V10-08

ADJUSTABLE RETROPUBIC SLING FOR SURGICAL TREATMENT OF STRESS URINARY INCONTINENCE IN COMPLICATED CASES

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INTRODUCTION AND OBJECTIVES: Midurethral sling is a standard primary surgical procedure for female stress urinary incontinence (SUI). Retropubic (RP) sling shows higher effectiveness than transobturator (TO) in patients with recurrent SUI. At the time, bladder outlet obstruction (BOO) is a common complication of RP sling. The purpose of the study was to evaluate the effectiveness and safety of retropubic adjustable sling in patients with complicated SUI.

METHODS: Our study comprised 43 women suffering from SUI and who had one or more predictors of surgical failure such as previous anti-incontinence surgery or pelvic organ prolapse repair, intrinsic sphincter deficiency, severe SUI and concomitant morbidity. All patients underwent RP adjustable sling insertion. We used monofilament polypropylene sling with special threads, which allow to tune its tension during 2 days after surgery. The pre- and postoperative evaluation included urogynecological history, vaginal examination, cough stress test (CST), urodynamic study, bladder ultrasound and post-void residual urine volume (PVR) measurement, 1-hour Pad-test, questionnaires (UDI-6, UIQ-6, PFIQ-7, ICIQ-SF).

RESULTS: Mean surgery time was 27,5±10,1 min. There were no cases of intraoperative bladder injury or clinically significant bleeding. The next day after surgery 25 patients (51,8%) required tension adjustment. The tension was increased in 14 (32,5%) patients presented with positive CST and decreased in 11 (25,6%) patients, who had obstructive flow pattern, complaints of a slow or intermittent stream and PVR>100 ml. This procedure was repeated in 7 (16,3%) because of positive CST at the following examination. After adjustment, all patients were continent, with PVR≤ 60 ml. There were no cases of BOO or urinary retention after tension adjustment. None of the patients required intermittent or indwelling catheterization.

Mean follow-up was 8.8±4.4 months.The objective cure rate was 95,4% (n=41). There was no significant decrease of Qmax (p>0,05). We had 3 (6,9%) cases of vaginal mesh extrusion in patients who had a history of vaginal mesh surgery. None of them underwent tension adjustment. There were no cases of wound infections, chronic pain or dyspareunia and no cases of BOO during follow-up. The questionnaires scores showed 88,3% (n=38) patients to be very satisfied with great improvement of the quality of life (p<0,001).

CONCLUSIONS: The adjustable retropubic sling is a good option for treating patients with risk factors of failure. It provides high objective and subjective cure rate and low complication number. At the same time, it allows to minimize the risk of postoperative voiding dysfunction

Source of Funding: none

V10-09

A NON-TRADITIONAL ROUTE TO THE VAGINAL HYSTERECTOMY: THE DÖDERLEIN–KRÖNIG HYSTERECTOMY

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INTRODUCTION AND OBJECTIVES: Approximately 590,000 hysterectomies are performed annually in the United States. Indications for hysterectomy include leiomyomas, endometriosis and uterine prolapse. Although vaginal hysterectomy is the preferred hysterectomy method, only 22% of all hysterectomies are performed via the transvaginal route. The Heaney vaginal hysterectomy technique is the traditional surgical method taught and performed. This method does have its limitations, one of which includes decreased visualization of vascular pedicles. In 1906, Doderlein-Kronig described a vaginal hysterectomy technique that removes the uterus through an anterior colpotomy. The purpose of this video is to demonstrate an alternative and safe vaginal hysterectomy technique using the Doderlein-Kronig approach to serve as an educational tool for female pelvic surgeons of all levels.

METHODS: We present the case of a 57 year-old female with symptomatic stage IIIBa uterovaginal prolapse desiring definitive surgical intervention. We performed a total vaginal hysterectomy utilizing the Doderlein-Kronig approach. An anterior colpotomy was made in the pubovesicocervical fascia, the uterus was flipped and the hysterectomy proceeded similarly to an abdominal hysterectomy. In addition, we performed a traditional uterosacral ligament colpopexy.

RESULTS: Our patient did well after the procedure. She was discharged home on postoperative day number one. At her 6-week follow-up, the vaginal apex was suspended well and the vaginal cuff was intact.

CONCLUSIONS: In women undergoing surgical removal of the uterus where a vaginal hysterectomy appears achievable, the Doderlein-Kronig vaginal hysterectomy approach should be considered. This method which is similar to an abdominal approach, is potentially easier and increases visualization of vascular pedicles. This technique may be a way to increase the number of vaginal hysterectomies in the future.

Source of Funding: None

V10-10

A LIVE PORCINE MODEL FOR ROBOTIC SACROCOLPOPEXY TRAINING

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INTRODUCTION AND OBJECTIVES: Over 200,000 surgeries are performed in the United States annually for correction of pelvic organ prolapse (POP). That figure is expected to increase 47.2% by 2050. Sacrocolpopexy is widely considered the gold standard prolapse surgery, and the robotic approach is the most widely used minimally invasive approach. The significant learning curve for the robotic sacrocolpopexy underscores the need to develop a realistic model for teaching this complex procedure. Given the cost and scarcity of human cadavers, the live porcine model represents a realistic, available, and cost-effective alternative. In this study, we created a porcine model for the robotic sacrocolpopexy and sought to determine its effectiveness as a teaching tool.

METHODS: Under the permission of the Institutional Animal Care and Use Committee (IACUC) of the University of Houston (UH), we developed our model for robotic sacrocolpopexy using the domestic pig. All the surgeries were all performed under general anesthesia with monitoring under the advisement of the protocols established by UH. All operations were terminal. From December 2016 to October 2017, 20 surgeons attended the two-day sacrocolpopexy training module. All physicians were currently in practice and had variable levels of experience with this surgery. The first day consisted of didactics and the second was creation and use of the porcine model (13 pigs total used for all participants). A post-module survey was given to 20 participants at the completion of the course and 10 completed it.

RESULTS: Our porcine module consisted of two steps: (1) creating the porcine cervical model which mimics human tissue and (2) performing the simulated robotic sacrocolpopexy using the cervical model. The post-module survey showed that 100% of the participants reported improvements in their economy of motion,