

Case Report

Infertility as a Revealing Mode of Pelvic Tuberculosis: A Case Report

Karima Benjouad^{*1}, Hassan Ouaya¹, Soumia Jellal¹, Adil Ait Errami¹, Sofia Oubah², Zouhour Samlani¹, Khadija Krati¹

¹Gastroenterology Department, Mohammed VI University Hospital, Marrakech

²Physiology Department, Faculty of Medicine and Pharmacy at Cadi Ayyad University, Marrakech

*Corresponding Author

Karima Benjouad

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Abstract: Genital tuberculosis is rare. The lack of clinical specificity makes the diagnosis difficult and often late. We report the case of a 25-year-old woman consulting for diffuse abdominal pain, abdominal distension, primary infertility and secondary amenorrhea. The diagnosis was made by pathological examination of a biopsy of the peritoneum and omentum revealing epithelioid-gigantocellular granulomas with caseous necrosis pathognomonic of tuberculosis. Tuberculosis should be mentioned and looked for in any woman with secondary amenorrhea, but above all, it should be included in the infertility assessment, particularly in countries where tuberculosis is still endemic.

Keywords: genital tuberculosis, infertility, menstruation disorders, epithelioid-gigantocellular granulomas with caseous necrosis.

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INTRODUCTION:

Extra-pulmonary forms of tuberculosis such as pelvic localization remain exceptional and affect young women in genital activity. The diagnosis of this form is often late in the face of nonspecific and insidious symptoms (Baxi, A. *et al.*, 2011) and patients most often consult for an infertility problem and menstrual disorders. We want to illustrate, from this case of pelvic tuberculosis, the seriousness of this disease and its repercussions on the fertility of young women wishing to become pregnant.

CASE REPORT:

It's about a 25-year-old woman, married for 5 years without children, with a history of recurrent genital infections resistant to usual antibiotics, with no other particular medical history. Who presented with diffuse abdominal pain progressing for 3 months associated with abdominal distension, primary infertility with secondary amenorrhea. The patient also reported a weight loss of 10kg with asthenia and anorexia and night sweats. Clinical examination found a BMI of 18kg / m², abdominal tenderness, minimal ascites with no palpable mass. The pleuropulmonary, lymph node and gynecological examination were unremarkable. Ultrasound showed minimal

unpuncturable septated ascites with some deep lymphadenopathies, the liver was normal in size and contour, the uterus was free from abnormalities, and the ovaries could not be visualized.

Laparoscopy under general anesthesia was performed and revealed a septated ascites with miliary granulations on the omentum and visceral peritoneum including that of the uterus. The ovaries are adherent to the uterus and the tubes were rigid. Histological examination showed an epithelio-gigantocellular granuloma with caseous necrosis suggestive of tuberculosis. The patient was put on antibacillary treatment according to the national protocol in force. The development after treatment is marked by weight gain and disappearance of abdominal pain with recurrence of menstruation but persistence of infertility. The patient was referred to the gynecology department for assisted procreation.

DISCUSSION:

Genital tuberculosis was first described by Morgagni in the 18th century (Tripathy, S. N., & Tripathy, S. N. 1998), it progresses silently and tends to be diagnosed accidentally during infertility tests. It can manifest as menstruation disorders, infertility and / or chronic pelvic pain. It is almost always acquired by

hematogenous spread from a non-genital source such as pulmonary or abdominal tuberculosis (Varma, T. R. 1991; Schaefer, G. 1976; BAZAZ- MALIK, G. A. U. R. I. *et al.*, 1983; Tripathy, S. N. 1990). Although direct transmission; from a sexual partner; has already been reported (Angus, B. J. *et al.*, 2001).

The most commonly affected genitals are the fallopian tubes, followed by the endometrium, ovary and cervix (Tripathy, S. N., & Tripathy, S. N. 2002). Localizations in the vulva (Varma, T. R. 1991) and in the Bartholin gland (Schaefer, G. 1976) have also been reported. Adhesions between tubes, ovaries, omentum, intestines, liver and diaphragm (Fitz-Hugh-Curtis syndrome) can be seen in tuberculosis.

Genital tuberculosis should be suspected in the presence of infertility, pelvic infections resistant to antibiotics as was the case in our patient.

Sterility is the only manifestation in 43 to 80% of cases according to the authors (Taleb Ahmed, L. *et al.*, 1989). Out of 393 cases of genital tuberculosis observed in India, 285 patients were screened for infertility, eighty for menstrual disorders, seventeen for chronic pelvic pain and eleven with other complaints, such as pelvic mass or swelling vulva. The tubal and endometrial involvement explains the sterility which is often irreversible due to the permanent consequences, despite a well-conducted treatment (Bose, M. 2011).

The diagnosis was obtained for our patient by the pathological study of biopsies taken from the peritoneal granulations.

The diagnosis of this affection is mainly histological and confirmed by the presence of epitheliogiganto-cellular granulomas with caseous necrosis. Direct examination of bacteriological samples is rarely positive given the low number of viable acid-alcohol-resistant bacilli. Other diagnostic methods also help initiate anti-tuberculosis treatment, such as culture of specimens and detection by molecular biology (Bose, M. 2011).

The outcome under treatment is almost always favorable, with a cure rate close to 100%, but the fertility result is disappointing (Ravelosoa, E. *et al.*, 2007). Tuberculosis is responsible for 5 to 10% of female infertility (Taleb Ahmed, L. *et al.*, 1989). In vitro fertilization is an alternative if the hysterosalpingography no longer shows an abnormal image of synechiae, but the risk of miscarriage is of the order of 30% and that of ectopic pregnancy 15 to 30%.

CONCLUSION:

Genital tuberculosis is often found in the context of an infertility workup or menstruation disorders. Clinical manifestations are insidious, leading to a delay in diagnosis and treatment. The definitive diagnosis is made mainly by the histological examination of a biopsy sample. In case of sterility and menstruation disorders, the search for tuberculosis should be systematic in endemic countries.

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