Case Report

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Ovarian tuberculosis mimicking a malignant tumour

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ABSTRACT

There has been reported increased incidence of ovarian tuberculosis in the tropics since the advent of HIV/AIDS disease. We report a case of bilateral ovarian tuberculosis associated with a single right kidney of uncertain origin in an immunocompetent 15-year-old generally healthy-looking girl. Abdominopelvic scan was equivocal about the diagnosis of the lesion as it failed to differentiate it from malignancy. Tuberculin and histopathology were necessary to confirm the diagnosis of ovarian tuberculosis. Antituberculous medical therapy successfully resolved the disease.

Key words: Child, extra-pulmonary, ovaries, ovaries, tuberculosis

INTRODUCTION

Tuberculosis is a deficiency that is increasing since the advent of HIV/AIDS with 9 million new cases and 3 million deaths in the world per year.[1] Its extra-pulmonary aspect is more and more dealt with.[2] Of these extra-pulmonary forms, the pelvic location precisely the genital has an imprecise incidence up to now.[3] We report a rare case of bilateral ovarian tuberculosis associated with the right single kidney by insisting on our diagnostic difficulties of which the anatomopathological examination is the key.

CASE REPORT

A 15 years teenager girl presented with 3 months intermittent generalised abdominal pain, fever, anorexia, progressively increasing abdominal mass and constipation but with no associated diarrhoea or vomiting. She had a history of contact with a person with chronic cough. Clinical examination showed a firm, mobile left iliac fossa mass with an ill-defined edge, extending to the periumbilical region. Digital rectal examination showed an anterior rectal mass associated with a retro rectal nodule.

Abdominopelvic ultrasonography and scandemonstrated a huge multi compartmentalised cystic mass with imprecise site of origin, minimal intraperitoneal fluid collection, multiple deep lymph node enlargement and absence of the right kidney [Figures 1 and 2]. The mass encroached on the left kidney. Sputum examination did not show any acid-fast bacteria. Tuberculin test was positive at 16 mm. Alpha-fetoprotein and beta human chorionic gonadotrophin levels were normal. Haemoglobin level was 8.6 g/dL, but there was no leucocytosis. She was nonreactive to HIV screening.

Operative findings were a left necrotic polycystic ovarian mass, dilated ipsilateral fallopian tube, multiple nodes and a minimal peritoneal reaction. The

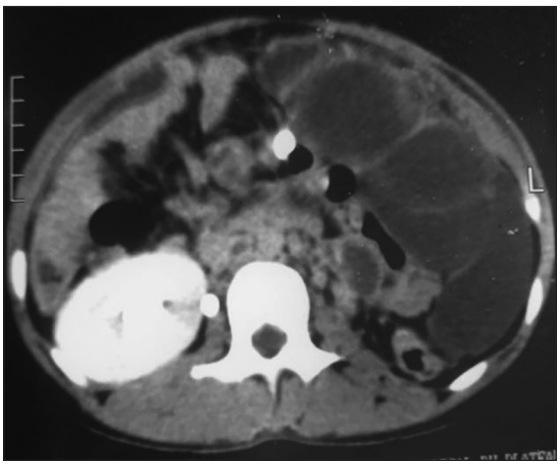

Figure 1: Scanning of the pelvic region with injection of product of contrast on the axial section. Right single kidney and left ovarian multi compartmentalised mass

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contralateral ovary was polycystic and nodular with a normal fallopian tube.

Oophorectomy was performed with a left adnexectomy and resection of the cystic pockets of the contralateral ovary.

Histological examination of the specimen performed showed the presence of epithelial giant cellular follicles and caseous necrosis [Figure 3], consistent with the diagnosis of caseofollicular tuberculosis of the ovaries.

Two years after a 6 months treatment for tuberculosis, patient was in good general condition with a radiological evidence of disappearance of the tumour in the contralateral ovary [Figures 4 and 5].

DISCUSSION

The incidence of tuberculosis is rising as a result of HIV/AIDS infection with 9 million of new cases and 3 million of deaths in the world per year.[1] The extra-pulmonary form is in the order of 15-30% of cases. The pelvic form represents 6-10% of the cases, involving the fallopian tubes, the cervical and endometrial region in that order of frequency.[4] Ovarian involvement is rarer.

The tumour form of genital tuberculosis can be found at any age, predominance in young women aged 20-30 years. The ovarian tuberculosis shared clinical, radiologic and biologic features with a malignant tumour of the ovary in many cases,[5,6] especially in the absence of abundant ascites and positivity of the tumour markers. Diagnosis in the absence of histological examination is almost impossible. The laparoscopic instead of the open surgery biopsy determines the diagnosis in more than 97% of the cases.[7]

Although the treatment is medical with a good prognosis, the future fertility in this young patient may

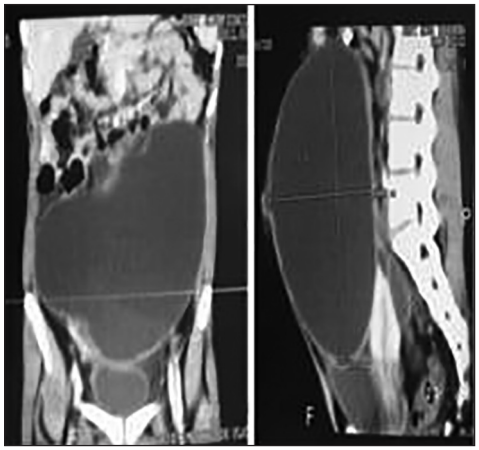

Figure 2: Scanning of the abdominopelvic in the front section: Front and profile view of the ovarian tumor

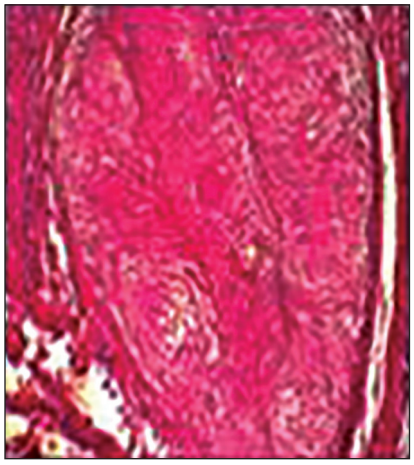

Figure 3: Histopathology: Caseo follicular tuberculosis

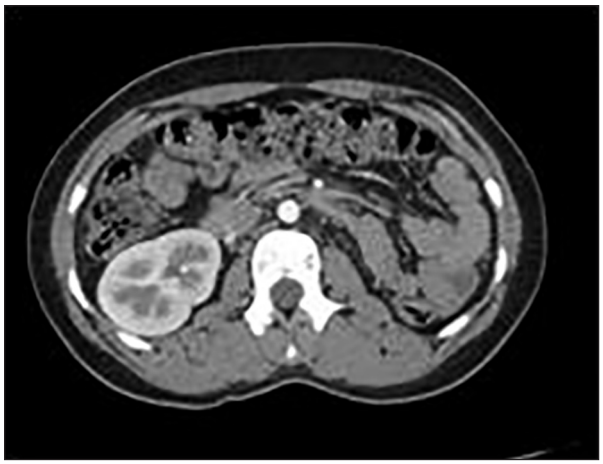

Figure 4: Control scan after antibacillary treatment: Axial section

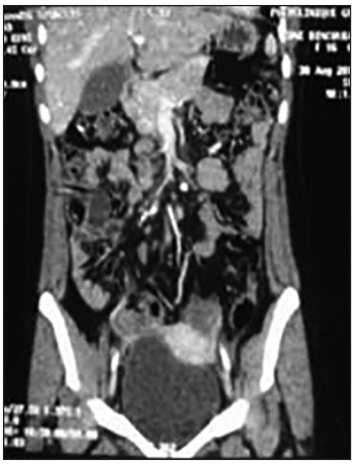

Figure 5: Control scan after antibacillary treatment: Frontal section

be compromised. Pelvic tuberculosis is responsible for tubo-ovarian infertility in more than 39% of cases.[7,8] The uniqueness of the index case is its association with a single kidney. The occurrence of a single kidney is rare, with a reported incidence of 1/1000 birth.[9] The absence of the kidney is probably of genetic origin (agenesis). The risk in this patient is the localisation of the tubercular mass on the "precious" kidney. This pseudo-tumour could cause diagnostic confusion because it could be confused with a malignant renal tumour, compound treatment decision-making in a single kidney.[9]

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