

**Case Report**

**CASE REPORT: TUBOCUTANEOUS SINUS TRACK/FISTULA**

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**ABSTRACT**

Direct fistulous communication between fallopian tube and skin/subcutaneous tissue is a rare entity and not yet reported. Here we report a case of tubocutaneous fistula/sinus track developed secondary to ruptured ectopic pregnancy. Hysterosalpingography followed by ultrasound was performed to diagnose the same.

**Abbreviations:**

HSA: Husband semen analysis. HSG: Hysterosalpingography. CT: Computed tomography. MRI: Magnetic resonance imaging. PID: Pelvic inflammatory disease. TB: Tuberculosis. IBD: Inflammatory bowel disease.

**Keywords:** Tubocutaneous Fistula, Post Surgery, HSG

**INTRODUCTION**

Tubocutaneous sinus track/fistula is a very rare condition/entity. Most of the tubocutaneous/enteric fistula described are secondary to pelvic causes (infection, Crohn's disease), post surgery (caesarean section or any gynaecological pathology). There are many case reports of fistula between uterus/ fallopian tube and bowel (jejunum and large bowel i.e rectum (Arthur *et al.*, 1982) and skin. This is a rare case report of tubocutaneous sinus track/fistula which developed secondary to pelvic surgery and extended from right fallopian tube further communicating with subcutaneous tissue in right lower abdomen.

**CASE**

A 38 years old woman with previous normal delivery (8 years ago) presented to hospital with complaints of secondary infertility. She had a history of ruptured left ectopic pregnancy in January 2018 and undergone open laprotomy under the joint care of gynaecologist and surgeon. Ruptured ectopic pregnancy was confirmed on left side along with haemoperitoneum and drainage tube placed in right lower abdomen. Right sided fallopian tube and ovary were normal in morphology intraoperatively. Post surgery patient developed anaemia (for which blood transfusions were given) and was under antibiotic coverage. After complete recovery patient was discharged from hospital.

For infertility work up, patient was referred to a gynaecologist, who had advised baseline investigations, including HSA and HSG. HSG was performed using non ionic contrast agent (iohexol). The study revealed normal position and outline of uterine cavity. No filling defect was seen. Left fallopian was not visualized, post operated status. However contrast intravasation seen within pelvic veins on left side. Contrast opacification of right fallopian tube seen along its medial third. On further installation of contrast, there was opacification of thick linear track which was directed superolaterally towards right side (along the drainage site) and was communicating with right fallopian tube. Pooling of contrast was also seen at distal end of the track with partly delineation of bowel loop as well. Findings suggested fistulous track. Correlative USG revealed normal morphology of uterus and right ovary. No evidence of any right sided hydrosalpinx noted. A thick curvilinear hypoechoic track seen in right lower abdomen which was seen directed superolaterally, traversing the parities and ending within the subcutaneous tissue in right lower abdomen (below the scar site) and measuring approx. 5.3x0.6cm in size. No external opening seen. Echogenic air foci/fluid seen within the track. Patient was asymptomatic till date (i.e no fever or pain).



## DISCUSSION

The communication between the fallopian tube and skin/subcutaneous tissue is very rare which can result from previous surgery (Skulka *et al.*, 2006), medical conditions (PID, TB (Rahimi *et al.*, 2003), post irradiation, IBD, endometriosis (Dragoumis *et al.*, 2004, Pant PR, 2012). In our case the fistulous/sinus track developed along the site of drainage secondary to ruptured ectopic pregnancy. Various modalities are available for confirmation of the condition, such as- USG, HSG, Sinogram, CT & MRI. CT scan is preferred over the other investigations as it gives confirmation regarding the length of the sinus track/fistula and extra luminal component (Abasiattai *et al.*, 2014, Ogbeide *et al.*, 2010) if any. Fertility status and age of the patient are the two most important criteria to determine the treatment plan. Fistula/sinus track to fallopian tube is very rare and management part not well known/ described. To assess fistulous communication between genital tract and parities (McFarlane *et al.*, 2008) contrast study like hysterosalpingography is an useful technique. To prevent subsequent ectopic pregnancy (Ogbeide *et al.*, 2010) most studies recommend fistula resection followed by salpingectomy. Salpingectomy with en bloc resection of the fistula is recommended for those developing secondarily from IBD (Crohn's disease). Enterocutaneous and uterocutaneous fistulas though rare are been reported following caesarean section and from Crohn's (Choe *et al.*, 2008) disease as well.

## CONCLUSION

Tubocutaneous sinus track/ fistula is a rare entity and treatment of choice been resection of the track, salpingectomy and treat the underlying cause. To prevent long term complications early diagnosis and treatment is recommended for such patients.

**Funding:** No funding sources.

**Conflict of interest:** None declared.

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