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CASE REPORT

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Repeated ectopic pregnancy on the tubal stump after laparoscopic salpingectomy

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Abstract A 40-year-old woman who had undergone laparoscopic right salpingectomy because of a tubal pregnancy 10 years ago presented to our hospital with severe lower abdominal pain. Ectopic pregnancy with internal bleeding was suspected after evaluation. With laparoscopy, repeated ectopic pregnancy on the tubal stump was diagnosed and treated successfully.

Keywords Ectopic pregnancy · Tubal stump · Laparoscope · Salpingectomy

Introduction

Repeated ectopic pregnancy on the residual tubal stump after salpingectomy has been sporadically reported after traditional surgery [1, 2] but is unusual after laparoscopy. Rizos et al. [3] reported a left cornual ectopic pregnancy after laparoscopic partial salpingectomy with endo-loop ligation which was subsequently treated with laparotomy. In our case, a repeated ectopic pregnancy on the tubal stump after laparoscopic salpingectomy was described and managed with laparoscopy.

Case report

A 40-year-old, gravida 7, para 4 woman came to our emergency department because of persistent lower abdominal pain for more than 24 h. She said she had had a laparoscopic right salpingectomy 10 years ago because of a right tubal pregnancy. Missed periods for 6 weeks was also noted.

Tenderness was apparent in the bilateral adnexal region during physical examination. The urine pregnancy test gave a positive result. Trans-vagina ultrasound showed a suspicious right adnexa mass and cul-de-sac fluid but the intrauterine sac was not seen. Laparoscopic surgery was performed immediately under the impression of ruptured ectopic pregnancy.

Hemoperitoneum 550 mL was noted and the right tubal stump was distended by a 2×2 cm gestational sac with villiform contents. The villiform tissue was removed and the right tubal stump was resected (Fig. 1). Both ovaries and the left tube were normal. The patient was discharged 3 days later uneventfully. Pathologic sections of the specimen confirmed the chorionic villi and tubal tissue.

Discussion

Recurrent ectopic implantation on the residual tube after laparoscopic salpingectomy is unusual, and the sperm must reach the ovum through the stump. Because the injured proximal oviduct during laparoscopic coagulation had potential fistula formation correlated with endosalpingoblastosis [4], we supposed the sperm reached the ovum via a fistula in the tubal stump.

Although rare, the possibility of ectopic pregnancy even many years after salpingectomy, unilateral or bilateral, should be considered. In the laparoscopic surgery the tube may have had inadequate or superficial fulguration and been resected on the proximal end leaving a short stump. If the stump was less than 2 cm, endosalpingoblastosis might develop and increase the chances of subsequent fistula formation [5].

We therefore suggest that if a laparoscopic salpingectomy is performed the residual tubal stump should be not less than 2 cm and the residual tube must be completely fulgurated, especially the proximal isthmus portion of the oviduct.

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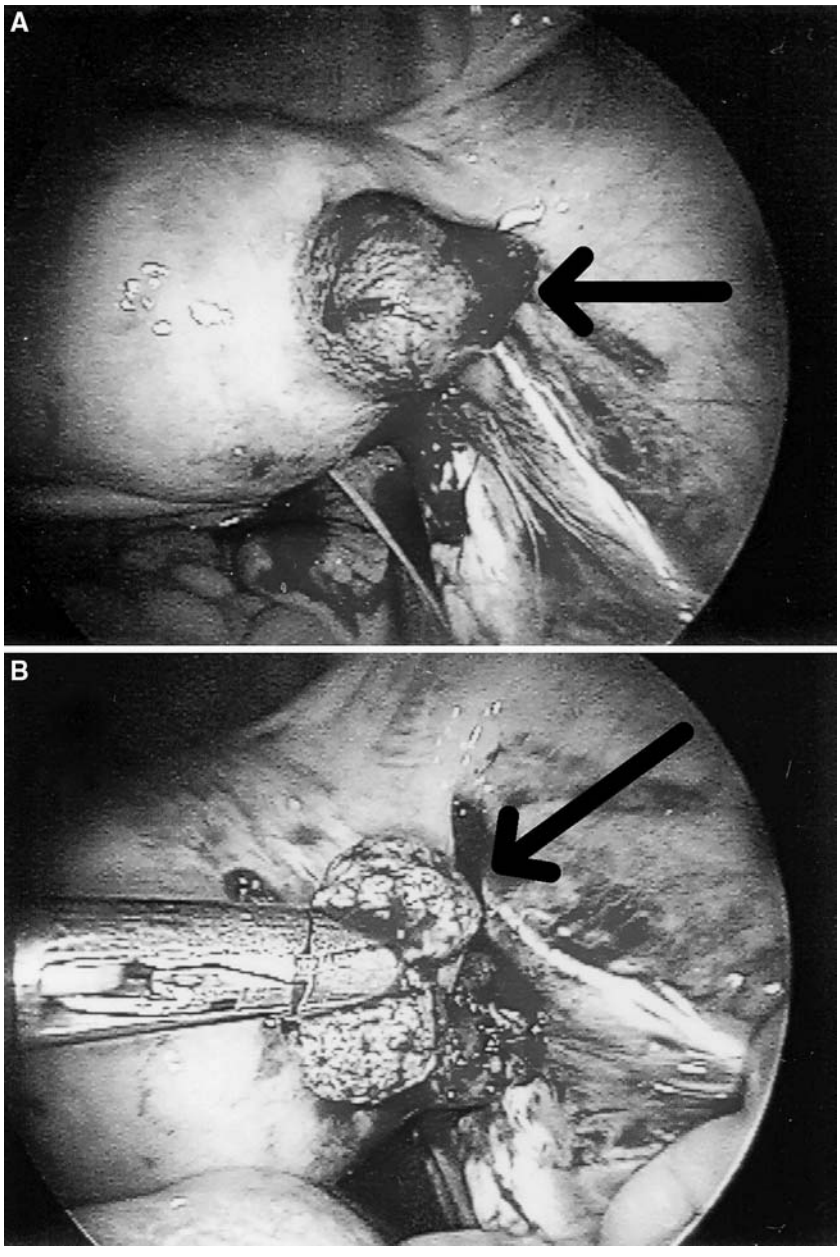

Fig. 1 **A** The right residual tubal stump pregnancy (*arrow*); **B** the mass was incised and the villiform tissue revealed (*arrow*)

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