

## A RARE CASE OF UTEROCUTANEOUS FISTULA

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### Abstract

Across the world, the search for new anti-cancer molecules remains one of the main A uterocutaneous fistula is a rare clinical presentation that occurs following Caesarean section and other pelvic operations. There are only a few reports discussing the treatments. We describe a patient of uterocutaneous fistula after caesarean section with successful surgical management. A uterocutaneous fistula is a rare condition with many causes and needs proper investigation and timely medical and surgical management.

### Keywords:

*Uterocutaneous fistula, Caesarean Section, pus discharge, resuturing.*

### Introduction

A fistula is a communication between two epithelium-lined surfaces. Fistulas are usually lined by granulation tissue but can get epithelialized. Gynaecologists are familiar with fistulas involving the urinary tract or bowel and the genital tract<sup>1</sup>(utero-vesical or utero-colonic). But uterocutaneous fistula is a rare entity mostly seen after post-partum or postoperative complications<sup>2</sup>. A uterocutaneous fistula (communication between uterus and skin) is a rare condition, but should be considered with signs of inflammation or persistent purulent discharge after caesarean section and there are only a few reports in this regard in the existing literature. The causes include multiple surgeries, use of drains, and incomplete closure of the incisions. Because of the uncommon presentation of the uterocutaneous fistula, the exact treatment is challenging<sup>3</sup>.

### Case report

A 29 years female ,P2L2,with post LSCS day 10,resident of SomnathNagar,WadgaonSheri,Pune presented with chief complaints of foul smelling pus discharge through defect in the anterior abdominal wall just above the LSCS scar as shown in figure 1



**Figure 1:** Purulent discharge coming through defect in anterior abdominal wall just above LSCS scar

There was no history of per vaginum discharge or per vaginum bleeding.LSCS done 10 days back for previous LSCS with scar tenderness.Suture removal done on post operative day 7 ,wound was healthy and patient was discharged.After 3 days patient came with foul smelling discharge through defect in anterior abdominal wall.Per abdominal findings suggestive of defect in anterior abdominal wall as shown in figure through which foul smelling discharge was coming and the defect was reaching upto the uterus with the suspicion of uterocutaneous fistula.Pulse and BP were within normal limits .Emergency surgery reference done and decision of emergency exploratory

laparotomy was taken after surgery reference. Preanaesthetic check up done and patient was posted for exploratory laparotomy with reservation of blood and blood products. Written informed consent was taken and Under all aseptic precaution and spinal anaesthesia parts painted and draped. Vertical incision was taken and abdomen opened in layers. Pus was coming directly from the uterus suggesting uterocutaneous fistula. Pus was sent for culture and sensitivity. Debridement of necrotic tissue done and tract was excised. Edges of uterus freshened up and saline wash given. Lower segment of uterus is closed with continuous interlocking by chromic catgut 1-0. abdomen closed in layers. On pus culture E.Coli colonies were found and they were sensitive to Cotrimoxazole, Cefoxitin, Amikacin, Piperacillin and Tazobactam, Inj Piptaz, Inj Augmentin, Inj Amikacin started post operatively according to sensitivity. Suture removal done after 8 days, but skin and subcutaneous tissues gaped widely as shown in figure 2, rectus sheath was intact



**Figure 2 : Full thickness gape of skin and subcutaneous tissue; rectus sheath is intact**

Plastic surgery reference done. Advice given was daily dressing with Reliheal gel with strapping of anterior abdominal wall for 21 days and follow up for resuturing.



**Figure 3 : Wound gape after dressing of 21 days**

After 21 days after better healing of tissues, debridement with secondary resuturing done by plastic surgeons. As shown in figure 3, 4x4cm raw area in midline lower anterior abdominal wall with granulation tissue was present. Transverse incision was taken at previous scar and abdominal flaps raised in subcutaneous planes. Granulation tissue scooped off, saline wash given. Secondary suturing done in 2 layers with vicryl and ethilon 2-0 showing in figure 4. Suture removal done after 3 weeks and wound was healthy.



**Figure 4:Debridement with secondary resuturing**

### Discussion

Most of the fistulae in the uterus are uterovesical or uterocolonic. Utero-cutaneous fistula is an extremely rare entity, and only a few case reports have been published. Most Utero-cutaneous fistulas are secondary to postpartum or postoperative complications. There are a large number of causes for the formation of uterocutaneous fistulae such as lower-segment type of Caesarean section, abdominal pregnancy, ,intrauterine devices and endometriosis. Radiation therapy or traumas to the uterine wall during curettage can also cause this kind of fistula. Nonetheless, a uterocutaneous fistula is a very rare condition, whose pathophysiology is not fully understood but whose causes include multiple surgeries in the abdomen, use of drains, and incomplete closure of incisions<sup>3</sup>.Most uterocutaneous fistulae originate from some type of infective process that disrupts the continuity of tissues involved.Once a fistula is diagnosed ,prompt excision of the fistulous tract is required.

Our patient had a fistula following Cesarean section, however fistula can occur after septic abortion, pelvic abscesses<sup>5</sup>, and true intra-abdominal pregnancy because of incomplete placenta removal<sup>6</sup>,uterovaginal malformation<sup>7</sup>, infection with actinomycosis, due to intrauterine devices<sup>8</sup>, curettage, difficult vaginal delivery, or use of forceps may be the other causes.

Our patient presented with purulent discharge through defect in anterior abdominal wall above caeserian scar, but presentation tends to vary from 2 months to 6 years after the last surgery<sup>3,4</sup>.Sometimes the patient has a clear finding like bloody discharge from the abdominal scar during the menstrual period; nevertheless, other investigations may be needed in some conditions such as pelvic pain or abdominal masses or abscesses. Fistulography with the injection of the contrast material through the skin opening shows the connection to the uterus. If the skin hole is too small in the case of a suspected uterocutaneous fistula, hysterosalpingography with a methylene blue injection via the cervix can be helpful<sup>5</sup>. Magnetic resonance imaging with contrast is another modality<sup>3</sup>.Thubert et al.<sup>3</sup> believed that hysteroscopy is very helpful in detecting fistula opening in the uterine with its direct vision.

Because a uterocutaneous fistula is a rare condition , a standard treatment has yet to be introduced.Previously, authors maintained that there was no nonsurgical treatment and the range of the surgeries varied from the excision of the fistula tract<sup>10</sup> to hysterectomy<sup>5</sup>, which presents a challenge in young patients. More recent reports, however, have introduced combined surgical and medical treatment for the reduction in the risk of hysterectomy<sup>3</sup>. The GnRH agonist induces atrophic changes in the epithelium and assists in the closure of the fistula. Nonetheless, a larger size of fistula opening in patients prompt surgeons to opt for the surgical approach.

Thubert et al.<sup>3</sup> used medical treatment and minimally invasive surgery (laparoscopy) for the excision of a fistula tract. Sonmezer et al.<sup>5</sup> injected the blue dye from the cervix and internal opening and successfully treated their patients. Finally, we believe it is advisable that this kind of rare fistula be borne in mind if the patient has chronic pelvic pain secondary to a uterine abscess.<sup>2</sup> Although our patient had a successful surgical treatment, prevention of

utero-cutaneous fistula by meticulous technique during the primary surgical procedure and measures to prevent postoperative sepsis would have spared this patient the distress, cost, and risk of a second operation. Complete closure of the uterine wound in two layers using absorbable suture, avoid inclusion of decidua during closure, and proper tissue handling to prevent ischemia would go a long way in preventing this catastrophe.

## Conclusion

Despite the uncommon presentation of a uterocutaneous fistula, it should be considered after Caesarean section, injury during operation, and abortion. All surgeons should follow up patients with signs of inflammation. Fistulae need proper investigation and timely medical and surgical management such as antibiotics and drainage.

## References

1. Reena Yadav, P Reddi Rani, D Jayalakshmi (2006) Uterocutaneous fistula. *J Obstet Gynecol India*. 56: 81-82.
2. Gonca Eldem, Baris Turkbey, SenerBalas, Erhan Akpinar (2008) MDCT diagnosis of uterocutaneous fistula. *European Journal of Radiology Extra*. 67: e129-e130.
3. Thubert T, Denoiseux C, Faivre E, Naveau A, Trichot C, Deffieux X. Combined conservative surgical and medical treatment of a uterocutaneous fistula. *J Minim Invasive Gynecol*. 2012;19:244–7. doi: 10.1016/j.jmig.2011.10.010. [PubMed] [Cross Ref]
4. Dragoumis K, Mikos T, Zafarakas M, Assimakopoulos E, Stamatopoulos P, Bontis J. Endometrioticuterocutaneous fistula after cesarean section. A case report. *GynecolObstet Invest*. 2004;57:90–2. doi: 10.1159/000075384. [PubMed] [Cross Ref]
5. Sonmezer M, Sahincioglu O, Cetinkaya E, Yazici F. Uterocutaneous fistula after surgical treatment of an incomplete abortion: methylene blue test to verify the diagnosis. *Arch Gynecol Obstet*. 2009;279:225–7. doi: 10.1007/s00404-008-0683-7. [PubMed] [Cross Ref]
6. Promsonthi P, Herabutya Y. Uterocutaneous fistula in term abdominal pregnancy. *Eur J ObstetGynecolReprod Biol*. 2007;132:239–41. doi: 10.1016/j.ejogrb.2006.04.041. [PubMed] [Cross Ref]
7. Shukla D, Pandey S, Pandey LK, Shukla VK. Repair of uterocutaneous fistula. *Obstet Gynecol*. 2006;108:732–3. doi: 10.1097/01.AOG.0000188067.74163.40. [PubMed] [Cross Ref]
8. Tedeschi A, Di Mezza G, D'Amico O, Ermann A, Montone L, Siciliano M, et al. A case of pelvic actinomycosis presenting as cutaneous fistula. *Eur J ObstetGynecolReprod Biol*. 2003;108:103–5. doi: 10.1016/S0301-2115(02)00361-5. [PubMed] [Cross Ref]
9. Ruiz Arteaga JD, Valdez Murillo AN, Hernandez Trejo MC. Utero-cutaneous fistula: a case report and literature review. *GinecolObstet Mex*. 2012;80:95–8. [PubMed]
10. Okoro O, Onwere S. Retained products of conception in a utero cutaneous fistula: a case report. *Niger J ClinPract*. 2008;11:170–1. [PubMed]