

was used to locate and remove the sentinel lymph nodes. Systematic pelvic and paraortic lymphadenectomy was further carried out. Histological evaluation was assessed by hematoxylin-eosin and immunohistochemistry in case of histological negativity.

Setting: Tertiary level oncological hospital.

Patients: 77 patients were enrolled in this study, 10 were excluded.

Intervention: Histological results of sentinel node and non sentinel node were analyzed to assess the diagnostic accuracy of this method.

Measurements and Main Results: In all but three cases at least one sentinel node was detected using radio-guided surgery. In all the cases more than one site was positive to Tc. In four patient sentinel nodes and non sentinel nodes where histologically positive for cancer, in 6 cases sentinel nodes where histologically positive and non sentinel nodes where negative. In 45 cases no cancer cells were found in removed lymph nodes.

Conclusion: The hysteroscopic injection of Tc99 labeled human albumin colloid particles in the detection of sentinel node(s) in endometrial cancer is a feasible technique. This study confirm the good sensitivity and specificity of this technique.

16 Plenary Session 4—Urogynecology (11:00 AM — 11:10 AM)

Evaluation of a Polypropylene Mesh Coated with Antibiotics in an Infectious Model of Vaginal Surgery in Rabbits

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Study Objective: Development of a polypropylene mesh coated with ofloxacin, evaluation in vitro and in vivo in an infectious model of vaginal surgery in rabbits.

Design: Animal model, study, basic science.

Setting: University hospital Nîmes (France).

Patients: New Zealand White Rabbits (n = 20).

Intervention: Tests of bacterial adhesion and bactericidal activity were performed in vitro using immunofluorescence, the used bacterial strain expressing a fluorescent protein (GFP +) allowed a quantitative and qualitative analysis. The agreement of the regional ethics committee on animal experiments was obtained. The animals were divided into four groups: infected or not and the polypropylene mesh was coated or not with ofloxacin. The mesh was located between the vaginal wall anteriorly and the rectum posteriorly. Bacterial inoculation intraoperatively was conducted with a strain of E.coli. Explantation at 1 month led to the production of bacteriological tests.

Measurements and Main Results: Immunofluorescence of the mesh coated with ofloxacin and infected by Escherichia coli was similar to the control (uninfected mesh). The bacterial tests performed in the in vivo model of vaginal surgery in rabbits did not reveal any evidence of E.coli in the group polypropylene mesh coated with ofloxacin and infected group. A statistical significant association between infection and erosion was obtained (p < 0.001). Our data suggests that erosion is strongly associated with infection and mesh coated with antibiotics could reduce erosion rate.

Conclusion: This work demonstrated the interest of a polypropylene mesh coated with ofloxacin and placed in contact with a vagina. We were able to validate a model of surgical infection recurring vaginal complications observed in clinical pathology. Our animal model of vaginal surgery in rabbits is very promising and could be used as a model to study vaginal erosion.

17 Plenary Session 4—Urogynecology (11:11 AM — 11:21 AM)

I-STOP Suburethral Sling: Outcomes of a Non-Deformable Sling for Intrinsic Sphincter Deficiency

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Study Objective: To determine the post-operative efficacy of a non-deformable retropubic sling for the treatment of intrinsic sphincter deficiency (ISD).

Design: Retrospective case-series of patients who underwent an I-STOP suburethral sling for surgical management of ISD between 2007 and 2009. Inclusion criteria were all stress incontinent patients with a urodynamic diagnosis of ISD, urethral hypermobility, and candidates for surgical therapy.

Setting: Tertiary referral center for urogynecology and pelvic floor disorders.

Patients: Stress incontinent patients with ISD are a challenging population to treat surgically. These patients require adequate suburethral support to enhance urethral sphincteric function yet are at risk for postoperative voiding dysfunction. The I-STOP sling is a monofilament, macroporous polypropylene tape with looped mesh edges that maintains rigidity, allows fibrous ingrowth, and minimizes tape shrinkage and migration. These characteristics may translate into more predictable urethral support with less postoperative voiding difficulties. 191 patients with mean age 66.5, parity 2, BMI 29.8 were identified. 44% had previous hysterectomy and 14% prior anti-incontinence procedure. Concomitant reconstructive procedures were performed in 61%. Mean follow-up was 30 weeks.

Intervention: The I-STOP sling was performed in a standardized manner. A 3 centimeter incision was made at the bladder neck and the endopelvic fascia dissected from the vaginal epithelium. After plication of the fascia, needle introducers were placed through the retropubic space and delivered through ipsilateral suprapubic incisions. The sling was tensioned with a cystoscope in the urethra at a 45 degree angle and the tape sutured to the bladder neck to prevent tape migration.

Postoperative outcomes

Outcome	N (%)
Subjective	
Daily Stress Incontinence	7 (13)
Any Stress Incontinence	14 (7)
Any Urge Incontinence	40 (21)
Any Mixed Incontinence	15 (8)
Objective	
Positive Empty Supine Cough Stress Test	6 (3)
Post Void Residual < 100ml*	162 (85)
Operative Complications	
Urinary Tract Infection	1 (0.5)
Mesh Erosion	0 (0)
Blood Transfusion	0 (0)
Follow-up	
Mean Follow-up (wks)	30 (range 6-50)

*Mean PVR was 49ml

Measurements and Main Results: Postoperatively, 87% of patients reported no daily stress incontinence events, and 97% had a negative empty supine stress test. Subjective improvement was reported by 91%.

Conclusion: The I-STOP sling is an effective treatment modality for ISD patients. The non-deformable tape allows individualized suburethral tensioning for severely incontinent patients without increased post-operative voiding dysfunction.

18 Plenary Session 4—Urogynecology (11:22 AM — 11:32 AM)

Ultrasonographic Scan Evaluation of Synthetic Mesh Used for Vaginal Cystocele Repair Comparing Four Arms Trans Obturator Techniques to Anterior Bilateral Sacro Spinous Ligament and Arcus Tendinous Suspension

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Study Objective: The main objective is the evaluation by Ultrasonographic scan of mesh contraction after vaginal cystocele repair and surgical procedure impact.