

# Menometrorrhagia Resistant To Progestin Treatment in a Secondary Infertile Woman with Pelvic Tuberculosis

**Keywords:** Tuberculosis; Pelvic tuberculosis; Infertility; Abnormal uterine bleeding

## Abstract

In the underdeveloped and developing countries, tuberculosis endometritis is still an important infectious disease and community health problem. In cases with infertility, abnormal uterine bleeding resistant to progestin treatment and family history of tuberculosis, genital tuberculosis should be kept in mind.

## Introduction

Genital tuberculosis, one of the oldest diseases in history, was first described in mid-eighteenth century and Tuberculosis bacillus (TB) was discovered in 1882 [1]. Although it was thought to be developing countries problem, after the HIV pandemics and increased immigration from developing countries to developed countries due to industrialization, TB has become world's problem. Five percent of the pelvic inflammatory diseases (PID) are associated with genital TB [2]. Genital TB can be primary or secondary.

Primary TB is that first focus that arises from pelvic organs and concomitantly pelvic lymph nodes have the infection. Secondary TB is the form that primary infection begins from somewhere else except pelvic region [3]. Secondary TB almost always has been seen after lung TB. Incidence of the secondary TB after the lung TB is 10% [2]. Most affected organs of the pelvic are tubes (100%), endometrium (50%), ovaries (20%), cervix (5%), respectively while vaginal and vulvar disease are very rare [4-6].

One of the most common symptoms with genital TB is infertility (60%) [7,8]; moreover, menstrual disorders and pelvic pain are not rare [11]. Menstrual disorder usually presents as amenorrhea or oligomenorrhea, menorrhagia, postmenopausal bleeding and dysmenorrhea are relatively rare clinical forms [7,8]. In some very rare cases, the disease presents with abdominal mass and/or ascites. And that can be very challenging to separate this situation from the ovarian cancer.

In this case presentation, we represent an endometrial TB case diagnosed during the investigation of abnormal uterine bleeding resistance to progestin therapy.

## Case Presentation

A 33-years-old gravidity 2 parity 1 abortion 1 secondary infertile woman admitted to our hospital with complaint of menometrorrhagia, fatigue, fever and weight loss for 3 months. Before admission to



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**Submission:** 07 August 2014

**Accepted:** 28 August 2014

**Published:** 30 August 2014

**Reviewed & Approved by:** Dr. Ossama Elsaccar, Assistant Professor of Obstetrics and Gynecology at West Virginia University School of Medicine, USA

our hospital, patient had progestin therapy for 2 months, but no regression of complaints was obtained. Her medical history revealed that patient's husband had TB infection 16 years ago.

Physical examination showed nothing except vaginal bleeding associated with passage of clots. USG examination was normal and laboratory testing's revealed iron deficiency anemia. Given these findings and had a history of progestin therapy, endometrial biopsy was performed. Endometrial biopsy obtained granuloma structures with the multinuclear giant cells and epithelioid histiocytes. Patient chest x-ray showed no evidence of pulmonary TB. Considering these findings, patient accepted as TB endometritis resistant to progestin treatment and received anti-TB therapy for six months (isoniazide, rifampicin, ethambutol, pyrazinamide). Three weeks after the initiation of therapy vaginal bleeding stopped. During the multidrug therapy, there were no adverse effects. At the end of six months of therapy, control endometrial biopsy performed and normal secretory endometrium was reported. The patient was free of disease for 18 months after treatment.

## Discussion

Despite significant medical advances, TB is still a major factor of mortality from infectious disease [4]. Every year 8 million new TB cases are added to TB patient population and 95% of these patients from undeveloped countries [9]. Because of its different clinical manifestations, genital TB is still a major problem and difficult to diagnose for gynecologists. Genital TB can be latent for years after initial seeding and infection usually occurs by reactivation of organisms from systemic distribution of TB bacillus.

Diagnostic tools vary from physical examination to isolation of TB bacillus. Although physical examination is very importance for diagnosis of genital TB, it may reveal nothing [3]. Chest x-ray is the another tool to search primary or secondary TB focus but normal

chest x-ray doesn't exclude the TB as about 75% of patients have normal chest x-ray [5].

Raut et al. found the Mantoux test showed a sensitivity of 55% with a specificity of 80% in female genital TB [10]. Endometrial curettage and demonstration of TB bacillus is also important diagnostic procedure for genital TB. Tasova et al. reported the isolation of bacillus is the certain diagnostic criteria for genital TB [11]. Acid resistance staining, granulomatous infectious findings in histological specimens, positive Mantoux test, clinical findings and symptoms associated with TB and response to anti-TB treatment are described as minor diagnostic criteria [11].

In the present case report, there were minor criteria including TB related clinical findings and symptoms (fever, weight loss, fatigue), granulomatous inflammation in histopathologic examination of endometrial specimen and response to anti TB treatment.

There are limited data for optimal medical therapy duration of genital TB. But the guidelines recommend at least 6 months anti TB therapy with multidrug combination [12]. In the cases resistant to anti-TB treatment, total abdominal hysterectomy and bilateral salpingo-oophorectomy is the surgical choice. It is important to give anti- TB treatment for at least 6 weeks before surgery because of the reduction of perioperative complications [13].

In conclusion, especially in undeveloped and developing countries, young patients with infertility, family history of TB and abnormal uterine bleeding resistant to progestin treatment, genital TB should be kept in mind.

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