Hypothesis / aims of study

Laparoscopic sacrocolpopexy was firstly described by Nezhat et al (1) in 1994, and since then the reported success rates have exceeded the open approach. Laparoscopic performance of this procedure has several advantages such as better visualization in the deep pelvis and accurate dissection planes (2). However, the procedure requires advanced laparoscopic skills and its introduction as a routine procedure remains elusive to most pelvic floor surgeons. Driven from the idea that surgical consultation to our patients should be combined with honest surgeon self evaluation, we planned to evaluate the introduction of laparoscopic sacrocolpopexy and sacrohysteropexy, its morbidity and mid-term outcome, in a tertiary referral center.

Study design, materials and methods

Between 2009 to 2012 we performed 23 cases of laparoscopic sacrocolpopexy. The procedures were performed by the same surgical team in all cases (AM and GB). Polypropylene mesh was used in all patients (Gynemesh, Gynecare) and the new Y shaped precut mesh Artysin (Gynecare) was used in the last 2 patients. All cases were completed laparoscopically, and according to preoperative assessment - different procedures were added such as – 4 mid urethral slings (17.4%), 4 cervical amputation (17.4%), 4 subtotal hysterectomy (17.4%) and 2 anterior colporrhaphy (8.7%). The patients were followed routinely annually in our urogynecology clinic, and were also recently interviewed for the purpose of this audit. All the medical records, OR charts and outpatient clinic charts were reviewed for data collection.

Results

Follow up was carried out for all patients. The mean age of our patients was 55.9 (range: 28-75). Mean followup was 14.9 months (range: 1-45 months). Sacrohysteropexy was performed in 6 patients (26.1%) for uterine preservation. One patient became pregnant twice following the procedure and delivered by CS without prolapse recurrence. Preoperative and postoperative prolapse is shown in Graph 1. Level one support was achieved in 100% in the short term followup. Three patients (13.05%) needed further surgery for prolapse repair – two for anterior wall prolapse and one for posterior wall. Anti incontinence surgery was performed on one patient (4.3%). No intra operative complications were recorded and none of our patients needed blood transfusion. Three post operative serious adverse events were noted – one case of paralytic ileus that was treated conservatively, one case of ureteric obstruction that was treated with double J stent and one case of recto-vaginal fistula that needed mesh removal. Mean operative time was 205 minutes (range: 82-360 minutes).

Interpretation of results

Laparoscopic sacrocolpopexy and sacrohysteropexy in our center achieved 100% cure for level I support. During follow-up additional surgical procedures were needed to repair level II support (3 patients) and stress urinary incontinence (1 patient). Three cases of post operative serious adverse events were found and treated successfully.

Concluding message

Laparoscopic sacrocolpopexy and sacro-hysteropexy are efficacious procedures for level one defects in our center. Level II defects sometimes warrants further vaginal surgical repair, and therefore we now tend to perform these during the initial laparoscopic procedure.
Graph 1: Pre and post operative prolapse assessment.

References

Disclosures
Funding: None Clinical Trial: No Subjects: HUMAN Ethics not Req’d: This was an audit of a surgical procedure that is performed routinely in our center. Helsinki: Yes Informed Consent: No