Case Report:
An Unusual Case of Cervical Tuberculosis

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Abstract:
Tuberculosis of the cervix is a rare disease and accounts to 0.1 – 0.65% of all cases of tuberculosis and 5 – 24 % of genital tract tuberculosis. We present an unusual case of 40 years old lady who presented with irregular bleeding per vagina and foul smelling white discharge for 1 year. Per speculum examination revealed an unhealthy looking cervix which bled on touch. A clinical diagnosis of carcinoma cervix was made. However, cervix biopsy revealed granulomatous lesion suggestive of tuberculosis. The patient responded to antitubercular therapy. In women with abnormal cervical appearance, there should be high index of suspicion of tuberculosis cervix, especially from areas where tuberculosis is common as it can be easily treated.

Key Words: Tuberculosis, Cervix

Introduction:
Tuberculosis is highly prevalent in India. However, genitourinary tuberculosis accounts for a minority of cases in young women of child bearing age and may involve fallopian tubes, endometrium, and ovaries. Tuberculosis of cervix is a rare disease which usually is not suspected clinically and can mimic malignancy in post menopausal females.

Case Report:
A 40 years old lady (Para 1 living 1), manual labourer by occupation, presented with chief complaint of irregular bleeding and foul smelling discharge per vagina for one year. There was history of recent weight loss. There was no history of genital malignancy in the past or in the family. Patient did not have any other significant medical or surgical illness in the past. General physical examination was essentially normal an dthere was no lymphadenopathy. Per speculum examination revealed an unhealthy looking cervix which was grossly erythematous, congested and bled on touch. (Fig. 1) On bimanual examination, uterus was anteverted and normal in size. Fornices were free. Per rectal examination was normal. Cervical smear study revealed extensive inflammation without any evidence of intraepithelial lesion or malignancy.

Figure 1: Photograph showing unhealthy erythematous, congested cervix.

Microscopic examination of the cervical biopsy revealed extensive epithelioid cell granulomas with Langhans type of giant cells and focal necrosis (Figure 2).

Figure 2: Photomicrograph showing endocervical glands and the stroma showing epithelioid cell granulomas with Langhans type of giant cells.
Endometrial biopsy was normal. Chest radiograph was normal and sputum and urine samples were negative for AFB. HIV I, II were negative. Patient was started on antitubercular treatment, CAT III Under RNTCP and was discharged. The patient is under regular follow-up and is doing fine after 6 months.

Discussion:
Tuberculosis of the cervix is rare and accounts for 0.1-0.65% of all cases of tuberculosis (TB) and 5-24% of genital tract TB. Symptomatic genital tract TB usually presents with abnormal vaginal bleeding, menstrual irregularities, abdominal pain, and constitutional symptoms. Tuberculosis of cervix can present with various ways and may at times even mimic malignancy. Pelvic organs are infected from a primary focus, usually the chest, by haematogenous spread. Lymphatic spread or direct infection is the mode of involvement of cervix. Often the primary lesion would be healed at presentation. Rarely cervical TB can be a primary infection introduced by a partner with tuberculous epididymitis or other genitourinary disease. Chowdhury has suggested that sputum, used as a sexual lubricant, may also be a route of transmission. As more than 80% of cases occur in the reproductive age group, the possibility of hormonal dependence of infection is also considered. The macroscopic findings of cervical TB can vary. There may be a hypertrophy of the cervix or show friable papillary or vegetative growth with or without ulceration, thus simulating invasive cervical cancer.

The diagnosis of cervical TB is usually made by histological examination of a cervical punch biopsy specimen. Microscopically there will be an extensive chronic inflammation with the presence of caseating or noncaseating granulomas in most of the cases. Staining with AFB may not reveal the organisms. A retrospective review found that ulcerative lesions usually are auramine negative. Isolation of the mycobacterium is the gold standard for diagnosis. Up to one third of patients can be culture negative. Molecular probes may be more sensitive than culture but also have reduced specificity. Hence presence of granulomas is considered sufficient enough to make a diagnosis after excluding other causes of granulomatous cervicitis.

The other causes of granulomatous inflammation of the cervix should be ruled out by performing ancillary investigations for Chlamydia trachomatis and Neisseria gonorrhoea. The other rare causes of granulomatous cervicitis are schistosoma, brucella, tularemia, sarcoidosis or a foreign body reaction. Generally the patients respond to 6 months of standard antitubercular therapy. Regular follow up of patient will be necessary to examine the lesion which would be marker to access response to treatment which can be confirmed by histopathological examination of serial biopsies.

Conclusion:
The incidence of tuberculosis has increased recently and is partly attributable to the HIV pandemic. The diagnosis of cervical tuberculosis is difficult clinically as the symptoms and physical examination usually do not give clues to the disease. Hence in women with an abnormal cervical appearance, there should be a high index of suspicion of tuberculosis, especially from areas where HIV and TB are common as tuberculosis can be easily treated.

References: