

ROBOTIC SINGLE SITE SACROCOLPOPEXY: A NEW MINIMALLY INVASIVE TECHNIQUE

Hypothesis / aims of study

Laparoscopic sacrocolpopexy has become the gold standard intervention for pelvic organ prolapse particularly in young patients. The new da vinci single site instrumentation allows the surgeon to perform laparoscopic procedures via a single incision with the advantages of robotic surgery. The aim of this study is to evaluate the feasibility and learning curve of this procedure.

Study design, materials and methods

We evaluated the first 30 consecutive patients who underwent robotic single site sacrocolpopexy (RSSS) performed by a single surgeon (FG). 17 patients required a single anterior mesh sacrocolpopexy (SAM), and 13 patients required a double mesh sacrocolpopexy (DM)

Data was collected prospectively with the time taken to perform each of the following steps being recorded : single site port insertion, uterus and colon fixation, sacral dissection, posterior dissection, bladder dissection, anterior and posterior mesh fixation and peritonisation . Pre- and Post-operative parameters were measured prospectively.

Results

The mean age was 59 years (range: 39-66yrs). Mean operating time was 221 minutes for SAM (range: 165-337mins), and 248 minutes for DM (range: 190-406mins). Mean Single site port insertion time was 5 minutes (range: 3-30mins), mean colon /uterus fixation time was 14 minutes (range: 7-30mins), mean sacral dissection time was 8 minutes (range: 3-24mins), mean posterior dissection time was 9 minutes (range: 2-31mins) for SAM and 26 minutes (range: 13-39mins) for DM, mean posterior mesh fixation time was 27 minutes (range: 16-44mins), mean bladder dissection time was 13 minutes (range: 3-19mins), mean anterior mesh fixation was 27 minutes (17-50mins), mean peritonisation time was 31 minutes (range: 10 - 55mins).

All patients were followed in the outpatient clinic at 1 and 3 months. At 3 months, all patients had a grade 0 cystocele/ rectocele (POP-Q score: -3/-3). Validated quality of life questionnaires were also completed at this time.

Interpretation of results

RSSS in carefully selected patients can be performed in under 4 hours for the SAM and just over 4 hours for the DM procedure. The short term post operative functional results are comparable to other laparoscopic and multi port robotic sacrocolpopexy series.

Concluding message

RSSS using the da vinci single site system has a steep learning curve, however with good experience in laparoscopic and robotic surgery it is a technically feasible procedure with comparable anatomical results.

Disclosures

Funding: None **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** it was a prospective analysis of data for a surgical procedure. It was considered as part of our data collection for internal audit. **Helsinki:** Yes **Informed Consent:** Yes