

## Case Report

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# Uterovesical fistula after uterine compression suture

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## Abstract

Uterovesical fistula is a rare complication. In this case, a utero-fetal fistula developed in a patient with lower uterine segment compression suture in cesarean section due to placenta previa totalis is described.

**Keywords:** caesarean section, compression suture, uterovesical fistula, Youssef's syndrome

## 1. Introduction

Compression sutures are an alternative to hysterectomy in young patients with postpartum hemorrhage. Today, very different compression sutures are used. Although it does not require much surgical experience and is an effective method to control bleeding, its complications have not been clearly identified. Infection, pyometra, synechiae and infertility are some of them (1). In some cases, uterine rupture has been reported in the following pregnancy (2).

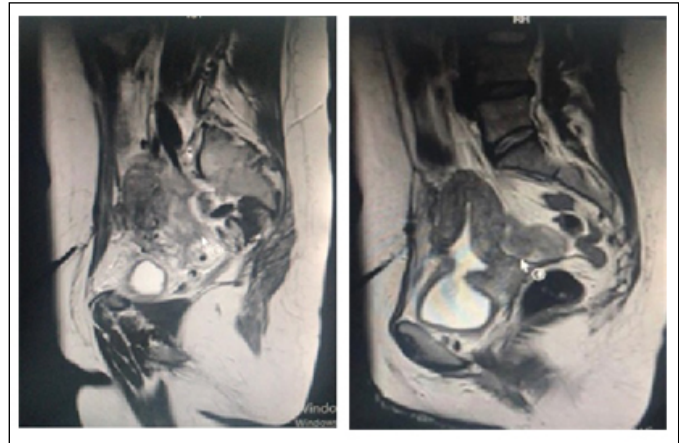
Uterovesical fistula is a rare complication that constitutes 1-4% of urogenital fistulas (3). There is a history of caesarean section in 88% of cases (4). Patients usually present with the classic Youssef Triad. Cyclic hematuria, urinary incontinence and amenorrhea constitute this triad (5).

In this case, we report a case of uterovesical fistula after compression sutures in lower uterine segment in a patient undergoing cesarean section due to placenta previa which was successfully repaired with early diagnosis.

## 2. Case Report

A 34-year-old patient with G4P3Y3 was taken to cesarean section with a diagnosis of placenta previa totalis 38 weeks and 2 days. She had four cesarean sections. In her operation two U-shaped compression sutures were placed in the lower uterine segment by rejecting the bladder peritoneum due to intraoperative bleeding. The patient's foley catheter was withdrawn after 24 hours because there was no suspicion of intraoperative bladder injury. The patient was followed-up for 2 days and was discharged after no bleeding. Thirty days after surgery, the patient presented with hematuria, dysuria, and intermittent urine intake. No fistula tract was observed in the speculum examination of the patient and no urine was observed in the cervix. Her blood and urine tests were normal. MR imaging of the lower abdomen of the patient revealed a 11 \* 31 mm vesicouterin fistula (Fig. 1). Cystoscopy was

performed and the vesicouterin fistula was seen near the bladder dome and the orifices were observed naturally. Double J catheter was placed in bilateral ureters. The operation of the patient was planned, and the bladder and uterus were dissected from each other by laparotomy and the bladder was incised up to the fistula tract. The fistula tract was removed. Bladder and uterine incision repair were performed as double layer. The patient was followed-up for two days postoperatively. After 14 days with foley catheter, the patient had no problem.



**Fig. 1.** Tract of uterovesical fistula is seen by Contrast Magnetic Resonance Imaging

## 3. Discussion

Compression sutures are frequently used in postpartum hemorrhage control. In placenta previa cases, compression sutures have been described which are discharged into the lower uterine segment, which frees the patient from hysterectomy. Complications such as infection, pyometry, synechia and infertility have been reported in the literature regarding compression sutures. In our case, uterovesical fistula developed after the compression suture thrown into the

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lower uterine segment due to hemorrhage because of placenta previa. The diagnosis of uterovesical fistula can be made for the first time in 1957 by the triad defined by Youssef. Cyclic hematuria, urinary incontinence and amenorrhea form this triad. In the literature, patients with secondary infertility and abortus complaints and late diagnosis are also present (6). Definitive diagnosis of the fistula between the bladder and the uterus is established (6). Hysterosalpingography, methylene blue test, pelvic MRI, and cystoscopy can be used for diagnostic purposes (7). MRI is important in terms of being 100% diagnostic in diagnosis (8).

5% of vesicouterin fistulas may heal without surgery. Foley catheter is left for three weeks, the infection is avoided, and the defect is closed with the involution of the uterus (9). But the main method is surgical repair. Transvesical, retroperitoneal, and transperitoneal repair can be performed. Because vaginal repair is not easily accessible, it is not generally preferred (7). It is a rare diagnosis that should be kept in mind because of the increased cesarean rates. Although it is a complication that should be kept in mind because of hemorrhagic and risky surgeries, especially in our patient, it can be treated with early diagnosis without hysterectomy.

#### Conflict of interest

None to declare.

#### Acknowledgments

None to declare.

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