

Genital tuberculosis – a rare but still existing disease

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Summary

Tuberculosis remains a global health problem and the abdominal pelvic cavity is one of the common sites for extra pulmonary tubercular infections. Unlike pulmonary tuberculosis, genital tuberculosis is difficult to diagnose because there is no pathognomonic clinical feature or imaging findings for definite diagnosis. The authors present a case of genital tuberculosis (tubal and endometrial), which poses some difficulties both in the diagnosis but also in management.

Key words: Genital tuberculosis; Endometrial tuberculosis; Ultrasound; Management.

Introduction

Tuberculosis remains a global health problem and the abdominal pelvic cavity is one of the common sites for extra pulmonary tubercular infections. Unlike pulmonary tuberculosis, genital tuberculosis is difficult to diagnose because there is no pathognomonic clinical feature or imaging findings for definite diagnosis. Usually female genital tuberculosis is diagnosed while investigating patients with amenorrhea or infertility. The authors present a case of genital tuberculosis (tubal and endometrial), which poses some difficulties in its diagnosis.

Case Report

A 23-year-old patient presented to gynecologist for primary amenorrhea. General physical and gynecological examination de-

tected no abnormality, external genital organs being normal. The hormonal profile and the karyotype were normal. Ultrasound revealed normal ovaries with the presence of follicles. In the uterine cavity a round shape, 22-mm, hyperechoic well-delimited structure was present, resembling a calcified uterine myoma (Figure 1). A laparoscopically assisted hysteroscopy was performed (Figure 2a). The laparoscopy revealed adhesions in the pelvis and hysteroscopy revealed the uterine cavity completely filled with a snow-like mass (Figure 2b). The diagnosis of tuberculosis was



Figure 1. — Endovaginal ultrasound: hyperechoic image in the uterine cavity can be seen.

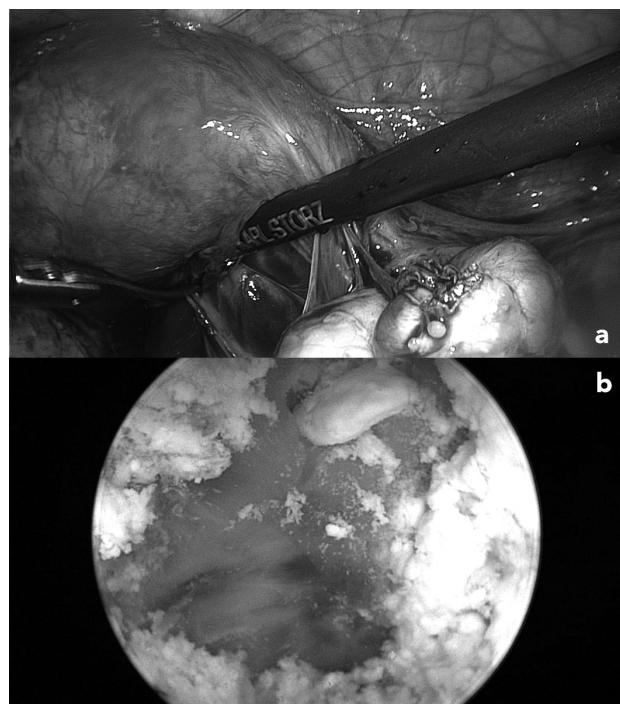


Figure 2. — a) Laparoscopy: intra-abdominal adhesions. b) Hysteroscopic image of the uterine cavity: white snow-like mass occupy the entire cavity.

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suspected and culture of the endometrium was positive for mycobacterium tuberculosis. The patient received antituberculosis treatment. A uterine IUD was inserted in the uterine cavity. The patient had menstrual bleeding for eight months and thereafter amenorrhea appeared again. A new hysteroscopy was scheduled and clinical images of tuberculosis were observed again. After hysteroscopy, an anti-adhesion gel with hyaluronic acid was utilized in the uterine cavity.

Discussion

Pelvic tuberculosis can be caused by reactivation of the organism (spread via blood stream, lymphatic system or direct from the involved abdominal organs such as intestines) or rarely by sexual transmission [1]. Usually genital tuberculosis involves fallopian tubes (95-100%), endometrium (50-60%), and ovaries (20-30%) [2]. Very rarely uterine cervix or vulvar region can be affected [3, 4]. Female genital tuberculosis is an important cause of infertility, amenorrhea or hypomenorrhea, especially in developing countries where tuberculosis is endemic [5]. Infertility is typically explained by fallopian tubes and a blockage of ovum transport either and/or pathology in the endometrium. [3] Hypomenorrhea or amenorrhea are caused by intrauterine adhesions and the degree of menstrual disorder is in direct correlation with the extent of the adhesions. Other symptoms that could rarely appear in genital tuberculosis are pelvic pain, ascites, and pelvic mass, and in these cases, the disease can be easily confused with ovarian cancer or peritoneal carcinomatosis. CA-125 level, a tumor marker for ovarian cancer may also increase in tuberculosis [1]. Laparoscopy with peritoneal biopsy provide rapid and correct diagnosis of abdominal tuberculosis and should be performed early in suspected cases. For endometrial tuberculosis, hysteroscopy is extremely useful and may reveal various forms of intrauterine adhesions from mild adhesions to severe one (Asherman syndrome). In the present case, hysteroscopy revealed a particular aspect: the entire cavity filled with white, snow-like caseum. Once the disease is diagnosed, anti-tubercular treatment should be initiated. Unfortunately, even if the tuberculostatic treatment was initiated after several months amenorrhea reappeared. The authors performed a second-look hysteroscopy and images suggested endometrial tuberculosis. A local anti-adhesion gel with hyaluronic acid proved to be efficient.

Tuberculosis should be always being considered, while investigating patients with infertility and amenorrhea, es-

pecially in the regions that are endemic for the disease. However because of the large mobility of the population nowadays, even in well-developed countries, we should bear in mind the possibility of genital tuberculosis when confronted with infertility and primary or secondary amenorrhea.

The present case demonstrates that even diagnosed, sometimes endometrial tuberculosis can be difficult to be managed. Although the correct medical treatment was applied, the uterine cavity proved to be affected by the disease. This observation is particularly important in young women with desire to conceive. It is a fact that genital tuberculosis could lead to female infertility. In cases with endometrial tuberculosis, even IVF treatments have very small chances for success.

Conclusion

Although a rare disease in well-developed countries, genital tuberculosis still represents a problem in geographical areas where this infectious disease is endemic. Sometimes genital tuberculosis can be difficult to be diagnosed because of particular forms of the disease. Nevertheless an early diagnosis is mandatory in order to enhance the chances for restoring fertility.

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