

## **UTERO-CUTANEOUS FISTULA FOLLOWING CESAREAN SECTION: FRUITFUL MANAGEMENT**

NARGIS IQBAL, LUBNA LATIF, NOSHEEN SALMAN, MEHREEN NISAR  
*Al-Aleem Medical College/Gulab Devi Hospital, Lahore*

### **ABSTRACT:**

Utero-cutaneous fistula is one of the most unusual entity and up till now only a few case reports have been published. Most Utero-cutaneous fistulas are secondary to postoperative complications following caesarean or other pelvic surgery. A 30-year-old woman, Para 4+0, all LSCS noticed bleeding through Pfannenstiel incision scar, following forth caesarean section. A fistulous tract was demonstrated at examination with a probe, between abdominal wound and uterus. The women underwent laparotomy with excision of the fistulous tract and repair of uterine and abdominal walls by taking all preventive measures for recurrence. She remained well postoperatively, specimen taken from fistulous tract sent for histopathology.

**Key words:** Cesarean section, uterine repair, utero cutaneous fistula

**How to cite this article:** Iqbal N, Latif L, Salman N, Nisar M. Utero-cutaneous fistula following caesarean section: Fruitful management. *Pak Postgrad Med J* 2019;30(3): 125-127

---

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/3.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

---

*Correspondence to: Lubna Latif, Professor,  
Department of Obstetrics & Gynaecology, Al-Aleem  
Medical College/Gulab Devi Hospital, Lahore,  
Pakistan*

*E-mail: drlubnazubair66@gmail.com*

### **INTRODUCTION:**

Utero-cutaneous fistula is one of the most uncommon entity. There is an unnatural connection among two epithelial surfaces, uterus and skin<sup>1</sup>. The etiology of utero-cutaneous fistulas is predominantly due to postoperative complications following caesarean section, pelvic surgery, infections or intrauterine contraceptive devices<sup>2,3</sup>. The common fistulae are between vagina and bladder or vagina and rectum called vesico- vaginal or recto-vaginal. The rare fistulae are between uterus and bladder or between uterus and colon called utero-vesical or utero-colonic. Because of the exceptional presentation of the utero-cutaneous fistula, the exact treatment is still ambitious<sup>4</sup>. I would like to describe a women with utero-cutaneous fistula after forth Cesarean section. Eventually she went home following successful management both surgical and medical.

### **CASE REPORT**

Mrs. Zakia Bilal 30-year-old married for 10 years, para 4+0 housewife, uneducated, resident of Lahore presented at the OPD of Al-Aleem Medical College Lahore, on 21st of February 2019, with a one year history of bleeding during her menstrual period from opening in the middle of incision scar of the Caesarean section. The women had elective Caesarean section at 38 completed weeks of gestation in one of the public sector hospital. Surgery was complicated by postoperative wound sepsis, and she had laparotomy one month after caesarean section due to abdominal distension. Tuberculosis of abdomen was diagnosed at laparotomy and it was confirmed by histopathology of the specimen and put the women on ATT (Isoniazid, Ethambutal, Rifampacin and Pyrazinamide). One month afterward, she developed pain, fever and bloody abdominal discharge, since then she is having cyclical bleeding from the incisional scar.

She attained menarche at the age of 13 years and menstruated for 5-6 in a 30-days regular cycle. She had no prior problems with irregular or heavy menses. On examination, she was a young good looking healthy woman afebrile and well oriented in time and space. The respiratory rate was 20 /min, pulse rate was 86

beats per min, regular with good volume, and blood pressure was 120/70 mmHg. Abdominal examination revealed a Pfannenstiel scar about 6-7 cm in length with puckering in its midpoint. A fistulous opening about 4–5 mm in diameter was at the center of the scar as shown in (Figure 1) confirmed with a probe. Pelvic examination revealed no abnormal findings. On investigation, her hematocrit, bleeding profile, serum electrolytes, RFT, and LFT were normal. Her pelvic scan showed uterus 8 cm in length, 4 cm in width with 5-6 mm endometrial thickness and both tubes and ovaries normal looking. Methylene blue was injected through cervical canal and dye was seen on skin. Hysterosalpingography (HSG) showed fistulous tract of 5-6 cm in length.

Figure 1



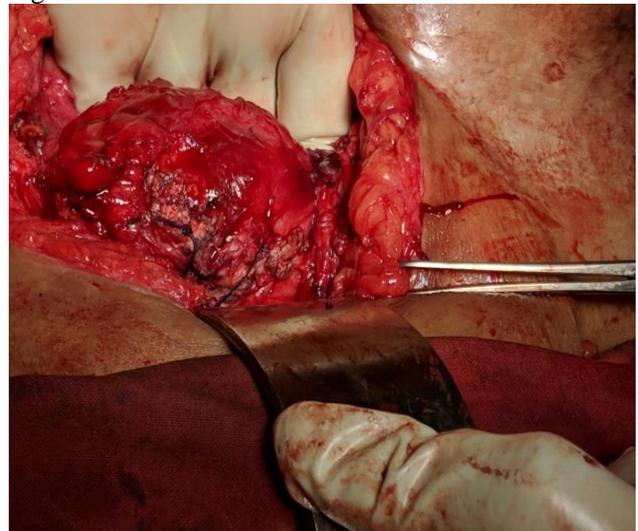
Figure 2



She underwent laparotomy under general anesthesia. Just before surgery, methylene blue was injected to highlight the fistulous tract. Intraoperative, the Omentum, bladder, and bowel loops were found to be adherent to previous cesarean scar on the anterior uterine wall. Adhesiolysis with the freeing of the uterus,

omentum, bladder and bowel was carried out. A bluish tinge about 5 cm opening of the fistulous tract and 4-5 cm caseous necrotic material was seen on the anterior surface of the uterus as shown in (Figure 2), fistulous tract stained with the dye was dissected easily and then fistulectomy performed. The rent in the uterus was repaired with vicryl# 1 in two layers as shown in (figure 3). Peritoneum of the abdomen was closed with chromic catgut # 0 and rectus sheath with proline #1. Caseous material and fistulous tract was sent for histopathology

Figure 3



She had an uneventful recovery and was discharged on 8th postoperative day. She was seen at OPD after her menstrual period found to be so happy that she had normal vaginal bleeding after a long time during menstrual cycle. Histopathology of the fistulous tract showed fibro-muscular tissue, and the tract lined by granulation tissue with nonspecific inflammation. Caseous material showed chronic granulomatous inflammation.

## DISCUSSION:

Utero-cutaneous fistula predominately results following postoperative complications of cesarean section or other pelvic surgery. Fistulae mostly occur from trauma either surgical or accidental, or some type of chronic inflammatory processes that break up the connection of tissues involved<sup>3</sup>. The decrease in the incidence of utero-cutaneous fistula may be due to decrease in the frequency of classical cesarean and good surgical technique in obstetrics<sup>4</sup>, Utero-cutaneous fistula following lower segment cesarean section has been reported by various authors<sup>5-8</sup>.

In our case patient develop utero-cutaneous fistula two months after forth cesarean section, similar case reports have been documented by different authors<sup>3,7-8</sup>. In compare to other case reports same presentation may occur after septic abortion, pelvic abscesses, abdominal pregnancy due to partial removal of placenta, congenital utero-vaginal malformation, action-mycosis, intrauterine contraceptive devices, and curettage of incomplete abortion<sup>1,9-12</sup>. Our patient presented 2 months after surgery, but it may vary from 2 months to 6 month after the last surgery<sup>3-4</sup>. Basic investigations used to confirm utero-cutaneous fistula are fistulography, Hysterosalpingography, dye test (methylene blue), CT scan and MRI<sup>1-3</sup>. Hysteroscopy play an important role in visualizing uterine opening under direct vision<sup>4</sup>. Our patient had Hysterosalpingography with her and we just perform simple dye test to confirm our diagnosis. As utero-cutaneous fistula is one of the rare condition (worldwide less than 15 cases has been reported till now during last 20 years), its treatment is still challengeable<sup>13</sup>. Once the utero-cutaneous fistula is diagnosed the standard principle of treatment is dissection of complete fistulous tract, its obliteration and uterine repair combined with medical treatment<sup>12, 14-15</sup>. We managed the patient on same regime both medical (anti tuberculosis therapy) surgical treatment by fistulectomy and repair of uterine and abdominal wound.

### CONCLUSION:

This case highlighted one of the infrequent complications after cesarean section, so great emphasis should be taken on hemostasis and infection control during surgery. No compromised on sterilizations.

### REFERENCES:

- Gupta SK, Shukla VK, Varma DN, Roy SK. Uterocutaneous fistula. *Postgrad Med J* 1993;69:822-823.
- Eldem G, Turkbey B, Balas S, Akpınar E. MDCT diagnosis of uterocutaneous fistula. *European Journal of Radiology Extra*. 2008;67: 30-35. Dragoumis K, Mikos T, Zafarakas M, Assimakopoulos E,
- Stamatopoulos P, Bontis J. Endometriotic uterocutaneous fistula after cesarean section. A case report. *Gynecol Obstet Invest* 2004;57:90-92.
- 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;19:244-247.
- Dessouky DA, Bolan J. Uteroabdominal sinus following cesarean section. *Am J Obstet Gynecol* 1980;137:147-148.
- Jain V, Jain SS. Post cesarean uterocutaneous fistula – A rare clinical entity. *J Obstet Gynecol India* 2003;53:97.
- Taingson M. Utero-cutaneous Fistula Following Cesarean Section. *Niger j Surg Res* 2016;17:58-60.
- Maddah G, Fattahi AS, Rehnama A, Jamshidi ST. Uterocutaneous Fistula Following Cesarean: Successful Management of a Case. *IJMS* 2016;41:30-34.
- 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;279:225-257.
- Promsonthi P, Herabutya Y. Uterocutaneous fistula in term abdominal pregnancy. *Eur J Obstet Gynecol Reprod Biol*. 2007;132:239-41.
- Shukla D, Pandey S, Pandey LK, Shukla VK. Repair of uterocutaneous fistula. *Obstet Gynecol*. 2006;108:732-733.
- 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 Obstet Gynecol Reprod Biol*. 2003;108:103-105.
- Ruiz Arteaga JD, Valdez Murillo AN, Hernandez Trejo MC. Utero-cutaneous fistula: A case report and literature review. *Ginecol Obstet Mex*. 2012;80:95-98.
- Abasiattai AM, Ibanga GJ, Akpan A, Ume KU. Post caesarean section uterocutaneous fistula: A case report. *J Womens Health Issues* 2014;3:50-53.
- Lim PS, Shafiee MN, Ahmad S, Hashim Omar M. Utero-cutaneous fistula after caesarean section secondary to red degeneration of intramural fibroid. *Sex Reprod Health*. 2012;3:95-96.

### AUTHORS' CONTRIBUTION:

**NI:** Conception of the work, read and approved the final version of the manuscript

**LL:** Study designing, data collection and analysis. Manuscript writing and editing

**NS:** Data Analysis and project coordination

**MN:** Statistical Expertise Data Analysis and project coordination and drafting of the article