Abstract:
Background - Utero cutaneous fistula is a rare complication of uterine surgery. Although uterovesical, uterocolonic fistulae are not uncommon, Uterocutaneous fistula is a rare entity, mostly seen after Post-partum or postoperative complications. Other causes such as migration of laminaria tent and intrauterine contraceptive devices have also been described. Surgical treatment with hysterectomy and or excision of the fistulous tract has been successful. We report a case of uterocutaneous fistula developed secondary to cesarean section performed 11 months ago. Case -We report an unusual case of an uterocutaneous fistula that developed in a 27 year old para 2 live 2 lady, presented with bloody discharge during her menstrual period from a Pfannenstiel incision scar, following a repeat lower segment caesarean section. A fistulous tract leading from uterus to the abdominal incision scar was demonstrated through a fistulogram. We proceeded with excision of subcutaneous tract followed by hysterectomy.

Discussion -
Possible mechanisms of development of such a rare condition, and diagnostic and treatment options are discussed in this article.

Keyword : Uterocutaneous fistula - caesarean section complications

INTRODUCTION
A fistula is an abnormal communication between two epithelial surfaces. Fistulas are usually lined by granulation tissue but can get epithelialized. Gynecologists are familiar with fistulas involving the urinary tract and the genital tract. But uterocutaneous fistula is rare

CASE REPORT:
Mrs. Sangeetha, 27 yrs from Cheyyar belonging to socio economic status class IV, Para 2 Live 2, had undergone previous two LSCS with concurrent sterilisation, with her last child birth 11 months back, and her LMP on 18-10-2012, who is HIV- REACTIVE, has presented with c/o bleeding through LSCS scar site during menstruation for the past 7 months to our OPD on 18-10-2012
No c/o mass or cyclical pain at the scar site

**fig-1, fistulous opening in the LSCS scar**

Patient’s last child birth was 11 mths back by emergency lower segment caesarean section.

Immediate post operative period was uneventful. There was no post op wound infection. Sutures were removed on VIII POD and she was discharged on IX POD. She resumed her periods after 3 months along with bleeding from scar site. USG done at that time showed fundo pelvic adhesion and She was treated with antibiotics but continued to have the symptoms. Pt has now presented with the same complaints on the day of her periods(Fig-1). she is married since 7 yrs, living with husband, her spouse is HIV- Non Reactive.

She has a regular menstrual cycle of 30 days duration with 3 days flow. patient has two children. In her first pregnancy, patient was diagnosed as HIV REACTIVE and she delivered a male child who is 6 yrs now.

It was a full term LSCS at KGH for fetal distress with a birth weight of 3 kg and the baby is alive and healthy.

Second is a girl child, 11mths old, delivered by full term emergency LSCS with sterilisation @IOG for previous LSCS with CPD in labour with a birth weight of 3 kg and the baby is alive and healthy. Her bladder and bowel habits were normal.

**On examination, Her general condition was fair. CVS, RS and CNS were within normal limits.**

**fig-2, Fistulogram showing fistulous tract**

Her abdomen was soft with a pfannenstiel scar. Puckering was seen in the middle 3rd of the scar and a small opening(2 mm) was seen in the middle of the puckered area. Minimal bleeding was seen from the small opening. No granulation tissue was seen through the opening. On speculum examination, Cervix was high up, with bleeding through os. On vaginal examination, Cervix was pointing downwards, uterus antverted, uterine mobility was restricted, appeared to be adherent to anterior abdominal wall, and fornices were free.

**INVESTIGATONS:** Her routine blood investigations were normal.

**ULTRASOUND PELVIS** showed the following findings:

A collapsed fistulous tract is seen, overlying the scar area extending from the skin to the anterior wall of fundus. uterus was anteverted, measures 9x3.6cm, pulled
to anterior abdominal wall. the anterior margin of uterine wall was not clearly well defined and it was seen merging into the anterior abdominal wall, endometrial thickness 6.2mm. myometrial echoes were homogenous, adnexae normal

FISTULOGRAM:
During fistulogram, the plastic canula of a 18 gauge venflon was inserted into the fistulous tract and uterine sound was inserted into the uterine cavity and radiographic contrast was injected through the fistulous opening in the abdominal scar to delineate the tract and X-Ray was taken. A fistulous tract from the skin to the uterine cavity was seen.(Fig-2)

TREATMENT: We proceeded with SUBCUTANEOUS TRACT
TREATMENT: We proceeded with SUBCUTANEOUS TRACT EXCISION WITH TOTAL ABDOMINAL HYSTERECTOMY on 5-11-2012 An elliptical incision was made initially around fistulous opening and extended to both sides.(Fig-3). There was fibrosis and dense adhesion around the fistulous tract. While dissecting, there was profuse bleeding from muscle. Incision was extended vertically above in the midline due to dense adhesions and bleeding. On opening the abdomen, Dense omental adhesion to the peritoneum was seen and the same released. Rectus sheath, subcutaneous fat and skin was densely adherent to anterior wall of uterus in its entire length and the same dissected from uterus. Endometrium was seen pouting from the fundus of uterus into the fistulous tract.(Fig-4). Methylene blue dye was injected through the fundus of uterus and it was seen leaking through the endometrium lining the fistulous tract. (Fig-5). Hysterectomy was proceeded as the anterior surface of uterus was deficient of myometrium(Fig-6)
**Fig-6, specimen of uterus**

Post operative period was uneventful and the patient was discharged on 15-11-2012.

**HISTOPATHOLOGY EXAMINATION:**
Histopathology of the fistulous tract showed fibrosis with chronic inflammation. There was no evidence of tuberculosis, endometriosis, or malignancy.

**DISCUSSION:**
Fistulae involving uterus are usually uterovesical, uterocolonic. Uterocutaneous fistula is a rare entity.

A very rarely seen entity, utero-cutaneous fistula usually results from post-partum or postoperative complications.

A number of cases of utero cutaneous fistulae are reported in the literature. **Majority of these fistulae** followed classical caesarean section. The decrease in the incidence of utero cutaneous fistula may reasonably be attributed to marked decrease in the frequency of classical caesarean section in modern obstetrics. Utero vesical fistula is known to be a complication of lower segment caesarean section, curettage, difficult vaginal delivery, high delivery via forceps and secondary to migration of an intrauterine contraceptive device.

Abdominal pregnancy leading to perforation of the anterior wall of uterus, gynecological injuries and genital tuberculosis are some other risk factors that can contribute to fistula formation.

Uterocolonic fistula is seen after traumatic or spontaneous rupture of gravid uterus with impaction of a loop of bowel into the tear. Inflammatory processes such as diverticulitis, spontaneous rupture of an appendicular abscess simultaneously abscess simultaneously uterocolonic fistula, radiation therapy and obstetric trauma during curettage with perforation of the uterine wall and bowel.

On the other hand, a very rarely seen entity, uterocutaneous fistula usually results from post-partum or postoperative complications. Other causes of this condition include migration of intrauterine contraceptive devices.

Possible mechanisms described previously in the literature are multiple previous abdominal operations, long-term stay of drains, incomplete closure of uterine incision during cesarean section, inflammation and wound dehiscence.

Fistula formation secondary to endometriosis and tuberculosis were also described. Another case of uterocutaneous fistula described in the literature is secondary to an abscess caused by in situ left placenta after an abdominal pregnancy.

Jain et al 2 reported uterocutaneous fistula following lower segment cesarean section. Gupta et al 3 reported uterocutaneous fistula which developed following septic abortion induced by laminaria tent insertion in the cervix. In their case, fistula developed subsequently at the drainage site on the abdomen. In most of the reported cases infection was a complicating factor. In our case there was no postoperative wound infection following repeat caesarean section and hence the probable mechanism is not known. A case of uterocutaneous fistula that was successfully treated with gonadotropin-releasing hormone agonist administration has also been reported from Turkey.

**CONCLUSION:**
Most uterocutaneous fistulas 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.

REFERENCE:


Fig. 1 Abdominopelvic tomography scan; white arrow shows fistula tract and the external opening of fistula. Arch Gynecol Obstet (2009) 279:225–227


