805

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LONG TERM OUTCOME OF LAPAROSCOPIC VENTRAL MESH RECTOPEXY AND SACROCOLPOPEXY

Hypothesis / aims of study

Laparoscopic ventral rectopexy is becoming an increasingly popular option in the management of rectal prolapse. This approach is often combined with sacrocolpopexy as part of a global pelvic floor repair. Long term follow up data is limited.

Aim: To assess the long term functional outcome and quality of life of patients undergoing laparoscopic ventral mesh rectopexy combined with sacrocolpopexy.

Study design, materials and methods

All patients undergoing laparoscopic ventral rectopexy with sacrocolpopexy between January 2000 and December 2010 at one institution were identified. Clinically all patients had a full thickness rectal prolapse, confirmed on defaecation proctography, associated with middle compartment prolapse.
Demographic data were obtained retrospectively from the medical records. Functional data were recorded pre-operatively in the pelvic floor clinic, and long term follow up was attained via postal questionnaire, using the Vaizey Faecal Incontinence Score[(1)], the Wexner Constipation Score[(2)] and the Manchester Health Quality of Life Questionnaire (MHQ).[(3)]
Quantitative data were expressed as median and range. Statistical analysis was performed using the Wilcoxon signed rank test for paired data.

Results

Patient Demographics: 18 female patients were identified.

Demographic		Median	(range)
Age	(yrs)	65	(21-88)
Follow up	(months)	48	(12-106)
Operating time	(mins)	110	(80-180)
Length of stay	(days)	3	(2-15)

Morbidity and Mortality

Complication	Frequency
Mesh erosion	1
Port-site hernia	1
Recurrent rectal prolapse	2
Mortality	1

There was one case of mesh erosion into the posterior vaginal wall. Since then the mesh has been changed to a softer composite mesh. There were 2 post-operative recurrences of full thickness rectal prolapse. Both occurred in young patients (21yrs and 29yrs) who have since been diagnosed with connective tissue disease. The post-operative death occurred on the 15th post-operative day in an elderly patient with multiple medical co-morbidities. She developed small bowel obstruction secondary to a port site hernia, which required surgical exploration. As a result of the insult she developed severe chest sepsis and multi-organ failure.

Functional Outcome

	Pre - op	Post-op (at long term follow-up)	p value
Incontinence Score (Vaizey)	10 (3-16)	3 (0-15)	0.031*
Constipation Score (Wexner)	14.5 (3-21)	9 (3-15)	0.25
Quality of life (MHQ)	432 (165-628)	227 (0-497)	0.016*

*Values are medians with range in brackets. *=significant at 0.05 level*.

Faecal Incontinence

12 of the 18 patients were faecally incontinent pre-operatively. At follow-up all patients were either cured or improved. The median Vaizey score improved from 10 to 3 and there were no *de novo* cases of incontinence. Overall there was a statistically significant improvement in Vaizey incontinence score (p=0.031).

Constipation

6 of the 18 patients were constipated pre-operatively. At follow-up 3 patients had improvement in their constipation and 3 showed no improvement. There were no *de novo* cases of constipation. The median Wexner score improved from 14.5 to 9 but overall this did not reach statistical significance (p=0.25)

Quality of Life

Quality of life was assessed with the Manchester Health Quality of Life (MHQ) questionnaire. The median pre-operative MHQ score improved from 432 to 227 post-operatively. There was a statistically significant improvement in quality of life post-operatively (p=0.016). Overall all patients were happy with the outcome of surgery.

Interpretation of results

The ideal surgery for rectal prolapse would correct the anatomical deformity, prevent any concomitant bowel dysfunction and address any co-existing middle compartment prolapse. This study has shown that laparoscopic ventral rectopexy is an effective treatment for rectal prolapse. There were 2 recurrences, however, these occurred in exceptional cases which do not represent the cohort of patients with prolapse. There was a significant improvement in faecal incontinence and quality of life. The main proponents of ventral rectopexy for rectal prolapse recommend it for its beneficial effects on constipation as it avoids posterior mobilisation of the rectum. No significant improvement in constipation was seen in our study, however, there were no *de novo* cases and no cases in which constipation severity worsened.

Concluding message

This study has assessed the long term functional outcome in a group of patients with complex pelvic floor pathology. Results from ventral rectopexy are encouraging. Further follow up with larger numbers is required to determine whether it represents a significant advance in the management of rectal prolapse.

References

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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	**The study was a service evaluation. It involved assessing the service provided with no randomisation of patients. It is not possible to identify the participants from the report and the use of the data will not cause damage or distress.**
Was the Declaration of Helsinki followed?	**Yes**
Was informed consent obtained from the patients?	**Yes**