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Case Report

A rare case of TB cervix-cause of secondary amenorrhoea and primary infertility: case report

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ABSTRACT

A 23 years old female presented with chief complaints of 11/2 years of primary infertility and postcoital bleeding for 7 months. On examination cervix was unhealthy and was bleeding on touch. A provisional diagnosis of chronic cervicitis was made. However, histopathology of the cervical biopsy revealed granulomatous lesion suggestive of tuberculosis. The patient responded to anti-tuberculosis therapy. In a young patient, with suspicious cervical lesion and history of contact bleeding, a benign pathology like cervical tuberculosis is extremely low. The outlook is good with full recovery, if the treatment is carried out properly and promptly.

Keywords: Cervix, Contact bleeding, Infertility, Tuberculosis

INTRODUCTION

Tuberculosis of the cervix is a rare disease and accounts for 0.1-0.65% of all cases of tuberculosis and 5-24% of genital tract tuberculosis.[1,2] Cervical tuberculosis is more common in third world countries like Africa, Asia. Genital tuberculosis is usually secondary to extragenital tuberculosis, most commonly from lungs. Spread can be either haematogenous, lymphatic or by direct extension. A 90% of affected women are of reproductive age, suggesting hormonal influence.[3]

Most common affected sites are endometrium, fallopian tubes and ovaries. Tuberculosis of cervix is a rare form of genitourinary tuberculosis with varied presentation. Patients with genital tuberculosis may present with infertility, menstrual disturbances, pain abdomen and offensive discharge per vagina. Lesion on cervix can be either exophytic, ulcerative or endocervical polypoidal growth.

CASE REPORT

A 23-year-old nulligravida with history of 1 year 6 months infertility came with complaints of postcoital bleeding for 7 months. Previously, patient had regular menstrual cycles. There is no history of chronic cough or loss of weight. No history of immunosuppressive diseases or use of immunosuppressive medication. No past, personal or family history of tuberculosis. No history of smoking and other addictions.

General physical examination was normal with no palpable lymphnodes. On abdominal examination no significant findings were noted. On inspection, vulva was grossly normal. On speculum examination, cervix was unhealthy, hypertrophied with ulcerative growth on anterior lip of cervix (Figure 1). Biopsy was taken from ulcerative growth. On bimanual examination uterus was anteverted, normal size, mobile, no palpable adnexal masses and ulcerative growth on cervix was noted. Per rectal examination was normal. ESR was rised and other

lab investigations were normal. Chest radiograph was normal and sputum analysis for AFB was negative. Pap smear suggestive of no intraepithelial lesions. Histopathology showed granulomatous endocervicitis suggestive of tuberculosis of cervix (Figure 2).

Figure 1: Ulcerative growth on the anterior lip of cervix.

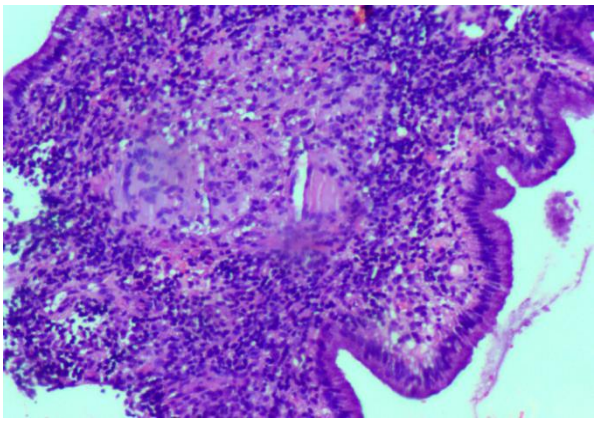

Figure 2: Caseating necrosis with giant cells with epitheloid cells in the mantle of lymphocytes.

Patient was refered to chest physician and was started on Anti tuberculous treatment for 6 months and was advised barrier contraception. After completion of ATT for 6 months, patient was relieved by postcoital bleeding. On speculum examination cervix was healthy and repeat cervical biopsy was done showing normal endocervical glands. Endometrial pippelle sampling was done and was histologically normal. Later, patient presented with 2 months of amenorrhoea and urine pregnancy test was negative. Patient was started on progesterone and high dose combined oral contraceptive pills, for withdrawal bleeding, but patient did not respond. Pelvic scan was done suggestive of possibility of stricture in the lower uterine cavity. Hysteroscopy was done revealing synechiae (Figure 3) and bilateral cornual block. Hysteroscopic guided synechiolysis was done and intrauterine copper T was inserted and was started on oral contraceptives. Patient was referred to infertility centre for further management.

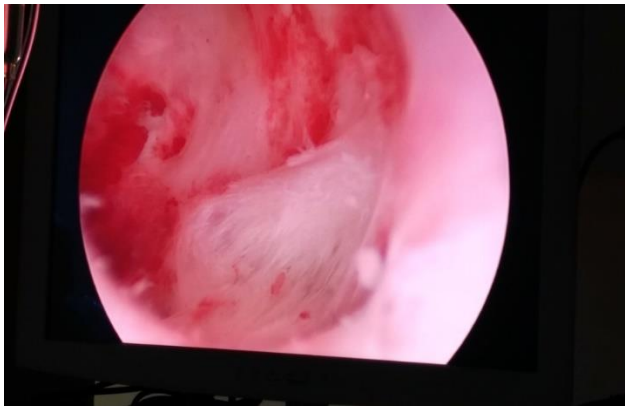

Figure 3: Hysteroscopy showing uterine synechiae.

DISCUSSION

TB of genital tract is a rare disease. Pelvic TB is caused by Mycobacterium tuberculosis or Bovis. Pelvic organs are usually affected secondarily, lungs being primary focus of infection, most commonly by haematogenous route. Cervix can be infected from primary focus by haematogenous spread or by lymphatic spread or by direct extension.[1] Rarely, cervical TB can be primary focus introduced from partner with tuberculous epididymitis or genitourinary diseases. Sputum of affected partner used as lubricant during coitus, may also be route of transmission.[4]

In genitourinary tuberculosis, fallopian tubes (95-100%), endometrium (50-60%) and ovaries (20-30%) are commonly affected. Vulva, vagina and cervix are rarely affected. Cervix is resistant to tuberculous infection because of stratified squamous epithelium of ectocervix and antibacterial action of cervical mucus.

A 50% of genitourinary tuberculosis patients are asymptomatic. Symptomatic tuberculosis usually presents with menstrual irregualrities, abdominal pain and constitutional symptoms.[3,4] 80% of cases of genitourinary tuberculosis occurs in reproductive age group suggestive of hormonal dependence of infection.[4]

Macroscopic findings of cervical tuberculosis may be papillary or vegetative growths on cervix, military appearance or ulceration simulating carcinoma cervix.[3] Microscopically caseating granulomas are present. Diagnosis of cervical tuberculosis is usually made by histological examination of cervical biopsy showing caseating granuloma. Isolation of mycobacterium is a gold standard for diagnosis but 1/3rd of cases are culture negative. Best time for endometrial examination is premenstrual. Staining for acid fast bacilli was not found to be very useful.[5] Therefore presence of typical granulomata is sufficient for diagnosis, if other causes of granulomatous cervicitis were excluded.[3,6] Mantoux test and ESR are nonspecific. A HSG in some cases reveals typical calcification, rigid lead pipe tubes with beaded appearance or hydrosalpinx and adhesions. Differential

diagnosis for granulomatous disease of cervix include amoebiasis, schistosomiasis, brucellosis, tularaemia, sarcoidosis and foreign body reaction. Cervix should respond to 6 months of standard anti tuberculous therapy.[7] Regular followup of patients is necessary for histopathological examination of serial biopsy specimens.

Future fertility is poor (5%) even after treatment due to endometrial and tubal involvement (tubal block) at presentation and healing by fibrosis.[8,9] Incidence of tuberculosis has increased due to HIV pandemic. There should be high index of suspicion of tuberculosis in women with an abnormal cervical appearance especially in areas where incidence of tuberculosis and HIV is high.

CONCLUSION

A young patient with history of contact bleeding and suspicious cervical lesion, a benign pathology like cervical tuberculosis should be thought rather than malignancy.

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