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Case Report

Genital Tuberculosis: A Common Disease Revisited

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Abstract

Tuberculosis is a common global disease, with a high prevalence rate in India. Genital tuberculosis in females affects fallopian tubes, uterine endometrium, ovaries, cervix, uterine myometrium, and vagina/vulva. It can lead to infertility, menstrual irregularity, and pregnancy loss in women. Here, we present a case of 52 years old, female patient who presented with chronic pain abdomen and post-menopausal bleed. Patient underwent hysterectomy. Although gross appearance of endometrium and cervix did not show significant pathology, microscopy revealed the granulomatous lesion in endometrium, cervix, and fallopian tubes.

Key words: Cervix, Common, Endometrium, Fallopian tubes, Genital, Tuberculosis

INTRODUCTION

Tuberculosis is an infectious disease caused by Mycobacterium tuberculosis, which is a major public health problem.[1] Tuberculosis can be categorized into pulmonary and extrapulmonary forms based on the affected organs. Female genital tuberculosis accounts 5–24% in India, 5% in world.[2] Most commonly secondary to pulmonary tuberculosis, rarely it has a primary etiology.[3] Tuberculosis is as an important etiological factor for infertility in countries with high prevalence of tuberculosis.[4]

CASE DETAILS

A 52 years old woman, nulligravida with post-menopausal status of 6 years presented to gynecology department with chronic pain abdomen and post-menopausal bleed. On examination: Per abdomen was soft, non-tender. Per vaginal examination - cervix was firm and bled on touch and bilateral fornices were free and non-tender. Ultrasound scan showed a subserosal fibroid with left adnexal mass, probably a neoplastic etiology and minimal pleural effusion. Hysterectomy was performed. We at histopathology unit received the following specimen of uterus cervix with bilateral fallopian tubes.

On gross examination, uterus was atrophied with hypertrophied cervix [Figure 1]. External surface of uterus noted two subserosal fibroid. External surface and cut surface of cervix was unremarkable. Cut surface of fallopian tube showed lumen occluded with gray-white material [Figure 2].

Microscopic examination revealed, a thinned walled endometrium with few endometrial glands lined by columnar epithelium, occasional glands were dilated and lined by flattened epithelium. Stroma was compact to spindly with foci of epithelioid granuloma with lymphocytes and langhan's types of giant cells [Figure 3]. Endocervix showed endocervical glands lined by columnar epithelium, ectocervix showed foci of ulceration with numerous well-formed non-caseating epithelioid granulomas, lymphocytes, and langhan's types of giant cells [Figure 4]. Bilateral fallopian tubes show obliteration of lumen by necrotic material [Figure 5].

A diagnosis of genital tuberculosis was made on the basis of histopathological examination.

DISCUSSION

In India, tuberculosis is the major cause of infertility especially in reproductive age group, commonly affecting the fallopian tubes.[5] The majority of patients are

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Figure 1: Uterus cervix with bilateral fallopian tube

Figure 2: Fallopian tube with gray-white material

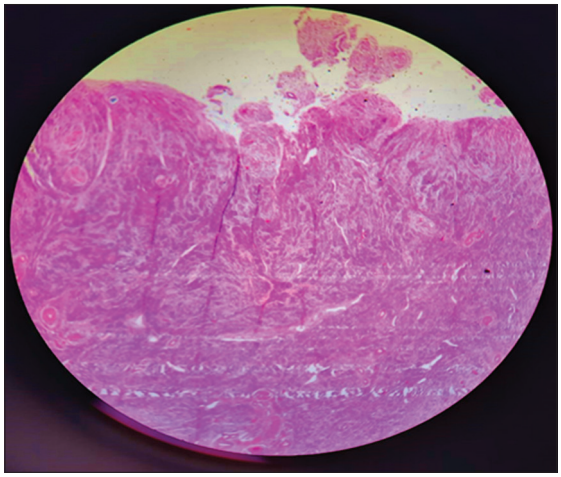

Figure 3: Section from endometrium showing multinucleated giant cell

asymptomatic, but patients also have the following symptoms such as oligomenorrhagia, menorrhagia, dysmenorrhea, dyspareunia, abnormal vaginal discharge, and chronic pain abdomen.[6] Frequent sites of involvement

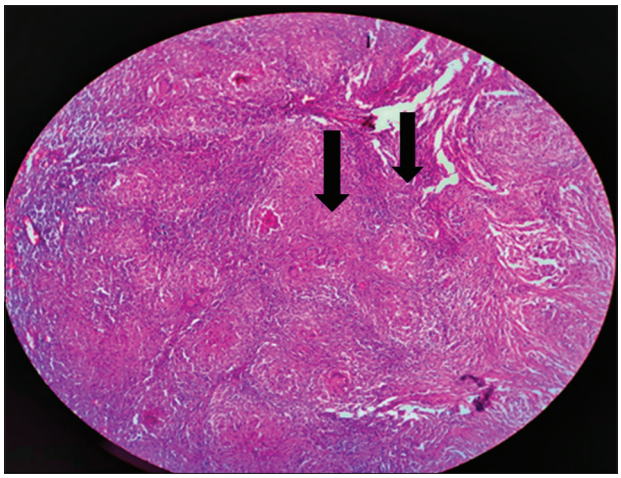

Figure 4: Section from cervix showing well-formed granulomas

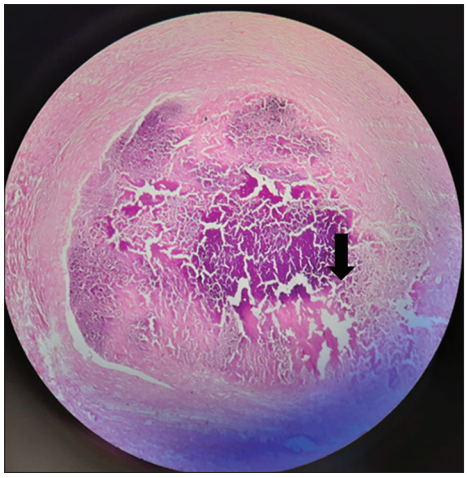

Figure 5: Fallopian tube showing necrotic material

are fallopian tubes (95–100%), endometrium (50–60%), ovaries (30%), cervix (5–15%), myometrium (2.5%), and vagina/vulva (1%).[7] The diagnosis is usually made on the basis of histopathological examination and serological diagnosis is done by enzyme-linked immunosorbent assay and polymerase chain reaction.

CONCLUSION

Diagnosis of tuberculosis is difficult clinically as most of the patients are asymptomatic, and it can mimic carcinoma in post-menopausal age groups.[8] Tuberculosis must be included in differential diagnosis, usually from the areas where it is commonly seen.

In this scenario, the clinical investigation tools such as ultrasound, computed tomography, dilation and curettage, hysterosalphingography, colposcopy, and biopsies from endometrium/cervix can play a significant role in the preliminary diagnosis. Histopathological examination with

the routine stains of hematoxylin and eosin can provide us with a definitive diagnosis.[9] Follow-up of the patient for any other organ/tissue involvement must be done. Early diagnosis can lead to early treatment.[10]

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