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**Obstetrics & Gynecology** 

# **Utero-Cutaneous Fistula- A Rare Complication Following Caesarean Section: A Case Report**

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Abstract Case Report

*Introduction*: Utero-cutaneous fistula is an extremely rare pathological condition characterized by an abnormal communication between the anterior wall of uterus and abdominal wall. It occurs most commonly after caesarean section. Fewer than 15 cases have been reported worldwide in last 20 years. *Case Summary*: A 30 years old female, P2+1 L2 with previous 2 LSCS presented to OPD with complain of pus discharge from previous scar site on and off from 6 months following her second cesarean section which was done 8 months back. On examination, there was an opening present at right lateral edge of the scar and discharge was coming from the same.

Keywords: Utero Cutaneous Fistula, Post Caesarean.

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#### Introduction

Fistula is an abnormal tract communicating two epithelial surfaces. Utero-cutaneous fistula is an abnormal communication between the cutaneous tissue and uterine cavity. It is an extremely rare condition following cesarean section. Around 20 cases were reported in the literature in the last 10 years [1]. Symptoms include blood mixed discharge and cyclical pain. Most cases result from infection, inflammation, injury, incomplete closure of the incision line and inappropriate wound healing in the post operative period

[2]. Because of the uncommon presentation of the uterocutaneous fistula, the exact treatment is challenging [3].

#### CASE PRESENTATION

A 30 years old female, P2+1 L2 with previous 2 LSCS presented to OPD with complain of pus discharge from previous scar site on and off from 6 months following her second cesarean section which was done 8 months back. On examination, there was an opening present at right lateral edge of the scar and discharge was coming from the same.



Figure 1: Showing Pfannenstiel scar with an opening (fistulous) at right lateral edge

Besides her routine investigations, MRI was also done to delineate fistulous tract. MRI showed a linear fistulous tract extending from scar site reaching

upto umbilicus. Her laparotomy was planned under general anesthesia and fistulous tract was excised.



Figure 2: MRI showing the fistulous tract

On laparotomy, dye was injected in the sinus tract and sinus tract was felt by inserting the sinus tract probe. The tract was found on the lateral edge of previous scar and reaching upto parietal peritoneum and other tract was detected after dye injection which was

extending between umbilicus and anterior uterine wall. The whole of the sinus tract was excised. Multiple tubercles were noticed on both the ovaries, hence biopsy taken for the same.



Figure 3: Tracing of fistulous tract



Figure 4: Excision of the fistula tract



Figure 5: Post-operative scar

Fistular tract as well as ovarian tubercle biopsy was sent for histopathological examination which showed chronic granulomatous inflammation.

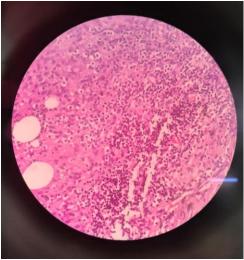


Figure 6: Histopathology showing chronic granulomatous reaction

Post operative period was uneventful and patient was put on antitubercular regimen for 9 months.

### **DISCUSSION**

Utero-cutaneous fistula is a rare condition with very few cases reported in literature. Its pathogenesis is not very clear. The main presentation is blood discharge from the cutaneous opening during the menstrual period. In this case utero-cutaneous fistula was attributed to tuberculosis. Genital TB may present in variety of ways. Possible mechanisms described previously in the literature involving uterus are multiple previous abdominal operations, long-term stay of drains, and incomplete closure of uterine incision during cesarean section, dehiscence. Fistula inflammation and wound formation secondary to endometriosis and tuberculosis were also described. Most fistulae originate from trauma or some other type of inflammatory processes that disrupt the continuity of tissues involved [4, 5]. Local reactivation of tubercular infection may be precipitated by trauma or surgery or any factor or insult that alters local tissue response; like injury, local vascular derangements, foreign body reactions and chronic inflammation as in our case [6]. Other reports have shown a similar presentation after pelvic abscesses [7], utero-vaginal malformation [8], and infection with actinomycosis due to intrauterine devices [9]. Cutaneous or utero-cutaneous fistulae are rare complications of cesarean section, with infection being the most common cause. Fistulography with the injection of the contrast material through the skin opening shows the connection to the uterus [3,10]. Magnetic resonance imaging with contrast also helps in the diagnosis [3]. The primary treatment is surgical excision of fistulous tract.

## **CONCLUSION**

Fistula between uterine and skin is a rare condition but should be considered when patient presents with cyclical discharge and pain after caesarean section. CT fistulography and MRI appears to be useful for early diagnosis and, consequently, a conservative surgery.

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