

TENSION FREE VAGINAL MESH: A HOPE FOR CURE OR A HARBINGER OF TROUBLE?

Hypothesis / aims of study

The new tension free vaginal mesh (TVM) procedures for the management of pelvic organ prolapse (POP) have been widely used in the last few years without robust scientific evidence to either support or refute its use. Moreover, management of both short and long term complications is yet to be standardised. The purposes of this study was to evaluate short term complications after TVM repair and describe a way of management of recurrent POP and a large vaginal mesh erosion after total TVM procedure.

Study design, materials and methods

Retrospective case record review of forty women who underwent TVM repair for symptomatic recurrent or grade three/four POP between October 2005 and November 2007 in a large district general hospital. The mean age of patients was 65.2. Anterior TVM (ATVM) 8/40 (20.00%), posterior TVM (PTVM) 14/40 (35.00%), total TVM (TTVM) 8/40 (20.00%), ATVM with vaginal hysterectomy 2/40(5.00%), PTVM with vaginal hysterectomy 2/40 (5.00%) and TTVM with vaginal hysterectomy 6/40 (15.00%) were performed as indicated.

Results

No intra-operative/ immediate peri-operative complications occurred. Three months post operative follow up was performed for all patients. Mesh erosion occurred in four patients (10.00%) all of whom required surgical management of trimming of mesh and re-suturing of vagina. Recurrent prolapse occurred in one woman 1/40(2.5%). She also had a large posterior vaginal wall mesh erosion. This patient had undergone TTVM repair for the management of a recurrent grade three vault prolapse, cystocele, enterocele and rectocele after conventional pelvic floor repair and vaginal hysterectomy. An innovative surgical technique employing modification of traditional abdominal sacrocolopexy and abdominal lateral vaginal repair was used to deal with this rarely reported complication of failure of a TTVM procedure. Photos detailing steps of this technique were taken after informed consent. This was proven successful at 18 months follow up without occurrence of further complications.

Interpretation of results

According to short term follow up results [three months], TVM repair seems to be a relatively safe and effective technique to correct symptomatic recurrent or grade three/four pelvic organ prolapse. The management of recurrent prolapse after TVM procedure poses a surgical challenge. Literature search did not reveal any reports on management of TTVM failure. The technique mentioned above seems to suggest a way forward in tackling this rare but surgically challenging problem.

Concluding message

Short term follow up seems to confirm TVM repair as a useful procedure for the management of symptomatic recurrent or grade three/four pelvic organ prolapse giving a hope of cure for women plagued by this relatively common problem. Long term follow up is needed to confirm effectiveness and safety. Short and long term complications are not common. However, as and when they arise, innovation in treatment seems to be the order of the day due to paucity in reported techniques to deal with them.

<i>Specify source of funding or grant</i>	None
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	Opinion was sought from the Lanarkshire Research Ethics committee who ruled that approval from the committee was not needed for this study
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes