

Primary Tuberculosis of Uterine Cervix Clinically Simulating Malignant Neoplasm-A Case Report

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Abstract

Tuberculosis of female genital tract is common among the reproductive age group in developing countries. However, primary tuberculosis of cervix is a rare entity. Clinical presentation of cervical tuberculosis could be as a papillary growth on the cervix with ulceration simulating carcinoma of cervix or as a miliary lesion. In the present case the clinical appearance was that of an exophytic friable, polypoid and ulcerated lesion which created clinical suspicion of a neoplastic condition. However the cervical cytology was normal. Biopsy histopathology showed endocervical tissue with multiple well-formed caseating epithelioid cell granulomas and multinucleate Langhan's type of giant cells. AFB was positive by Ziehl Neelsen's stain. Hence a diagnosis of granulomatous inflammatory lesion with presence of AFB was given and the patient was referred for further management. The case is presented in view of rarity of the clinical presentation and importance of considering this lesion in the differential diagnosis of an ulcerated friable polypoid lesion of the cervix.

Keywords Tuberculosis; Cervical; Papillary growth; Friable; Granulomas; AFB

Introduction

Tuberculosis (TB) is a contagious infection caused by bacteria (*Mycobacterium tuberculosis*) that most often affects the lungs. It is estimated to affect 1.7 billion individuals worldwide, with 8 to 10 million new cases and 1.6 million deaths each year. Pathologic manifestations of the disease, such as caseating granulomas are the result of hypersensitivity that develops in concert with the protective host immune response [1]. Genital TB in females is well recognized as an important etiological factor for infertility in countries with high prevalence of TB. It usually occurs secondary to TB in other sites (primarily, the lungs). The spread is generally through haematogenous or lymphatic routes [2]. The most frequently affected genital organs include fallopian tubes, endometrium and ovaries. However, involvement of cervix is rare and accounts for 0.1-0.65% of all cases of tuberculosis and 5-24% of genital tract TB [3,4]. Primary tuberculosis of cervix is a very rare condition with 21 cases reported till date [5].

Case Report

A Filipino national, 31 years old female, presented with yellowish vaginal discharge, postcoital bleeding and dyspareunia. No history of weight loss, fever, cough or abdominal pain was noted. No past or family history of Tuberculosis or contact with Tuberculosis was there. Also no history of sexual intercourse with male partner infected with Tuberculosis was given by the patient. Patient was afebrile on examination and abdomen was non-tender. On per speculum examination, two cervixes were noted, with longitudinal vaginal septum. Left half of the cervix had erosions, was fleshy, friable, easily bled on touch and yellowish vaginal discharge was noted. Based on the clinical features, there was suspicion of high grade dysplasia or malignancy. Complete Blood Count and ESR results were within

normal limits. High vaginal swab result and Cervical cytology were normal. A cervical biopsy was taken from the abnormal areas. Microscopically, endocervical tissue was seen, with benign endocervical glands, dense acute on chronic inflammatory infiltrate in the stroma, with several well-formed caseating epithelioid cell granulomas and Langhan's giant cells (Figures 1 and 2). AFB were seen on Ziehl Neelsen stain (Figure 3). Hence a diagnosis of Granulomatous Inflammatory lesion with AFB positive was given. Chest X-ray and ESR was normal and no other primary focus of Tuberculosis was detected. Hence a clinical diagnosis of Primary Tuberculosis of Cervix was given and patient was referred for treatment.

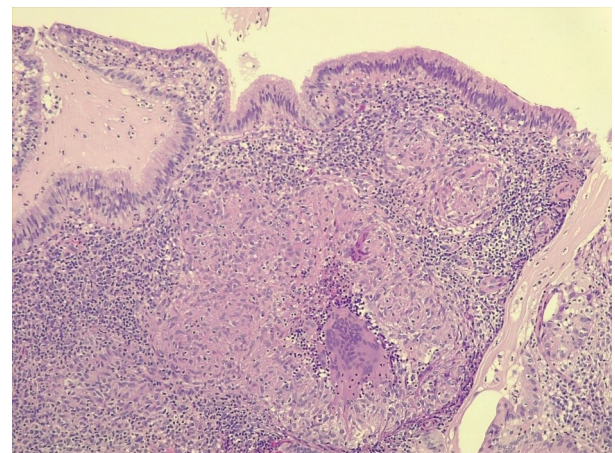


Figure 1: Endocervical tissue with Epithelioid cell granulomas 10 X magnification.

Quadruple drug treatment with Isoniazid, Rifampin, Pyrazinamide, and Ethambutol was initiated, however, post treatment follow-up was

not provided by the patient as she was referred to a healthcare facility specialized in Anti tuberculous treatment as per the local regulations.

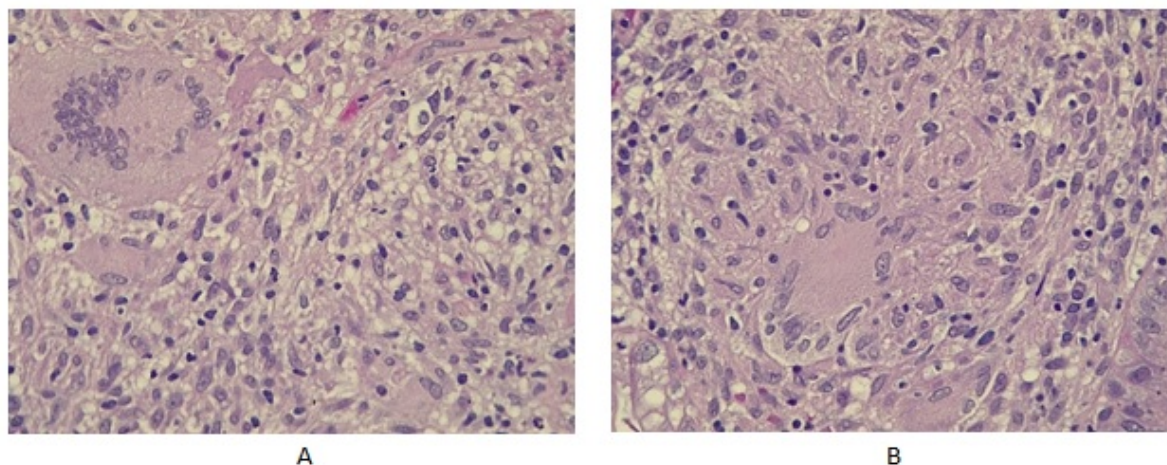


Figure 2: Langhan's Giant cell and granuloma 40 X magnification.

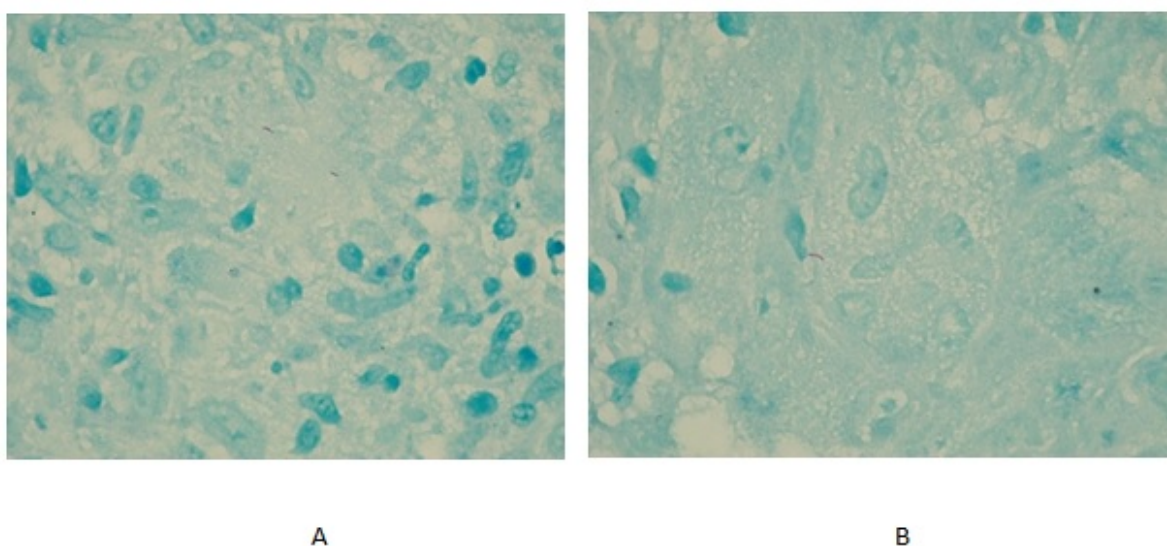


Figure 3: AFB positive by Ziehl Neelsen stain 100 X magnification.

Discussion

Tuberculosis of the cervix occurs usually by hematogenous spread from a primary focus in the lungs. Pelvic organs are infected from a primary focus, usually the chest [6]. The cervix is infected, as part of this process, by lymphatic spread or by direct extension. The primary lesion is often healed at presentation. In rare cases, cervical TB may be a primary infection, introduced by a partner with tuberculous epididymitis or other genitourinary disease [7]. As in previously reported cases, clinical presentation is in the form of a friable growth in the cervix which simulates a malignant neoplasm on speculum examination. The diagnosis of cervical tuberculosis is usually made by

histological examination of the cervical biopsy, which reveals granulomatous inflammatory lesion. Staining for Acid-fast bacilli is performed to confirm the diagnosis. The differential diagnoses for granulomatous disease of the cervix include amoebiasis, schistosomiasis, brucellosis, tularaemia, sarcoidosis, and foreign body reaction [7]. The cervix should respond to six months of standard therapy [8]. This case emphasizes that though uncommon, tuberculosis is an important alternative in the differential diagnosis of a malignant appearing lesion of the cervix. With resurgence of tuberculosis worldwide, there should be a high index of suspicion of tuberculosis in women with an abnormal appearance of cervix.

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