well as incontinence [6]. The subsequent video presentation is "Cystoscopy with fulguration for the treatment of recurrent urinary tract infections due to trigonitis in women" [7]. The authors presented also their long term efficacy of this procedure in women with mean follow-up of 4 years. This video concerns the management of a 67 year old women with a history of recurrent urinary tract infections not responding to several courses of antibiotic treatment [7]. On cystoscopy under light general anesthesia with a 17.5 French female cystoscope the lesions of trigone (inflammation, pus pockets, bullous lesions, small encrustations) were noted. First, the edges of the trigonal surface was cauterized with a fine tip bugbee electrode from the ureteric orifice to the bladder neck area, then across the bladder neck area without involving the urethra to avoid a bladder neck contracture. Subsequently, the interureteric area was cauterized. The study was carried out in nonneurogenic women with urinary tract infections with at least one year follow up [7]. Six month after fulguration the women underwent cystoscopy. The proven resolved trigonitis was reported in 75% of women confirmed by the reduction of the episodes of urinary tract infections documented by either urine cultures or any antibiotic courses [7].

The next video presentation is “Transvaginal approach to urethral reconstruction after midurethral sling complication” [8]. Urethral mesh erosion is a rare complication of tape procedure in the treatment of stress urinary incontinence. The authors presented the case of a 45-year old woman with a 3 years history of persistent urethral pain, voiding dysfunction and stress urinary incontinence following transobturator tape operation for severe stress incontinence [8]. The neuropathic pain had been suspected so she had been previously treated with pain medication including Pregabalin. The tape in the distal urethra with stones was diagnosed on cystoscopy [8]. An inverted U incision was made horizontally in the anterior vaginal wall and the lateral wall of the urethra was mobilized with sharp dissection. The tape was identified and clamped on both lateral side and then the vertical incision of the urethral wall was carried out. The tape was clamped with an Alice Clamp and isolated. The lateral existing tape was clamped, sharply divided and mobilized and cuted. The urethra was reconstructed with a series of 5-0 Vicryl sutures with a distal flap to prevent narrowing of the urethra and the paraurethral tissue as a additional closure layer [8]. Foley catheter was removed 10 days later. In the follow-up visit the women was free of urethral pain with a mild stress urinary incontinence symptoms [8].

The next video presentation is “Sacrocolpopexy is always up to date: robotic assisted and uterus sparing” from the University of Illinois at Chicago [9]. Sacrocolpopexy is the preferred procedure for vaginal apical prolapse (Grade A) [10]. However, there is insufficient, conflicting data on hysterectomy (total or subtotal) or uterus preservation during sacrocolpopexy [10]. The authors presented the most important surgical steps of the robot-assisted uterus sparing sacrocolpopexy [9]. There were: opening of the posterior peritoneal wall over the sacral promontory, extension of posterior peritoneal wall incision along the right uterosacral ligament and preparation of the posterior vaginal wall to the level of the levator ani muscle, opening of the peritoneal wall over the uterine isthmus to the level of the bladder neck, bilateral opening of broad ligaments, anchorage of a Y-shaped mesh to the anterior vagina, passage of the two arms of the Y mesh through the broad ligaments, anchorage of a rectangular mesh to the posterior vaginal wall and to sacral promontory, closing the retroperitoneal space [9]. The issue of uterine preservation or excision during the procedure requires further clarification [10].

References


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