Abdominal tuberculosis can cause utero-cutaneous fistula following caesarean section

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ABSTRACT

A 30-year-old lady was presented with complaints of intermittent pus like blood mixed discharge during her menstruation. This was located at the midline incision below the umbilicus, following a seven month caesarean section. Magnetic resonance imaging (MRI) showed uterocutaneous fistula. A uterocutaneous fistula is a rare complication following caesarean section. This was the first case of utero cutaneous fistula which was reported in our hospital. The following procedures were carried out; laparotomy, total abdominal hysterectomy with left salpingooophorectomy. The histopathology report showed tuberculosis. After nine months of treatment with anti-tubercular drugs the patient has recovered and has no complaints.

Keywords: caesarean section, tuberculosis, utero cutaneous fistula, wound infection

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INTRODUCTION

A fistula may be defined as an abnormal communication between two epithelium-lined surface.[1] Most uterine fistulae are between the uterus and the bowel or bladder (uterocolonic or uterovesica) due to postoperative injuries or infectious conditions.[2] Utero cutaneous fistula is a rare occurrence. It is an abnormal communication between two epithelial surfaces, the uterus and skin.[3] Most utero cutaneous fistulas develop secondary to postpartum or postoperative complications. Other possible causes of this rare occurrence are intrauterine devices and endometriosis.[4] It has also been reported following criminal abortion.[5]

CASE REPORT

A 30-year-old female was presented on 22nd May 2020 with a seven-month history of intermittent pus-like discharge mixed with blood during her menstrual period from pfannenstiel and midline (inverted T) caesarean skin scar. The caesarean was done on 17th August 2018 at term for non-progress of labour. Postoperative period was uneventful and the patient was discharged on day seven.

After one month of discharge, she had bloody discharge from the wound at day of menstruation and for the following four days which ceased spontaneously in each cycle. After two months, she experienced pus mixed discharge from the incision site. She was treated with antibiotics and daily dressing in the local health post but there was no improvement and was referred to Kathmandu.

There is no history of fever, abdominal pain, discharge per vaginum, nausea and vomiting.
Her menstrual history is non-significant, she is para two, living two, 1st is spontaneous vaginal delivery 2.5 kg female baby ten years back, second is emergency caesarean section four kg male seven months back. Her past medical, surgical history was non-significant. Her mother was treated for tuberculosis five years back.

On examination the general condition was fair, no pallor, jaundice, lymphadenopathy, clubbing and cyanosis. The vitals sign was within normal limits. On inspection, below the umbilicus puckering in its midpoint of skin incision with pus discharge from the centre opening (0.5*0.5 cm) was present. (fig 1) which was non tender. Pelvic examination revealed no abnormal findings. Rectal examination was normal. All investigations were within normal limits except magnetic resonance imaging (MRI) showed utero subcutaneous fistula.

On laparotomy, the right ovary and fallopian tubes were not visualised due to adhesions. On the fundus of the uterus showed fistulous tract of about 1*1 cm, connecting to the skin. (Fig 2) Total abdominal hysterectomy with left salpingo oophorectomy was performed. A histopathological report showed tuberculous utero-cutaneous fistula. She was discharged on day 14th and completed full course of anti-tubercular drugs for nine months for genital tuberculosis (tablet isoniazid 300 milligram per oral once a day for nine months, capsule rifampicin 150 milligram per oral once a day for nine months, tablet pyrazinamide 1500 milligram per oral once a day for two months and tablet ethambutol 700 milligram per oral once a day for nine months).

The patient was followed at three, six and ten months. She had last follow up on 22nd of march 2021.

Ten months postoperative she gained five kg, the wound was fine and no complaints.

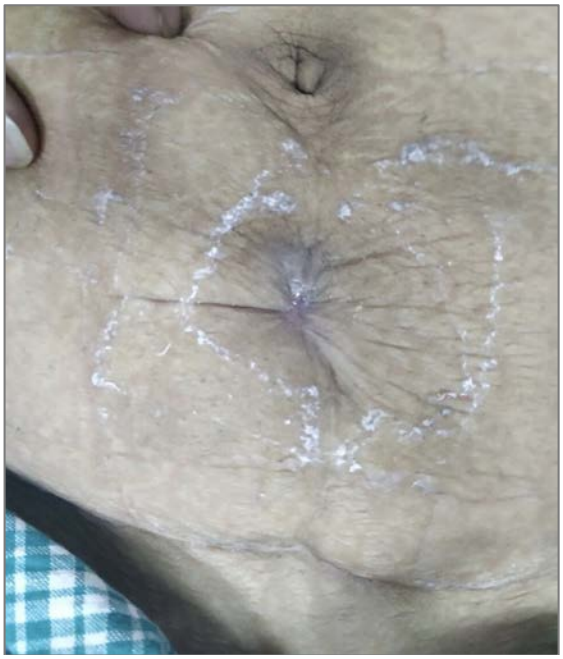

Figure 1. Puckering and fistulous opening

Figure 2. Fistulous tract in the abdominal cavity

Figure 3. Fistulous tract and its opening of the uterine fundus

DISCUSSION

An utero cutaneous fistula is a rare occurrence. It is an abnormal communication between two epithelial surfaces, the uterus and skin.[1]

Most uterine fistulae are between the uterus and the bowel or bladder (enterocolonic or uterovesical) due to postoperative injuries or infectious conditions.[2]

Most utero cutaneous fistulas develop secondary to postpartum or postoperative complications. Other possible causes of this rare occurrence are intrauterine devices and endometriosis.[4]

It has also been reported following criminal abortion.[5]

Our patient had a fistula following caesarean section, similar to the report by Dragoumis, et al.[4] in contrast, other reports have shown a similar presentation after septic abortion[3] pelvic abscess.[6] Infection with actinomycosis due to intrauterine devices.[7]

She was presented nine months after surgery, but presentation tends to vary from two months to six years the last surgery.[4,8] sometimes the patient has a clear finding like bloody discharge from the abdominal scar during the menstrual period like our case; nevertheless, other investigations may be needed in some conditions such as pelvic pain or abdominal masses or abscess. Fistulography with the injection of the contrast material through the skin opening shows the connection injection via the cervix can be helpful.[6] similar in our case we diagnose by Magnetic resonance imaging with contrast as Thubert, et al. is another modality.[8]
An uterocutaneous fistula is a rare condition (fewer than 15 cases reported in the last 20 years worldwide).[9]

Thubert, et al.[8] used medical treatment and minimally invasive surgery (laparoscopy) for the excision of a fistula tract.

Our patient was treated with different types of conservative management from the district hospital so we did total abdominal hysterectomy with left salpingo oophorectomy due to dense adhesions, where enable to excise the fistula as Okoro, et al.[5]

In our series histopathology report showed tuberculosis of fistula tract, tube and omentum.

She was treated with anti-tubercular drugs for nine months and had no problem after one year of follow up.

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