



Journal Homepage: www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/14586
DOI URL: <http://dx.doi.org/10.21474/IJAR01/14586>



CASE REPORT

ENDOMETRIAL TUBERCULOSIS REVEALED BY POST-MENOPAUSAL METRORRHAGIA REPORT CASE

Dr. Mettahi Anass, Dr. Amina Ousti, Pr. Taheri Hafsa, Pr. Saadi Hanane and Pr. Mimouni Ahmed
Gynecology and Obstetrics Department, Mohammed VI University Hospital,
Faculty of medicine and pharmacy of Oujda
Mohammed First University Oujda, Morocco.

Manuscript Info

Manuscript History

Received: 20 February 2022
Final Accepted: 24 March 2022
Published: April 2022

Abstract

Because genital tuberculosis is frequently asymptomatic, the disease may not manifest itself for years after the initial infection. Clinical symptoms usually appear 10 to 15 years after the initial infection. We report a case of 47 years old women with a history of right breast cancer who was suffering from post menopausal metrorrhagia, ultrasound revealed thickening of the endometrium, and the biopsy revealed endometrial tuberculosis. Genital tuberculosis is uncommon in postmenopausal women and accounts for 1% of postmenopausal metrorrhagia. In 60-70 percent of cases, the endometrium is affected. It is difficult to explain the disease's low prevalence in this age group. The majority of authors believe that the endometrial atrophy and decreased vascularity associated with this hypoestrogenic phase provide an unfavorable environment for Mycobacterium growth. The standard treatment regimen is currently well codified and is based on daily administration of Isoniazid and Rifampicin for 6 months, followed by Pyrazinamide and Ethambutol for the first 2 months. Throughout the treatment, clinical and paraclinical monitoring is performed on a regular basis.

Copy Right, IJAR, 2022., All rights reserved.

Introduction:-

Female genital tuberculosis accounts for 6-10% of all tuberculosis localizations (1). The fallopian tubes and endometrium (100 percent and 50%, respectively), but the cervix and ovaries can also be affected, and the vagina and vulva are uncommon sites of infection (2)

Because genital tuberculosis is frequently asymptomatic, the disease may not manifest itself for years after the initial infection. Clinical symptoms usually appear 10 to 15 years after the initial infection. Only 25% of patients with genitourinary tuberculosis have a known history of tuberculosis, and roughly half have normal chest x-rays.

Case presentation

We report a case of a 47 years old married female patient, gravida 4para 4, postmenopausal for 2 years, with a low socioeconomic status, with a history of right breast cancer for which she received conservative surgical treatment followed by 6 cycles of cisplatin-based chemotherapy at a dose of 100mg/m², doxorubicin at a dose of 60mg/m² and radiotherapy at the dose of 50 Gy on the right breast and radiation therapy of 16 Gy on the tumor bed then she was put on hormone therapy for 3 years

Corresponding Author:- Dr. Mettahi Anass

Address:- Gynecology And Obstetrics Department, Mohammed VI University Hospital, Oujda, Morocco.

The patient presented post-menopausal intermittentmetrorrhagia of small quantity made of black bloodfor one month. Associated with a pelvic pain without other associated signs.

The clinical examination was unremarkable. Cervicovaginal smear is without anomalies The patient underwent a pelvic ultrasound scan which showed: a uterus of normal size, a 16 mm thickening of the endometrium without any signs of ascites or peritoneal effusion (**FIGURE 1**)

Patient underwent surgical hysteroscopy that revealed endometrial hypertrophy and hyperemia. Then a partial Endometrectomywas performed

The result of the anatomopathological examination revealed: an endometrial mucosa widely infiltrated by multiple epithelioid and gigantocellular granulomas confluent and surrounded by an associated lymphocytic crown without presence of caseous necrosis. The test for acid-fast bacilli was negative afterreinterviewing the patient we didn't find any evidence of tuberculosis infection or signs of tuberculosis impregnation**FIGURE 2**

The pulmonary radiography was normal; identification of Koch bacilliin expectorations was negative. In our patient we have performed a QuantiFERON test which was positive. These results along with those from the pathological assessment of the endometrial mucosa samples are highly suggestive of endometrial tuberculosis. The patient was made under anti tuberculosis treatment (2 months of a combination made of ethambutol, rifampicin, isoniazid and pyrazinamide and 4 months of rifampicin associated with isoniazid), the evolution was favorable with a total disappearance of the symptomatology



Figure 1:- Pelvic ultrasound showing 16mm endometrial thickening.

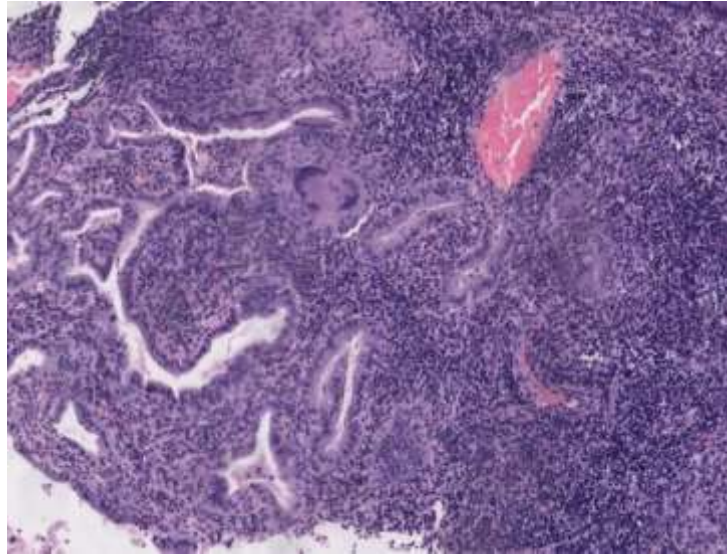


Figure 2:- Microphotography showing endometrial mucosa presenting numerous epithelioid granulomas with presence of giant cells. (HE; 100X).

Discussion:-

Female genital tuberculosis accounts for 6-10% of all localizations tuberculosis [1]

The most preferred sites Fallopian tubes and endometrium (100% and 50% respectively), but the cervix and ovaries can also be affected, whereas the vagina and vulva are rare sites of infection [2]

Genital TB is often asymptomatic so the disease may not manifest itself until years after primary infection. Clinical symptoms usually develop about 10 to 15 years after primary infection. Only 25% of patients with genitourinary TB have a known history of tuberculosis and about half of them have normal chest x-rays [7,8,10].

The most frequent clinical presentations were infertility (44%), pelvic pain (25%), vaginal bleeding (18%), amenorrhea (5%), leucorrhea (4%), and postmenopausal metrorrhagia (2%). Rarely an abdominal mass, ascites, or tubo-ovarian abscess [3].

Tuberculous endometritis in young women is almost always associated with tuberculous salpingitis, unlike in postmenopausal women where endometritis is often isolated without tubal involvement [5].

Genital tuberculosis is rare in postmenopausal women and is responsible for 1% of postmenopausal metrorrhagia. The endometrium is affected in 60-70%. It is difficult to explain the limited incidence of this disease in this age group. Most authors believe that the endometrial atrophy and decreased vascularity typical of this hypoestrogenic phase provide an unfavorable environment for the growth of *Mycobacterium* [4,5].

Chest radiography may show parenchymal or pleural sequelae, less often progressive lesions. Intravenous urography is useful because of the frequency of associated urinary tuberculosis [9;11] .

The pelvic ultrasound is not specific; it highlighted an adnexal mass, an intra-cavity liquid. (hematoma, pyometrium) and thickening of the endometrium [6;10]

The diagnosis of certainty is obtained by the detection of *Mycobacterium tuberculosis*, either by direct microscopic examination or after culture of pathological samples. The material analyzed is obtained by endometrial biopsy, or by laparoscopy or even laparotomy with sometimes hysterectomy [6-8].

In our patient, the first diagnostic hypothesis given her age, history of breast cancer, hormonal treatment she received for 3 years and clinical signs, was an endometrial neoplastic process. In a recent report of a primary

endometrioidadenocarcinoma coexisting with endometrial tuberculosis and a tubal adenocarcinoma coexisting with genital tuberculosis, the authors concluded that, although both entities are extremely rare, they were not considered to be the only ones, their occurrence in areas of high TB prevalence may not be uncommon[3:7], justifying close monitoring during and after anti-tuberculosis treatment.

The standard treatment regimen is currently well codified and is based on daily administration of Isoniazid and Rifampicin for 6 months, combined with during the first 2 months of Pyrazinamide and Ethambutol. Clinical and paraclinical monitoring is carried out regularly throughout the treatment [12].

Surgical treatment is indicated in case of: persistence of adnexal masses despite medical treatment, particularly cold abscesses; relapse of endometrial tuberculosis after one year of treatment persistence of pelvic pain after 3 months of treatment or when they have not completely disappeared after one year of treatment; persistent metrorrhagia after anatomical and clinical healing; fistulas that do not subside [10-12].

Surgery should be performed at least 6 weeks after the start of antibacterial treatment as it reduces the risk of intraoperative complications and facilitates the surgical approach [12].

Our patient benefited from 6 months of medical treatment with antibacterial drugs with good clinical evolution, in her case there was no indication for surgery.

Conclusion:-

Primary endometrioid adenocarcinoma coexisting with endometrial tuberculosis, a tubal adenocarcinoma and genital tuberculosis are extremely rare entities and their occurrence in areas with high TB prevalence may not be uncommon [8], justifying close monitoring during and after anti-TB treatment. The standard treatment regimen is currently well codified and is based on daily administration of Isoniazid and Rifampicin for 6 months, followed by Pyrazinamide and Ethambutol for the first 2 months. Throughout the treatment, clinical and paraclinical monitoring is performed on a regular basis.

References:-

1. Taleb AL, Bouchetara K, Boutteville C. La tuberculose génitale de la femme. *Encycl Méd Chir (Paris-France), Gynécologie* 1989;490,7:13 p.
2. Maestre MA, Manzano CD, López RM. Postmenopausal endometrial tuberculosis. *Int J .Gynaecol Obstet.* 2004 Sep;86(3):405–6
3. Saygili U, Guclu S, Altunyurt S, Koyuncuoglu M, Onvural A. Primary endometrioid .9 adenocarcinoma with coexisting Endometrial tuberculosis: A case report. *Journal of Reproductive Medicine.* 2002;47(4):322–324.
4. GungordukKemel, UlkerVolkan, Sahbaz Ahmet, Ark Cemal, Terkirdag Ali Ismet. .Postmenopausal Tuberculosis Endometritis. *Infect Dis Obstet Gynecol.* 2007;2007:27028.
5. Anthelme KouessiAgbodande, Roger Leoubou Dodo, Aoulath Issa, Une localisation rare de la tuberculose: la tuberculose endométriale *Pan Afr Med J.* 2019; 33: 45. French. Publication en ligne 2019 mai 21. DOI : 10.11604/pamj.2019.33.45.17520PMCID: PMC6690063
6. Genet C, Ducroix-Roubertou S, Gondran G, Bezanahary H, Weinbreck P, Denes E. Post- . menopausal endometrial tuberculosis. *J GynecolObstetBiolReprod (Paris)* 2006 Feb;35(1):71–3.
7. Houda E, Abderrahman E, Hanane B, Adil E, Amina L, Driss F. Endométrite tuberculeuse .post-ménopausique simulant un cancer de l'endomètre: à propos d'un cas. *Pan African Medical Journal.* 2012;11:7
8. Kamilia L, Fatima Z, Sofia J, Hakima B, Moulay A. Endométrite tuberculeuse: à propos .d'un cas et revue de la littérature. *Pan African Médical Journal.* 2013;16:94.
9. Patachiola F, Di Stefano L, Palermo P, et al. Genital tuberculosis in a menopausal .woman - a case report. *Minerva Ginecol.* 2002 Jun;54(3):287–91.
10. Hammami B, Kammoun MF, Ghorbal H, et al. Tuberculose génitale de la femme dans le sud tunisien (à propos de 22 cas) *La lettre du gynécologie.* 2005:13.
11. Chau Nguyen. Tuberculoseendometriale. *J ObstetGynaecol Can.* 2006;28(9):762. [Google Scholar
12. Ravelosoa E, Randrianantoanina F, Rakotosalama D, Andrianampalaninarivo R, Rakotomalala C, Rasolofondraibe A, et al. La tuberculose génitale chez la femme: à propos de 11 cas suivis à Antananarivo, Madagascar. *Bull Soc PatholExot.* 2007;100(1):30–31.