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CASE REPORT

Tuberculosis of Uterus: A Case Report

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Abstract

Female Genital Tract Tuberculosis is caused by *Mycobacterium tuberculosis*, being usually secondary to tuberculosis of the lungs. In Female Genital Tract Tuberculosis, fallopian tubes are affected in 90 percent woman, whereas uterine endometrium is affected in 70 percent and ovaries in about 20 percent. HIV induced immunosuppresion paves the way for several infections, tuberculosis being very common. This is a case of genital tuberculosis which was diagnosed after hysterectomy by histopathological examination in HIV patient. To describe an uncommon case of female genital tract tuberculosis diagnosed by histopathology. Total abdominal hysterectomy specimen was received. Brief clinical history was taken and clinical examination was done. Histopathological examination of hematoxylin & eosin stained sections was done. AFB staining was done to look for bacilli. Sections studied from endometrium and cervix revealed granulomas comprised of epithelioid cells, langhan's type of giant cells. Testing for Tuberculosis & HIV should be undertaken because these are the infections which can affect any organ in the body. In patients with extra pulmonary tuberculosis, early institution of therapy & close clinical monitoring are keys to timely diagnosis and treatment of such co-infections.

Keywords: Tuberculosis; HIV; Female genital tract

Introduction

Female genital tract tuberculosis is caused by *Mycobacterium tuberculosis* being usually secondary to tuberculosis of lung. Female genital tract tuberculosis was first reported by Morgagni in 1744 on autopsy of young women who died of tubercular peritonitis[(1)]. 27.1 percent cases show extra pulmonary tuberculosis out of which 9 percent cases are positive for genital tuberculosis[(1)].

HIV is immunodeficiency virus which targets CD4 T cells resulting in their depletion & dysfunction. Macrophage function is also abnormal because of direct infection & lack of macrophage activation factors produced by CD4 T cells thus facilitating rapid progression of tuberculosis[(2)].

Objective

To describe an uncommon case of female genital tract tuberculosis diagnosed by histopathology.

Case report

45 years old female HIV positive patient was admitted in the Department of OBG with history of pain abdomen, fever, vaginal discharge. Investigations revealed anaemia, raised leucocytes & elevated ESR. USG report shows uterus bulky in size measuring 90x63x59mm, endometrial thickness 10mm, ovaries & adnexa appears normal. Patient underwent subtotal abdominal hysterectomy and specimen was sent for histopathological examination.

Gross findings

Uterus and cervix measures11x6x5cms. External surface shows grayish white well circumscribed tubercles measuring 0.2cms. No adhesions were noted. Cut section shows well circumscribed multiple tubercles. (Figure 1)

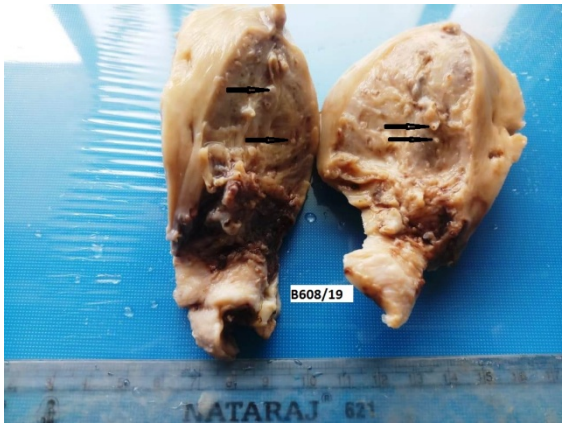

Fig 1. Endometrium showing tubercles on the surface of uterus

Microscopic appearance

Multiple sections studied from endometrium shows round to tubular glands of varying size lined by single to stratified cuboidal epithelium with compact stroma showing caseating granulomas comprising of epithelioid cells, langhan's type of giant cells and lymphocytes. Myometrium shows multiple foci of endometrial glands and stroma. (Figure 2)

Cervix shows ectocervix & endocervix with caseating granulomas in stroma. (Figure 3)

Special stain

ZN staining was done which demonstrated slender rod like acid fast bacilli (Figure 4)

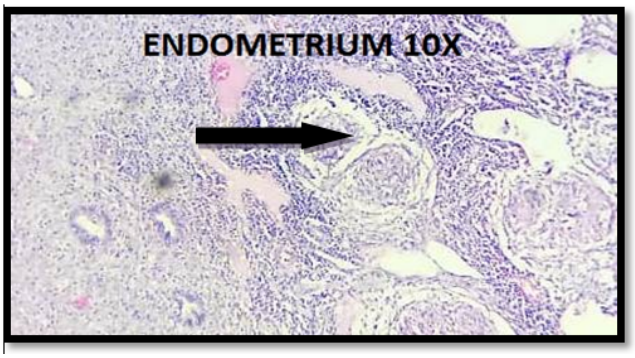

Fig 2. H & E, 10X, and Endometrium showing granulomas with langhan's giant cells

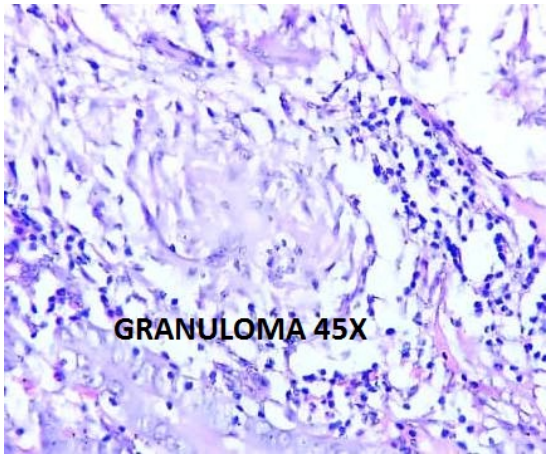

Fig 3. H & E, 40 X, Cervix

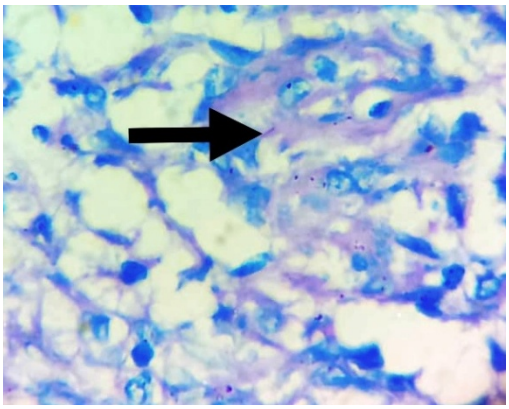

Fig 4. ZN Stain 100X showing Acid fast bacilli

Result

Diagnosis of female genital tract tuberculosis was made.

Discussion

Incidence of tuberculosis in countries with high HIV prevalence has increased 5 fold[(2)]. Genital tuberculosis can occur in any age group, majority of them being in reproductive age group, 75% in 20 – 45 yrs of age & post-menopausal women account for 7-11%[(3)].

Genital tuberculosis occurs mostly secondary to pulmonary tuberculosis, haematogeneous route being the most common mode of spread.

To a current estimate, nearly 5.1 million persons in India are infected with HIV & approximately 60% of these are also infected with tuberculosis. Also, 5.2% of TB patients between 15-49 yrs are HIV positive. Considering this increase in number of patients co-infected, testing for HIV is recommended for all patients of tuberculosis[(4)].

Conclusion

What appears physiological could be hiding a dense pathology inside. So even at the slightest suspicion, testing for tuberculosis and HIV should be undertaken.

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