456

El Haddad R[1], Martan A[1], Masata J[1], Svabik K[1], Koleska T[1]
1. *Charles University in Prague, First Faculty of Medicine, General Teaching Hospital*

LONG TERM REVIEW ON THE TRANSVAGINAL REPAIR OF POSTERIOR COMPARTMENT PROLAPSE USING POSTERIOR COLPORRHAPHY WITH LEVATOR ANI MUSCLES PLICATION AND INCORPORATING A VYPRO II COMPOSITE MESH.

Hypothesis / aims of study

Recurrence rates for vaginal prolapse surgery are as high as 30% [1]. For this reason various graft materials have been proposed to improve the long-term surgical outcomes. Polyglactin 910 mesh was found to be useful in prevention of recurrent anterior prolapse [2]. The aim of our study was to investigate the safety and efficacy of posterior colporrhaphy incorporating VYPRO II(polyglactin 910-Prolene) mesh in the treatment of posterior vaginal wall prolapse.

Study design, materials and methods

Posterior colporrhaphy with VYPRO II mesh was performed in 28 women between March 2003 and November 2005. VYPRO II (Ethicon) is a type I macroporous mixed fibre mesh composed of 50% absorbable polyglactin 910 and of 50% non-absorbable prolene fibres.

Mean age was 63.7 years (range 46-83), mean parity 2.1 and mean BMI 30.34. All patients were invited after surgery to follow-up. The mean follow-up was 26.2 months. 22 women (78.5%) had a previous hysterectomy, 16 women (57%) had previous pelvic surgery for prolapse and/or urinary incontinence. All patients underwent urodynamics, ultrasound, physical examination and prolapse staging in POP-Q system. All women had stage II-IV symptomatic prolapse of the posterior compartment (stage II=11 patients 39.2%, stage III=14 patients 50%, stage IV =3 patients 10.7%). Concomitant surgeries performed included vaginal hysterectomy 7% (n=2), anterior colporrhaphy 50% (n=14), anterior colporrhaphy with VYPRO II mesh 21.4% (n=6), TVT 7% (n=2), TVT O 7% (n=2), sacrospinous vaginal vault suspension 32% (n=9).

Surgical method: the posterior colporrhaphy was performed through the vertical incision in the posterior vaginal wall. The levator ani muscles were exposed, with lateral dissection into the pararectal space. The mesh was placed over the rectoenterocele, and overlaid by the levator ani muscles plication. The excess of vaginal mucosa was trimmed prior to closing the vagina. Standard perineorrhaphy was performed.

Results

23 patients (82%) were with no recurrence of posterior vaginal wall prolapse. 2 patients (7%) with asymptomatic stage I rectocele and stage I vault prolapse. 1 patient with stage II rectocele (3%). 2 patients (7%) with stage III rectocele.

5 patients (17.8%) had complications. Re-operation for rectocele reccurence without mesh erosion was in 2 patients (7%). Mesh erosion occurred in 3 patients (10.7%). 1 Patient of them had vaginal mesh erosion and recurrent stage II rectocele (3.5 %) requiring re-operation and mesh removal. See table below.

Mesh erosion	**Time of occurence**	**POP-Q**	**Therapy**
Patient 3	5 months after surgery	Stage II anterior and posterior prolapse	Repeated local therapy, antibiotics, estrogen. 29 months after surgery, re-operation and mesh partial removal, anterior and posterior colporrhaphy
Patient 4	4 months after surgery 1x1cm	Stage 0 rectocele Stage II cystocele	Repeated local therapy and trimming for 1 year.
Patient 5	6 weeks after surgery 1x1cm	Stage 0	Repeated local therapy and trimming, When examined 34 months after surgery, recurrent 5mm mesh erosion was present.

Interpretation of results

There were no operative or early postoperative complications. There were no cases of bladder or bowel erosion. Vaginal erosion presents in the first 5 months after surgery. Conservative management was possible but required repeated trimming and repeated local therapy for a very long period.

Concluding message

The incidence of rectocele recurrence was 10.7 %, the incidence of mesh vaginal erosion was 10.7 %, and the overall complication rate was 17.8 %.

References

1. Obstetrics and Gynecology 1997, 89 (4): 501-506.
2. American Journal of Obstetrics and Gynecology 2001, 184: 1357-64.

Specify source of funding or grant	**No funding**
Is this a clinical trial?	**Yes**
Is this study registered in a public clinical trials registry?	**No**
What were the subjects in the study?	**HUMAN**
Was this study approved by an ethics committee?	**No**
This study did not require eithics committee approval because	**It was patient chart data retrospective analysis only**
Was the Declaration of Helsinki followed?	**Yes**

Was informed consent obtained from the patients?	**Yes**