684

Ciezki A[1], O'Reilly B[1], O'Sullivan S[1], Hewitt M[1]
1. *Cork University Maternity Hospital, Ireland*

ROBOTIC-ASSISTED ABDOMINAL SACROCOLPOPEXY/SACROHYSTEROPEXY (RASC) – A VIABLE ALTERNATIVE FOR PELVIC ORGAN PROLAPSE REPAIR?

Hypothesis / aims of study

To report our initial experience in performing Robotic Assisted Sacrocolpopexies and Sacrohysteropexies with the use of the daVinci robot. Abdominal sacrocolpopexy has been regarded to date as the gold standard operation for vault prolapse repair(1). However, RASC offers a new minimally invasive approach, which is proving to be a viable alternative.

Study design, materials and methods

20 women with POPQ stage III underwent RASC.

In Sacrocolpopexies (15 cases), a preshaped polypropylene mesh was introduced and sutured to the vaginal apex anteriorly and posteriorly with Gore-Tex nonabsorbable monofilament suture. The cephalic end of the mesh was sutured to the anterior longitudinal ligament of the sacrum. Reperitonisation was then done with Vicryl 2.0 covering the full length of the mesh.

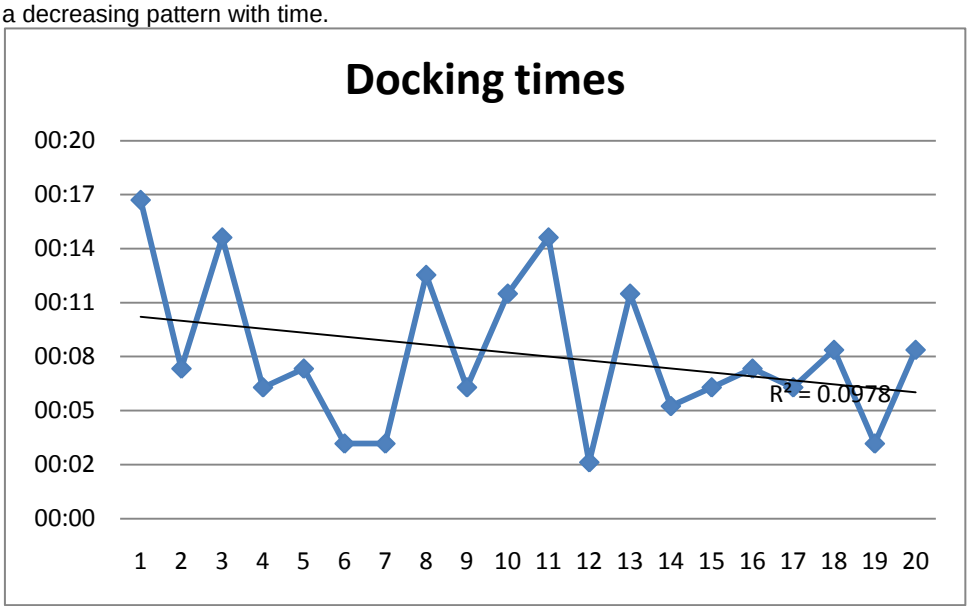
In Sacrohysteropexies (5 cases), the uterosacral ligaments were dissected to clearly identify the ureters and to avoid damaging them. Similarly to sacrocolpopexies, dissection was extended from the rectovaginal space along the right pelvic side wall to the sacral promontory. The uterosacral ligaments were plicated with the use of Gore-tex nonabsorbable monofilament suture, as used in sacrocolpopexies to secure the mesh. At the apex of the ligaments, a stitch was inserted in the body of the cervix. Reperitonisation followed with the cephalic end of the suture secured on the anterior longitudinal ligament of the sacrum.

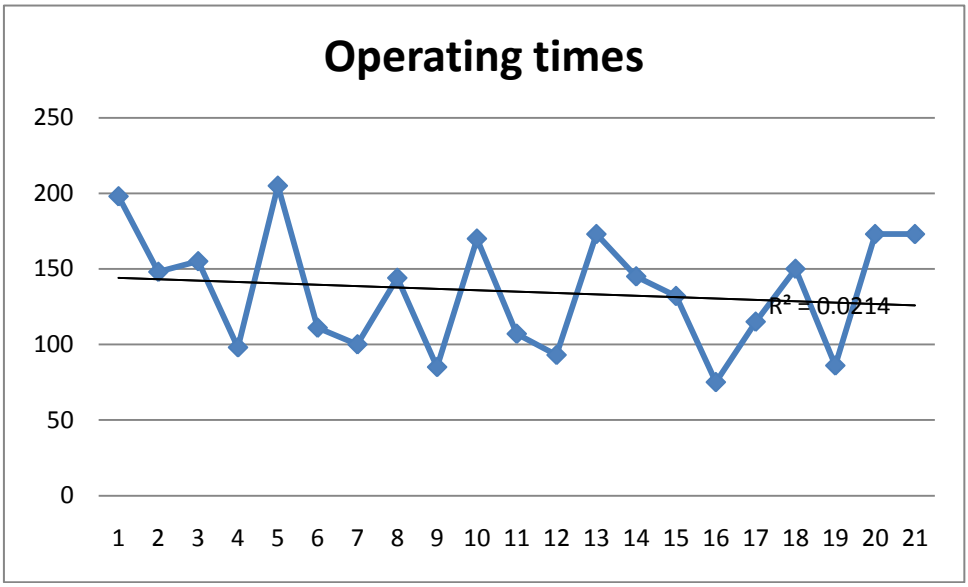
Results

Mean (range) patient age was 58 (40–70). Mean docking time was 8 (3 – 17) minutes. Mean operating time was 131 (85 – 205) minutes excluding 1 conversion to laparotomy following cystotomy. Other complications included pulmonary embolism. The mean hospital stay for uncomplicated cases (also excluding 1 sacrohysteropexy with anterior & posterior repair requiring 3-day stay) was 1.6 (1 – 4) days. All women were POPQ stage 0 postoperatively and at 1 to 6-month follow-up.

Interpretation of results

Early results show that RASC offers short hospital stay and relatively low morbidity. Docking and operating times already reflect a decreasing pattern with time.





Concluding message

Laparascopic surgery is associated with a long learning curve however with its 3D visualisation, enhanced dexterity and greater precision of endowrist instruments, the daVinci robot makes procedures more intuitive, potentially allowing these procedures to be performed be an increasing number of gynaecologists. With functional results similar to conventional techniques(2), this clearly makes RASC a viable alternative for pelvic prolapse repair.

References

1. Maher C, Baessler K, Glazener CMA, Adams EJ, Hagen S. Surgical management of pelvic organ prolapse in women. Cochrane Database of Systematic Reviews, 2007. Issue 3. Art. No.: CD004014.
2. Daneshgari F, Kefer JC, Moore C, Kaouk J. Robotic abdominal sacrocolpopexy/sacrouteropexy repair of advanced female pelvic organ prolaspe (POP): utilizing POP-quantification-based staging and outcomes. BJU Int. Oct 2007;100(4):875-9.

Specify source of funding or grant	**None**
Is this a clinical trial?	**No**
What were the subjects in the study?	**HUMAN**
Was this study approved by an ethics committee?	**No**
This study did not require ethics committee approval because	**None needed**
Was the Declaration of Helsinki followed?	**Yes**
Was informed consent obtained from the patients?	**Yes**