

## VESCICO-VAGINAL FISTULA AND BLADDER STONE CAUSED BY A PROTUDING SPIRAL TACKER 4 YEARS AFTER A LAPAROSCOPIC SACROCOLPOPEXY: CASE REPORT.

### Hypothesis / aims of study

We report a case of bladder mesh erosion resulting in a stone and vescico-vaginal fistula due to spiral tacker used for vaginal wall mesh fixation during laparoscopic sacrocolpopexy. To our knowledge, this is the first case of such a complication after laparoscopic sacrocolpopexy.

### Study design, materials and methods

A 67-year-old female came to see me for an urodynamic study for incontinence. Her previous medical history included a natural child birth and surgical menopause due to hysterectomy for fibromatosis at 45 years old. In the 2010 she underwent laparoscopic sacrocolpopexy for vaginal vault prolapse. She complained of urinary symptoms, burning sensation and urgency since 3 years. A month previous presentation progressive severe incontinence appeared, so that she used about 4 pann/day. At ultrasonography, performed to measure the urinary post voiding residual, a hyperechoic formation was noticed, in first instance attributed to a 4 cm bladder stone. The urethro-cystoscopy confirmed the presence of a bladder stone attached to the posterior bladder wall at the point of mesh erosion.

We also performed a uretro-cystography which showed behind the stone the presence of a vescico-vaginal fistula.

### Results

A laparotomy and cistolitotomy was performed and showed a big stone developed on the eroded mesh, which resulted to have been fixed with spiral tackers on the anterior vaginal wall. The spiral tackers, had eroded into the bladder resulting in a stone and a vescico-vaginal fistula. The stone was removed with the mesh and all the tackers, and the fistula had been repaired with the interposition of the omentum She made an uneventful recovery and was discharged home with a bladder catheter.

The patient was seen 15 days after surgery and at the vaginal examination the incontinence due to the fistula persisted. So the catheter was maintained for 15 days more, and the cystography confirmed the persistence of the fistula.

A vaginal and laparoscopy approach was performed. From the vagina a 12 Ch Foley was put in the fistula to "mark" it for the laparoscopic approach. Once visualized, the fistula was repaired with suture, and the water-thickness of the bladder was proved. Two days after surgery the patient was discharged home with a catheter, removed without complication 30 days after. One year after surgery the patient is asymptomatic and completely dry, there is no recurrence of incontinence.

### Interpretation of results

Mesh fixation with tacker systems is common in laparoscopic inguinal and ventral hernia repair but it is described also for promontofixation. Complications due to tackers are rare. There are reports of tacker related complications of adhesions, pain, hernia, intestinal obstruction, perforation of the bowel or urinary bladder and death. Several cases of spondylodiscitis were reported after use of tackers to the promontory; however this complication also occurs if sutures are utilized. To our knowledge the use of spiral tackers for mesh fixation to the vaginal wall have not been described in the literature. The length of a tacker is 4 mm long and depending on the thickness of tissue it may penetrate the neighboring structures with disastrous complications.

### Concluding message

Spiral tackers in laparoscopic colpopexy, should be used, as described, only for the fixation of the mesh on the promontory. Alternative techniques of suture fixation of mesh may avoid the tacker related complications.

### Disclosures

**Funding:** Non **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** is a case report **Helsinki:** Yes **Informed Consent:** Yes