Endometrial and Cervical Tuberculosis, a Rare Case Report with Cytological and Histological Correlation.

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Abstract: Tuberculosis endometrium and cervix is a rare unusual event accounting for 0.1-0.65 % of all cases of Tuberculosis1,8. A 30 year old nulliparous woman with complaints of foul smelling discharge and oligomenorrhea for 3 months was suspected with cervical carcinoma. Diagnosis of cervical and endometrial Tuberculosis was made by cervical pap smear and was confirmed by cervical and endometrial histopathological study.

Keywords: Tuberculosis, cervical pap smear

I. Introduction

This case is presented due to its rarity with an incidence of (0.1-0.65%) of all Tuberculosis cases and 5% in female genital tract, which in almost all cases are secondary to extragenital tuberculosis1. Spread to cervix is either by hematogenous, lymphatic dissemination or by direct extension.2 The lesion can be exophytic, ulcerative, although interstitial & endocervical polypoid form may also occur3. This case is presented due its rarity and which was misinterpreted clinically as cervical malignancy.

II. Case Report

A 30 yr old nulliparous lady was referred to our hospital with history of primary infertility and 3 months amenorrhea. There was no history of fever or weight loss. No previous history of Tuberculosis in self or any family member was elicited. On examination patient had no lymphadenopathy. Systemic examination was otherwise unremarkable. Speculum examination showed abnormal looking cervix with an irregular cervical mass mimicking carcinoma. Bimanual examination showed the presence of a non tender mass on cervix with foul smelling discharge. No adnexal mass or fornical tenderness. A clinical diagnosis of carcinoma cervix was made. Lab investigations: revealed raised ESR (100 mm/hr). Pap smear showed multiple epithelioid cells and giant cells in clusters. Both acute and chronic inflammatory cells infiltration was seen. Staining for acid fast bacilli was positive. A diagnosis of granulomatous cervicitis of Tubercular origin was made with an advice for biopsy. Endometrial and cervical biopsies were done for confirmation.

2.1 Gross

Macroscopic examination: a friable greyish white endometrial tissue measuring (2x1.5x1 cm) and multiple bits of greyish white cervical tissue measuring (1.5 x 1 cm.) was received for histopathological study. Microscopic examination: showed endometrial tissues with extensive caseous necrosis along with multiple epithelioid granulomas containing multiple Langhan type of giant cells. Sections from the cervix also showed epithelioid granulomas of various sizes containing multiple Langhan type of giant cells. Staining for acid fast bacilli was positive in biopsy specimens.

III. Discussion

Tuberculosis of upper genital tract is an unusual event (0.1-0.65%) of all Tuberculosis.4 Genitourinary Tuberculosis is more prevalent in developing countries.5 Fallopian tubes and Endometrium are commonly involved6. Cervix is relatively resistant to Tuberculosis infection because the stratified squamous epithelium of ectocervix prevents bacterial penetration. In addition cervical mucus is known to have antibacterial action.7 Organs are infected from a primary focus, usually lungs, by hematogenous spread, lymphatic spread or by direct extension from contiguous organs8. In rare cases it can be a primary infection, introduced by a partner with Tuberculous Epididymitis.9 50% of patients remain asymptomatic. Symptomatic patients present with infertility, amenorrhea, abnormal bleeding, menstrual irregularities, abdominal pain and constitutional
symptoms. Diagnosis of endometrial and cervical tuberculosis is made by cervical pap smear and histological examination of endometrial and cervical biopsy specimen. New modalities and diagnostic tests could be considered such as serodiagnosis by ELISA, PCR for rapid detection. Presence of granuloma is considered sufficient to make a diagnosis. Other diseases causing granulomatous cervicitis like schistosomiasis, brucellosis, tularemia, sarcoidosis, foreign body reaction should be considered in differential diagnosis. Patients respond to 6-9 months of standard ATP. Regular follow up is necessary to examine the lesion to assess response to treatment which can be assessed by histopathological examination of serial biopsies.

IV. Conclusion

The incidence of TB has increased recently and is partly attributable to HIV pandemic. There should be a high index of suspicion of TB in women with an abnormal cervical appearance especially from areas where HIV and TB are common.

References

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