373

Curtiss N[1], Duckett J[1]
1. *Medway Maritime Hospital*

A LONG TERM FOLLOW UP OF PERIGEE ANTERIOR MESHES PERFORMED FOR RECURRENT PROLAPSE.

Hypothesis / aims of study

There is a significant recurrent prolapse rate after primary native tissue repair (1). Mesh repairs were introduced to reinforce the native tissues with mesh aiming to reduce recurrence rates. A systemic review suggested recurrence rates are lower using non absorbable mesh augmented repairs (2). However, there are complications unique to mesh repairs and 10% of patient will have a mesh complication and a high proportion of these will require further surgical intervention to manage the complication (1). High rates of pain and dyspareunia have also been reported affecting patient satisfaction. The long term safety and prolapse recurrence is of concern to urogynaecologists and their patients and there is currently a paucity of long term evidence. This study aims to evaluate the long term safety and efficacy of vaginal repairs performed using Perigee (non-absorbable trans-obturator) mesh.

Study design, materials and methods

A consecutive cohort of 51 patients who underwent anterior repair with Perigee mesh for recurrent cystocele was identified from a prospectively maintained database. All patients were operated on at a single centre between March 2007 and December 2011. Patients were contacted and invited for assessment. All patients gave informed consent and underwent POP-Q assessment by a research fellow. Patients were also examined for erosion and pain and completed validated patient questionnaires. All patient records were scrutinised.

Patients who did not attend for clinical assessment were contacted by telephone, questionnaires and interviews were undertaken over the telephone. The clinical records were also reviewed.

Same compartment recurrence was assessed by reoperation in the same compartment or presence of a prolapse with the leading edge within 1 cm of the hymen on POP-Q assessment.

Results

A total 48 patients were assessed (6 by telephone interview). The mean length of follow up was 82 months (range 48-106). The mean age at follow up was 66 years (range 47-83) and median parity was 2. The mean BMI at surgery was 27.4 and predominant ethnicity was white British.

All Perigee procedures had been undertaken in patients with recurrent cystocele. The rate of mesh erosion at follow up was 10%. Two erosions were treated with topical estrogen alone, one was cut in clinic and the two required surgical excision.

At the time of index surgery 77% of women included in the study were sexually active. New sexual dysfunction was reported in 46% of those patients.

Same compartment anatomical recurrence was detected on POP-Q examination in 5 patients (9.5%). In addition one patient had undergone an abdominal paravaginal repair for recurrent cystocele during the follow-up period. The reoperation rate for recurrent prolapse in the anterior compartment was 2%.

Symptomatically 83% of woman described their prolapse as a little, much or very much better. 69% described their prolapse as much better or very much better.

Interpretation of results

This study had a long follow up period with all but one patient followed up for over 5 years. All procedures were performed by one operator and therefore were carried out in a standard fashion. This study focused exclusively on patients who had had a previous failed native tissue repair and so focuses at potentially the more complex patients.

Mesh erosion rates were 10% with only two patients (4%) in the study requiring surgical management for mesh erosion. This is a similar rate of mesh erosion to that reported in a systemic review 11.4% (2) and lower than 21% quoted for Perigee mesh repairs performed for recurrent prolapse by another long-term follow up study (3). There were no major intraoperative complications in our study of organ damage or haemorrhage.

The reoperation rate for recurrent anterior prolapse was low 2% and similar rate to a rate of 1.3% described in a review of 21 trials for anterior repair (2). The low reoperation rate following mesh vaginal repairs is reported as lower than for native tissue repairs (1,2). This rate may be kept low by the technical complexities involved in repeat vaginal approach operations in the presence of a non-absorbable mesh

Dyspareunia rates were higher in this study than have been previously reported. A higher proportion of women in this study reported being sexually active prior to the procedure (77%) than in other studies (3). The rates of dyspareunia were also high in a case series with rate of 36% based on 11 women (1). De novo dyspareunia was reported as only 10% of patients in another long term follow up study (3). However, in that study only 9.7% of the patients undergoing Perigee mesh repair were sexually active pre-operatively. Two patients in their study underwent removal of the arm of the mesh with subsequent resolution of symptoms. The long follow up period in this study may have resulted biased reporting and some pain during intercourse may be wrongly attributed to the operation. There is generally a trend towards decreased sexual activity as patients get older and atrophy and other factors may have led to some symptoms. Evidence to support that at least some of the reported dyspareunia is directly attributable to the index operation is that examination of the mesh arms reproduced the pain felt during intercourse for some patients in this study.

Concluding message

This study shows that at long term follow up a vaginal mesh repair using a non-absorbable trans-obturator mesh has a low reoperation rate and low anatomical recurrence rate for patients with a recurrent cystocele. The erosion rate is similar to studies with shorter follow up. However, in view of the high rate of de novo dyspareunia (46%) the operation is perhaps best reserved for those patients for whom sexual function is a low priority.

References

1. NICE 2008 Interventional procedure guidance 267. Surgical repair of vaginal wall prolapse using mesh.
2. Maher c, FEiner B, Baessler K and Schmid C. Surgical management of pelvic organ prolapse in women. Cochrane Database Syst Rev4:CD004014. Doi:10.1002/14651858.CD004014. pub5
3. D Karmakar et al. Vaginal mesh for prolapse: a long-term prospective study of 218 mesh kit from a single centre, International Urogynaecology Journal (2015) 26:1161-1170

Disclosures

Funding: This project was partially supported with a grant from American medical systems (AMS). **Clinical Trial:** Yes **Registration Number:** ClinicalTrials.gov: NCT02642835 **RCT:** No **Subjects:** HUMAN **Ethics Committee:** National Research Ethics Service -London Riverside **Helsinki:** Yes **Informed Consent:** Yes