Pelvic Tuberculosis with Cervical Involvement: A Case Report

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Abstract : *Pelvic tuberculosis is seldomly found in female. The involvement of uterine cervix is rare with no particular specific feature. The macroscopic appearance gives a first impression of cancer. A cervical biopsy with histological study leads to diagnosis and then anti - tuberculous treatment may be administered There is no need for surgery only in drug resistant case. The authors reported a case of pelvic mass and hypertrophic growth of the cervix with histology Compatable with tuberculosis. The outlook was good after anti-tuberculous drugs were carried out. (Thai J Obstet Gynaecol 1995;7:77-80.)*

Key words : *tuberculosis, pelvic , cervix*

Genital tuberculosis is caused by Mycobacterium tuberculosis that produces a granulomatous lesion involving upper and occasionally lower genital tract structure. Pelvic infection is usually a consequence of dissemination of primary disease or spreading from visceral organs. However cervical involvement is rare[1]. The following case illustrated pelvic tuberculosis with cervical involvement,without evidence of pulmonary infection.

Case report

A 22-year-old primipara woman, was admitted to Siriraj Hospital with the chief complaint of having pelvic pain and vaginal spotting. She experienced spontaneous complete abortion at 16 week gestation two years ago. After that she used no contraception and has been in good health. Five months prior to admission she developed amenorrhea and increased vaginal discharge with no other symptom. She continued working and stopped two days before admission due to pelvic pain and bleeding per vaginam.

On physical examination, she was fair, hyposthenic built, weighed 38 kilograms, and had low grade

fever. Palpable irregular rubbery mass about 20 week gestation was detected in lower abdomen (Fig.1). Pelvic examination showed hypertrophic growth of the uterine cervix 4 cm in diameter with contact bleeding (Fig 2). The uterus could not be separately palpated from that mass. Ultrasonography revealed echogenic mass packing in pelvic cavity at left side of normal sized uterus and at the right side showed hypoechogenic area which was consistent with bowel loops as shown in plain film abdomen. No abnormality was detected on rectal examination. Complete blood counts , blood urea nitrogen, fasting blood glucose, electrolytes, VDRL, anti HIV, urine analysis and chest x-ray were all within normal limits.

Carcinoma of the uterine cervix with pelvic metastasis was suspected and cervical biopsy was performed. Histological study revealed necrotic tissue and area of tubercle formation containing large histiocytes with multinucleated giant cells, that was consistent with tuberculosis (Fig. 3). Acid fast stain for Mycobacterium tuberculosis was positive. The patient had positive tuberculin skin test but negative sputum examination for acid fast stained bacilli. The patient was treated with anti - tuberculous drugs which included isoniazid 300 mg daily,ethambutol 800 mg daily, rifampicin 450 mg daily and pyrazinamide 1000 mg daily.

One month later,she gained weight 2.5 kg and still had amenorrhea but no pelvic pain. Pelvic mass was decreased in size (about 6 cm in diameter). The cervix had nearly normal appearance (Fig.4). She was

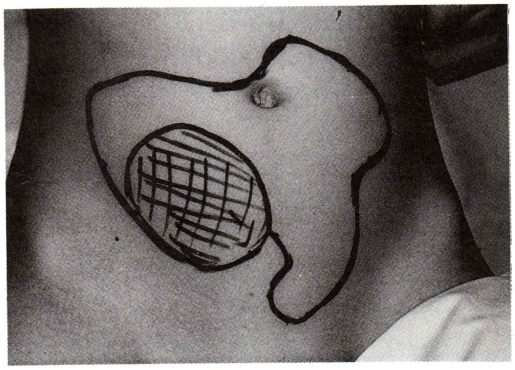

Fig. 1 Irregular pelvic mass (before treatment)

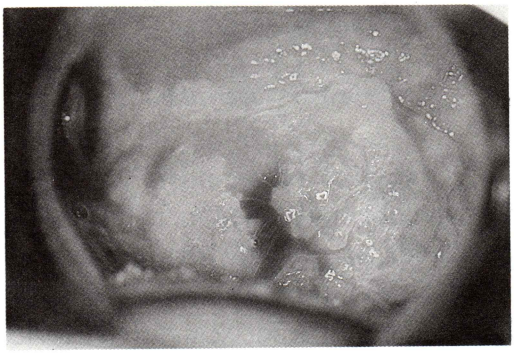

Fig. 2 Hypertrophic growth of cervix (before treatment)

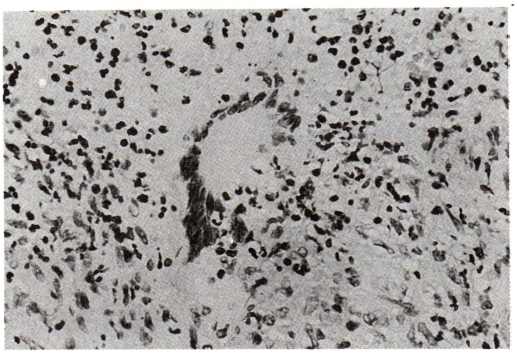

Fig. 3 Necrotic tissue and area of tubercle formation containing large histiocytes with multinucleated giant cells (X 200)

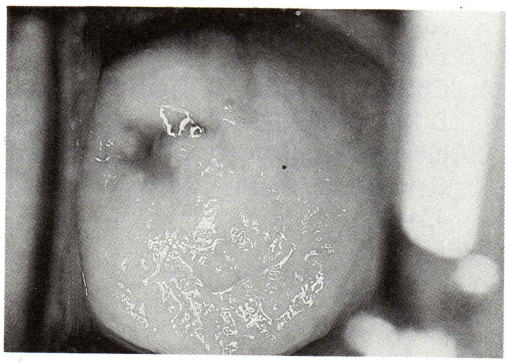

Fig. 4 Nearly normal cervix (after treatment)

given 6-month course of combined anti-tuberculous drugs without surgical intervention and no adverse effect.

Discussion

Pelvic tuberculosis is usually a consequence of hematogenous dissemination of primary pulmonary disease. It may produce salpingitis, dysmenorrhea, amenorrhea, infertility or otherwise asymptomatic[2]. An exceedingly rare lesion that generally secondary follows widespread pelvic involvement is tuberculois of cervix. Cervical tuberculosis as a primary lesion can be transferred during sexual activity by a male with genital tuberculosis[3]. The diagnosis is rarely made by gross inspection only, the confirmation by biopsy is mandatory[4]. Our case illustrates malignant like appearance of uterine cervix associated with irregular pelvic mass in amenorrheic woman. The cervical histology characterized by multiple tubercles with multinucleated giant cells has to be differentiated from fungal infection,foreign body giant cell granuloma reaction suture, crystals, and sarcoidosis[5,6]. The unequivocal diagnosis requires the demonstration of acid fast Mycobacterium tuberculosis by Ziehl-Neelsen stained sections, as in this case, otherwise by cervical tissue culture[7].

Current therapy should include the use of combined agents such as isoniazid,ethambutol,rifampicin and pyrazinamide. Surgical removal of pelvic structure may be indicated only in nonresponsed case[8] Tuberculosis causes extreme tissue damage, and the prognosis of fertility is poor so that follow up evaluation and counselling of the patient is essential.

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