

Tubercular uterocutaneous fistula after caesarean section: A case report

Aditi Jindal ^{*}, Himanshu Chaudhary, Monika Thakur

Department of Obstetrics and Gynaecology, Indira Gandhi Medical College, Shimla, India

ARTICLE INFO

Article history:

Received 28 December 2017
Received in revised form 1 February 2018
Accepted 26 February 2018
Available online 10 March 2018

Keywords:

Uterocutaneous fistula
Tuberculosis
Lower-segment caesarean section

ABSTRACT

A 29-year-old patient had undergone an elective lower-segment caesarean section (LSCS) five months previously at a district hospital. The operation and the immediate postoperative period were uneventful. After five months she presented back with a fistulous opening. A fistulogram revealed a connection between the uterus and the skin. Fistulous tract excision was planned. Intraoperatively there was communication between the skin and the uterine cavity, with extensive necrosis of the uterine wall. The patient gave her informed consent for excision of the fistulous tract and/or total abdominal hysterectomy. During surgery, it was deemed that there was no scope for excision, so the decision was made for a total abdominal hysterectomy. Histopathological examination confirmed tuberculosis and the patient responded well to anti-tubercular drugs. This case report describes a rare presentation of tubercular uterocutaneous fistula after caesarean section.

© 2018 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

A fistula is a communication between two epithelium-lined surfaces. They are usually caused by injury or surgery, although they can also be secondary to infection or inflammation [1]. Fistulas may be congenital or acquired. Gynaecologists are familiar with vesicovaginal and rectovaginal fistulas. There have been only a few case reports of uterocutaneous fistula. The cause of a fistula in the case reported here was tuberculosis. Sinus and fistula are both known complications of tuberculosis but tuberculosis causing a uterocutaneous fistula is rare. To the best of our knowledge this is only the second case of uterocutaneous fistula secondary to tuberculosis to be reported.

1.1. Patient Information

A 29-year-old had previously undergone two caesarean sections, the second five months previously at a district general hospital. The operation and immediate postoperative period were uneventful. Three months later she noticed a purulent discharge from her wound. She was advised to take antibiotics and to dress the wound daily but despite this the discharge continued and she presented to us.

She gave a history of primary infertility of 6 years, for which she was never evaluated. On examination her vital signs were within normal limits. Abdominal examination revealed a pus-draining sinus through the Pfannenstiel scar (Fig. 1). As per speculum examination there was mucoid discharge; per vaginally, the uterus was

anteverted to 6–8-week size, with restricted mobility and appeared adherent anteriorly.

1.2. Diagnostic Assessment

Her haemoglobin was 102 g/l. Other haematological investigations were within normal limits. A cartilage-based nucleic acid amplification test (CBNAAT) of a sample of the wound discharge for diagnosis of tuberculosis, was negative. Transabdominal ultrasonography was suggestive of a pelvic fluid collection with a sinus tract. On fistulogram, the contrast opacified as a blind-ending cavity measuring 8 × 2 cm, with an irregular outline and evidence of contrast in the pelvic cavity adjacent to gut loops. Magnetic resonance imaging revealed a peripherally enhancing collection in the abdominal wall communicating with the uterus and the exterior through the abdominal wall.

1.3. Therapeutic Intervention

Laparotomy for excision of the fistulous tract was arranged. Intraoperatively, on excising the scar we found two fistulous tracts with granulation tissue around them. The first tract connected the skin to the uterine cavity, with necrosis of the anterior uterine wall. The second tract commenced in the skin and ended at another point on the skin. The patient gave informed consent for excision of the fistulous tracts and/or total abdominal hysterectomy. However, it was deemed that there was no scope for excision and to avoid the risk of sepsis the decision was made for a total abdominal hysterectomy. Both ovaries were normal. On gross examination, there was evidence of granulation tissue

^{*} Corresponding author at: 133, Park Road, Laxman Chowk, DehraDun, India.
E-mail address: aditijindal_18@yahoo.com (A. Jindal).

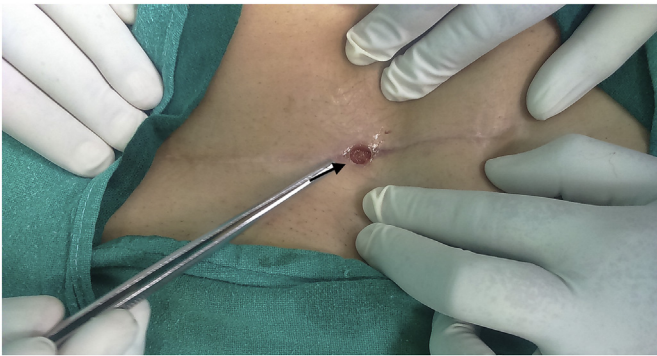


Fig. 1. Fistulous opening over the Pfannenstiel scar.

in the endometrial cavity and necrosis in the anterior uterine wall (Fig. 2). A specimen was sent for histopathological examination.

1.4. Follow-Up and Outcome

The postoperative period was uneventful. The histopathological examination revealed granulomatous inflammation suggestive of tuberculosis. She responded well to anti-tubercular therapy.

The patient was discharged on the 10th postoperative day on anti-tubercular drugs. She presented for follow-up after 6 weeks with a well healed scar.

2. Discussion

Uterocutaneous fistula is rare, with few cases reported worldwide. It is usually misdiagnosed as wound infection or an abscess. Because of its rare presentation, the approach to management is not clearly defined [2]. For the diagnosis of this condition a fistulogram or contrast-enhanced computed tomography (CECT) may be helpful. There have been reports of such fistulas being visualised through hysteroscopy or hysterosalpingography. Uterocutaneous fistulas have been reported after septic abortion [3], pelvic abscess [4], secondary abdominal pregnancy [5], uterovaginal malformation [6] and migration of an intrauterine device [7]. In most of these cases surgical management was adopted to avoid the risk of sepsis. A few cases were treated by a GnRH agonist.

In our case, uterocutaneous fistula was attributed to tuberculosis. A similar case of uterocutaneous fistula secondary to tuberculosis was reported by Pant [8]. Genital tuberculosis is usually secondary to tuberculosis elsewhere in the body. Genital tuberculosis may present in a variety of ways, with infertility being the most common. Genital tuberculosis, being paucibacillary, is difficult to diagnose. In our case tuberculosis could not be diagnosed preoperatively and was diagnosed only after histopathological examination of a hysterectomy specimen.



Fig. 2. Necrosis of the anterior uterine wall.

Contributors

Aditi Jindal, Himanshu Chaudhary and Monika Thakur were involved in patient management and making the diagnosis. Aditi Jindal wrote the manuscript while the literature search and revision of the manuscript were done by Himanshu Chaudhary. All authors read and approved the final version of the manuscript.

Conflict of Interest

The authors declare that they have no conflict of interest.

Funding

No funding was sought or secured in relation to this case report.

Consent

Patient consent was obtained.

Provenance and Peer Review

This case report was peer reviewed.

References

- [1] G. Eldem, B. Turkbey, S. Balas, et al., MDCT diagnosis of uterocutaneous fistula, *Eur. J. Radiol. Extra.* 67 (2008) (e129–e30).
- [2] T. Thubert, C. Denoiseux, E. Faivre, et al., Combined conservative surgical and medical treatment of a uterocutaneous fistula, *J. Minim. Invasive Gynecol.* 19 (2012) 244–247.
- [3] S.K. Gupta, V.K. Shukla, D.N. Varma, et al., Uterocutaneous fistula, *Postgrad. Med. J.* 69 (1993) 822–823.
- [4] M. Sonmezer, O. Sahincioglu, E. Cetinkaya, et al., Uterocutaneous fistula after surgical treatment of an incomplete abortion: methylene blue test to verify the diagnosis, *Arch. Gynecol. Obstet.* 279 (2009) 225–227.
- [5] P. Promsonthi, Y. Herabutya, Uterocutaneous fistula in term abdominal pregnancy, *Eur. J. Obstet. Gynecol. Reprod. Biol.* 132 (2007) 239–241.
- [6] D. Shukla, S. Pandey, L.K. Pandey, et al., Repair of uterocutaneous fistula, *Obstet. Gynecol.* 108 (2006) 732–733.
- [7] A. Tedeschi, G. Di Mezza, O. D'Amico, et al., A case of pelvic actinomycosis presenting as cutaneous fistula, *Eur. J. Obstet. Gynecol. Reprod. Biol.* 108 (2003) 103–105.
- [8] P.R. Pant, Uterocutaneous fistula: rare complication of caesarean section, *NJOG* 7 (3) (2012) 66–67.