A new complication of adnexal transposition: isolated torsion of the Fallopian tube

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Abstract

A woman with known adnexal transposition for carcinoma of the cervix presented with abdominopelvic pain. The previously known complications of adnexal transposition are discussed and the first description of isolated torsion of the fallopian tube is presented.

Keywords

Adnexal transposition; torsion; complication; laparoscopy.

Case report

We report the case of a 35-year-old patient, a mother of 2, who had presented 2 years earlier with FIGO IB1 stage squamous carcinoma of the cervix. She had undergone initial pelvic lymphadenectomy with bilateral adnexal transposition via laparoscopy. After section of the utero-adnexal ligaments and proximal tubes, the ovaries and tubes were pediculised on the lumbo-ovarian ligaments. They were then moved cranially to the ipsilateral paracolic gutters, just below the iliac crests, through retroperitoneal tunnels. The ovaries were fixed to the abdominal wall with 3-0 non-absorbable monofilament nylon sutures. The operation was followed by radiotherapy and subsequent abdominal hysterectomy; the resection specimen was free of tumour. Follow-up was uneventful, and the patient developed neither clinical recurrence nor loss of ovarian function.

Two years later, she was referred to the emergency department with the sudden onset of abdominal and pelvic pain in the left flank and iliac fossa. Her pulse was 112/min, blood pressure 111/72 mmHg, temperature 38°C. Laboratory investigations revealed a leukocyte count of 10,030/mm³ and a C-reactive protein level of 249 mg/L.

Ultrasound examination of the abdomen and pelvis was non-contributory, and a computed tomography (CT) scan was performed which showed peritoneal collection and an intra-peritoneal mass with partial contrast uptake measuring 35 mm, and located anterior to the descending colon, infiltrating the adjacent peritoneal fatty tissue (Fig. 1).

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Laparoscopy revealed an isolated torsion of the left fallopian tube with haematosalpinx. The fulcrum of the torsion was the point of fixation to the abdominal wall. Laparoscopy also showed a normal left ovary and no suspicious lesion. Histopathological examination (peritoneal cytology and biopsies, left salpingectomy) revealed no sign of malignancy. There were no postoperative complications.

Discussion

Ovarian transposition was described in 1958 by McCall et al.[1]. It can be offered to premenopausal patients (younger than 40–45 years) presenting with malignant disease requiring pelvic irradiation[2,3]. The indications for the procedure include cervical cancer, lymphoma, unilateral ovarian dysgerminoma and rectal cancer. The effectiveness of ovarian transposition is linked to the patient’s age and to the distance separating the source of irradiation and the ovaries. It is therefore necessary to move the ovaries as far as possible from the radiation source while preserving maximum vascular supply. In the case of cervical cancer, the ovaries are moved to the paracolic gutters. The ovary may be pediculised on its own in order to limit the risk of malignancy to a maximum but this must be weighed against potential failure of the technique and therefore early menopause due to lack of vascularisation of the transposed ovary. Adnexal transposition is thus the preferred technique in order to preserve the tubal arcade and the ovarian blood supply. Follow-up of these transposed adnexae is difficult and the procedure may lead to specific complications, particularly ovarian insufficiency, increased frequency of functional ovarian cysts after transposition, and recurring malignancy in the form of ovarian metastasis[4,5]. To our knowledge, no case of isolated tubal torsion after adnexal transposition has been described in the literature. The reason why the fallopian tube of our patient rotated remains unclear, but we could suggest that fixation with multiples sutures of the ovary and the tube could avoid adnexal torsion.

Teaching points

- The diagnosis was not considered before performing the surgical procedure, and we report this case in order to alert gynaecologists who perform these procedures to this possible diagnosis.
- The clinical picture is non-specific, as the adnexae are inaccessible for palpation and only with imaging techniques can a possible complication be elucidated[6].
- Interpretation of the radiological imaging is made all the more difficult as the adnexae are not in their normal anatomical position. This stresses the importance of marking the ovaries with metallic clips when adnexal transposition is performed, in order to locate them on radiological examination.
- When in doubt, laparoscopy will provide the diagnosis and lead to appropriate management.
- Systematic biopsy samples should be collected during this procedure to exclude any recurrence of malignancy.
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References


