Mesh Deformity after Prolift: Do We Have an Answer?

Introduction and Objective: Trans vaginal mesh was popularized since 2001, and in 2010, in only the USA, more than 10,000 cases were done for POP and SUI. However, for the last 6 years, more than 3000 cases (1503 POP, 1497 SUI) had mesh complications. Hence in July 2011, the FDA sent a warning to all surgeons and patients about mesh and its problems. We had three cases, which were referred after prolift procedure, done 2 years ago (done for grade 3 cystocele). All these cases had a painful and deformed vagina, dyspareunia and even sitting normally in chair was difficult. They had a long antibiotics and analgesic treatment without any relief.

Materials and Methods: All three females were in the age range of 35 to 55 years and sexually active before prolift surgery. Clinical examination showed a tender, deformed and lumpy vaginal surface from introitus up to apex. All had undergone hysterectomy, yet at site of uterosacral and cardinal ligament, painful movement and nodular feel could be felt. No erosion of mesh was noted in vagina and urethra. The urinary flow was normal. The lower abdomen showed vague tender areas and per rectal examination, it also revealed a tender, nodular posterior vaginal septum. All three had abstained from intercourse for more than 1 year. USG showed normal urinary bladder but showed a variegated appearance on posterior wall of bladder. MRI also showed that POP was cured but had a nodular and lumpy feeling all around posterior wall of bladder. No mesh was seen in MRI. Routine biochemical tests were normal. They were offered a laparoscopic adhesiolysis with omental wrapping up to trigone of bladder. The three trocar technique was used. A 10mm, camera trocar was inserted with zero degree 10 mm telescope through umbilicus. Right 10mm and left 5 mm port was placed 3 fingers below and lateral to umbilicus. On entering peritoneum, a gooey appearance was noted between vagina and bladder. No mesh was ever seen. The vagina was elevated above and below by vaginal dilator. This facilitated a plane of dissection between bladder and vagina. Majority of dissection was done by sharp dissection, only at corner, a cutting cautery was used. The plane was followed up to trigonal level, which was confirmed by concomitant cystoscopy. After dissection was complete, heamostasis was achieved and three stay sutures were taken to engage omentum in between. A drain was kept and abdomen was deflated. The Foley catheter was kept for 5 days. The drain was removed on the 2nd day and then the patients were discharged within a week. All of them had a smooth recovery.

Results: All of them were reviewed after 1 week for pain, residual deformity and nodular feel per vaginally. All had a great recovery and only one had a small nodule at left apical region, which was still painful. Three months later 2 were sexually active and had resumed all work. We have a follow-up of all three for now at 18 months and all of them are sexually active and doing well.

Conclusions: TVM has been a boon and also bane in majority of patients with prolapse and SUI. The rationale of using a foreign material is to give additional force to already week ligaments and muscle. However, it also has problems in 3 to 9% of cases in form of erosion, deformed vagina, nodular, lumpy vaginal wall, and intrusion in bladder, rectum and blood vessels. More than 30% mesh contract after 1 year, entrapping nerves, muscles, ligaments and producing areas of avascular necrosis, resulting either in local or total erosion. Local excision of local covering of mesh by using circumcised incision is described by many authors, but I feel, total removal of coagulum and then planting omentum is not well documented. The series is too small and follow-up is less than 2 years with us; however, it gives a clear-cut message that if such deformity exists, the correct therapy appears to be a complete separation and aiding a vascularised graft like omentum in between the organs.