Interstitial ectopic pregnancy in a patient with absent ipsilateral fallopian tube

To the Editor,

We read the video article titled "Treatment and management of interstitial pregnancy with laparoscopic cornual resection" by Şeker and Elçi (1) with great interest. We also manage our cases of interstitial pregnancy with the same laparoscopic technique. They have rightly mentioned the rarity and severity of interstitial pregnancy. However, its occurrence is even more rare in the absence of an ipsilateral fallopian tube. Only a few such cases are reported (2-5). Here, we report a case of interstitial pregnancy in a totally absent ipsilateral fallopian tube managed with laparoscopic cornual resection.

A 33-year-old female (gravida 4, para 1), with one previous abortion and one ectopic pregnancy, presented with a one and a half month history of amenorrhea. She underwent laparoscopic left salpingectomy 4.5 years previously for left-sided ruptured tubal ectopic pregnancy. Pelvic ultrasound revealed an empty uterine cavity, an eccentrically located gestational sac of six weeks at the left cornual end of the uterus with a surrounding thin rim of myometrium, suggestive of left interstitial ectopic pregnancy.

A diagnostic hysteroscopy was performed and a normal uterine cavity with bilateral ostia was visualized, and no gestational sac was seen. The diagnosis of interstitial ectopic and absent ipsilateral fallopian tube was confirmed on laparoscopy (Figure 1a). The left fallopian tube was absent, and bilateral ovaries and the right fallopian tube were healthy. Intramyometrial vasopressin was instilled to minimize blood loss during the procedure. The interstitial ectopic gestational sac was excised completely with a harmonic scalpel, and the defect was closed with a barbed suture in two layers (Figure 1b-e). No breach of the endometrial cavity was noted. The products of conception were removed in a bag, and the diagnosis of interstitial pregnancy was confirmed on histopathology.

The development of interstitial pregnancy in the isthmic portion after partial salpingectomy is still plausible. However, the underlying mechanism of the development of interstitial pregnancy after total salpingectomy is unclear. The possible mechanisms are:

1. Passage of spermatozoa via the healthy tube followed by Pouch of Douglas, to fertilize the ovum on the side of the absent fallopian tube;
2. Passage of spermatozoa and ovum on the side of the absent tube, fertilization and implantation in the interstitial portion of the absent tube, if patent;
3. Normal fertilization in the healthy tube, followed by migration of the fertilized embryo via ostia and implantation in the interstitial portion of the absent tube.

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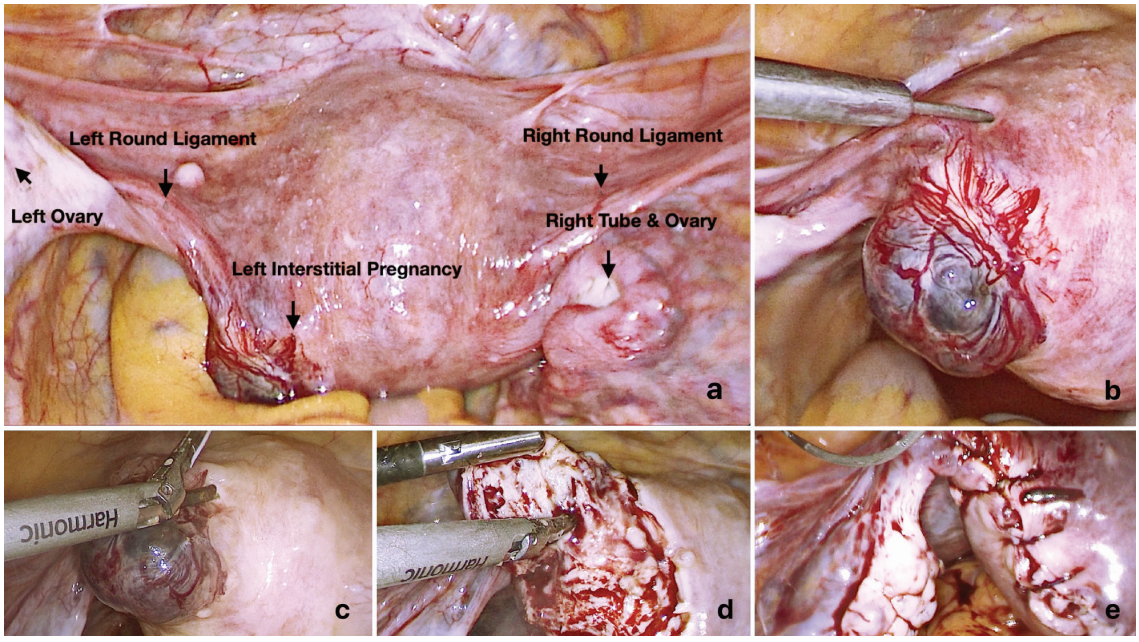

Figure 1. (a) Laparoscopic image showing left interstitial ectopic pregnancy and absent left fallopian tube; (b) intramyometrial injection of vasopressin to minimize blood loss; (c) use of harmonic scalpel to excise the gestational sac; (d) complete excision of ectopic tissue; (e) repair of the defect in two layers

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Author's Response

Dear colleague,

I read your article with great interest. The diagnosis of interstitial ectopic pregnancies is difficult and can be misdiagnosed. We are very pleased that laparoscopic treatment has become established. On the other hand, the absence of an ipsilateral fallopian tube makes the case interesting. The authors also performed a hysteroscopy before the operation. In the differential diagnosis of interstitial pregnancy, the use of hysteroscopy is a useful method in difficult cases. We expect that the use of minimally invasive methods will increase as knowledge on this topic increases.

Yours sincerely,

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