

## LAPAROSCOPIC LATERAL MIDDLE COMPARTMENT SUSPENSION FOR THE MANAGEMENT OF ADVANCED GENITAL PROLAPSE. PROSPECTIVE CASE SERIES.

### Hypothesis / aims of study

Current techniques used for the management of middle compartment genital prolapse have an increased risk of prolapse recurrence and re-operation. Abdominal procedures provide less recurrence at the cost of increased peri-operative morbidity. Laparoscopic lateral middle compartment suspension is a minimally invasive technique described by Dubuisson that offers satisfactory results avoiding laparotomy related complications that usually go along with abdominal sacrocolpopexy, which is the gold standard operation. The aim was to study the management of advanced vaginal prolapse with laparoscopic lateral middle compartment suspension with regard to anatomical and functional outcome.

### Study design, materials and methods

Prospective case series with no control group. Ethical committee approval was as appropriately obtained. Inclusion criteria: (1) women with stage III or IV uterine or vault prolapse, (2) women younger than 70-years-old, (3) women having no absolute contra-indications for operative laparoscopy and general anaesthesia (multiple abdominal operations, advanced cardiovascular disease, chronic obstructive pulmonary disease, advanced abdominal cancer). All patients had clinical examination (POP-Q), assessment of quality of life, urinary incontinence symptoms, prolapse symptoms and sexual life with appropriate validated questionnaires (EQ-5D, ICIQ, PFDI and PISQ-12, respectively). All participants had preoperative urodynamic study (uroflowmetry, cystometry, pressure-flow study). Parameters assessed were: (1) operating time, (2) intra- and postoperative complications, (3) postoperative lower urinary tract symptoms (LUTS), and (4) mesh erosions.

### Results

Six patient were enrolled in this study (mean age 60-years-old). Three women had previous hysterectomy. The patients with uterus initially underwent subtotal hysterectomy. All women had laparoscopic lateral cervical/vaginal suspension with type I polypropylene mesh (Pelvitex, Bard ©). All operations were completed with anterior and/or posterior repair and tension-free vaginal transobturator tape. Mean operating time was 150 min. One patient had postoperative unilateral ureteral obstruction and underwent exploratory laparotomy where an incidental ureteric stone was removed. There were no other intra- or post-operative complications. Mean follow-up is 3 months. There was no prolapse recurrence. No significant LUTS were reported and no mesh erosions have been recognized during the follow up.

### Interpretation of results

Sacrocolpopexy, the gold standard technique for the treatment of middle compartment prolapse demands a high level of surgical competence when performed laparoscopically. The study protocol approached advanced prolapse by the means of lateral suspension of the apex with mesh, a quick laparoscopic technique which can be used as an alternative to the gold standard technique. It can be argued that vaginal axis is distorted and shifted ventrally via lateral suspension, creating the preconditions for development of anterior compartment prolapse and/or de novo stress urinary incontinence. Therefore, the protocol of our study included a prophylactic anti-incontinence procedure and a vaginal anterior repair where necessary. Lateral suspension appears to be a quick and safe technique compared to other middle compartment suspensions.

### Concluding message

Laparoscopic lateral middle compartment suspension is a sufficient, relatively quick, minimally invasive technique for the treatment of middle compartment high degree prolapse. Prospective controlled trials comparing this technique with open/laparoscopic sacrocolpopexy are necessary.

### References

1. Cochrane Database Syst Rev (2007) 3; CD004014.
2. Gynécol Obstét Fertil (2002) 30; 114-20.

<b>Specify source of funding or grant</b>	None
<b>Is this a clinical trial?</b>	Yes
<b>Is this study registered in a public clinical trials registry?</b>	No
<b>What were the subjects in the study?</b>	HUMAN
<b>Was this study approved by an ethics committee?</b>	Yes
<b>Specify Name of Ethics Committee</b>	Papageorgiou General Hospital Ethics Committe, Thessaloniki, Greece
<b>Was the Declaration of Helsinki followed?</b>	Yes
<b>Was informed consent obtained from the patients?</b>	Yes