Case Report

Tuberculosis endometritis in a patient with renal transplantation: a case report

Ceyhan ST1, Gezginc K1, Terek MC1, Ulubay M1, Cicek AF2, Yenen M1, Baser I1

Gulhane Military Medical Academy, Department of Obstetrics and Gynecology1, Department of Pathology2, Ankara, Turkey

Abstract. Female genital tuberculosis is a cause of pelvic inflammatory disease and infertility. Pelvic tuberculosis usually occurs secondary to the pulmonary tuberculosis. We report a 38-year-old patient with renal transplantation. Tuberculosis endometritis was diagnosed after endometrial sampling due to irregular uterine bleeding.

Key words: Tuberculosis, abnormal uterine bleeding, endometritis.

Female genital tuberculosis is a cause of pelvic inflammatory disease and infertility [1]. Pelvic tuberculosis usually occurs secondary to pulmonary tuberculosis, and may present with elevated sedimentation rate, increased CA-125 level, adnexial mass, myoma like lesion, adnexial tenderness, irregular uterus, uterine prolapse and cervical polyp. Almost 43% of patients have normal pelvic physical examination. Chest X-ray film may demonstrate typical lesions of tuberculosis [1].

Most of the patients are in the reproductive age group and pelvic tuberculosis is diagnosed during the infertility work-up. However, postmenopausal uterine bleeding may be the first sign of endometrial tuberculosis [2], and even coexist with endometrial adenocarcinoma [3] in the postmenopausal period.

Case

A 38-year-old premenopausal woman presented with irregular bleeding. She had undergone renal transplantation five years ago due to chronic renal disease, which developed just after her last pregnancy. General physical examination was unremarkable. Speculum examination showed vaginal bleeding. Uterus was anteverted and normal in size by palpation. Transvaginal sonographic examination revealed irregular endometrial echogenity. Office endometrial biopsy was performed after obtaining negative pregnancy test. Pathological examination reported caseous granulomatous endometritis. The pathological examination of the curettage material showed Langerhans-type multinucleated giant cells in the endometrial stroma and granulomas with caseous necrosis (Figure 1). PCR was performed on sections of pathological specimens and was negative (Figure 2). HIV was found to be negative. Laboratory results were detected as hemoglobin 11.7 gr/dL, urea 45mg/dL, creatinine 1.39 mg/dL, and erythrocyte sedimentation rate 42 mm/hour. She was on immunosuppressive therapy consisting of cyclosporine 200mg/day, Imuran (azathioprine) 100mg/day and an antihypertensive agent (Telmisartan) 80mg 1x1. Chest X-ray was within normal limits, with no evidence of pulmonary tuberculosis.

Correspondence to: Kazim Gezginc, MD, e-mail: kazingezginc@yahoo.com

Figure 1. Langerhans-type multinucleated giant cells in the endometrial stroma and granulomas with caseous necrosis.
Antituberculosis treatment with a combination of isoniazid, rifampicin, ethambutol and pyrazinamide was administered for six months.

Figure 2. PCR performed on sections of pathological specimens was negative for tuberculosis bacilli.

Discussion

Tuberculosis is a primary disease of the lungs and 30% of cases have extrapulmonary involvement of the genitourinary tract, bone, skin, meninges and joints. People with latent tuberculosis infection have a greater risk of reactivation in the setting of immunosupression such as HIV infection and renal transplantation, as in our case [2].

Genitourinary tuberculosis is an opportunistic infection and direct transmission between sexual partners has been reported. The fallopian tubes are involved in all the cases and endometrium in half of them. Although, the most common clinical presentation is infertility, pelvic pain, abnormal uterine bleeding and discharge, postmenopausal uterine bleeding may be the only sign [2,4].

Tuberculin skin test has a specificity of 80% and sensitivity of 55% in diagnosis of female genitourinary tuberculosis [5]. Chest X-ray may reveal normal findings in 2/3 of patients [1]. Molecular testing of endometrial specimens by polymerase chain reaction aids in the diagnosis of endometrial tuberculosis [5]. The gold-standard of diagnosis is the detection of tuberculosis bacilli in endometrial specimen cultures.

Treatment of genital tuberculosis consists of combination therapy for 6 months [6]. If there is persistence of pelvic mass or recurrence of abnormal bleeding and pain after 6 months of medical therapy, surgical therapy may be considered [7].

References