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Pseudotumoral Tuberculosis of the Cervix: A Case Report

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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Case Report

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ABSTRACT

Aim: We aimed to present a rare case of pseudotumoral tuberculosis of the cervix.
Introduction: Tuberculosis has many localizations. Urogenital and particularly cervical involvement is rare.
Case Presentation: Our observation concerned a case of pseudotumoral tuberculosis of the uterine cervix simulating a cancer. The clinical signs were pelvic pain and metrorrhagia, which were non-specific. The ulcerative-bourgeons appearance of the cervix was suggestive of cancer. Histology allowed the diagnosis to be made by showing an inflammatory granuloma and the absence of malignant cells. Despite the absence of bacteriological evidence, the clinical, biological, and histological presumptive arguments and the good therapeutic response made it possible to correct the diagnosis. The prognosis of our patient was mainly functional due to the risk of infertility.
Conclusion: The interest of this observation lay in the rarity of this tuberculosis localization, especially in an immunocompetent subject, and the predominant place of histology.

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Keywords: Pseudotumor; cervix; tuberculosis.

1. INTRODUCTION

Tuberculosis is an endemic disease in sub-Saharan Africa. It is a public health problem worldwide [1]. It has multiple localizations. However, tuberculosis of the cervix is a rare extra-pulmonary involvement [2,3,4]. It poses the problem of diagnosis with cervical cancer [5,6,7]. In this presentation, histology has a central role [7]. We present a case of pseudotumoral tuberculosis of the cervix.

2. CASE PRESENTATION

A 25 year old woman consulted for pelvic pain. These were chronic, of moderate intensity, radiating to the lumbar region, aggravated by micturition and sexual intercourse, which caused metrorrhagia. She also had a chronic productive cough with whitish sputum. This symptomatology was associated with a fever, predominantly in the evening, without sweating or chills. A weight loss of 10 kg in one year, non-selective anorexia and marked physical asthenia were also noted. She was 2nd gesture and 2nd part. The patient had no particular medical or surgical history, nor any notion of tuberculosis infection. Her blood pressure was 100/80 mmHg, her temperature 37.7°C and her weight 50 kg. Speculum examination with colposcopy showed an ulcerating lesion of the uterine cervix. Vaginal examination revealed a swollen, painful cervix without bleeding on contact. The rest of the physical examination was normal. Enlargement of lymph nodes were not found. A non-specific inflammatory syndrome with a positive C-reactive protein (46mg/l) and an accelerated sedimentation rate was noted. Sputum was negative for acid-fast bacilli. Retroviral serology was negative. The tuberculin skin test was 14 mm.

Chest and spine X-rays were normal.

The cervico-vaginal smear was in favor of moderate vaginitis and a cervicitis disturbing the cylindrical-pavimentous junction zone, without any cellular abnormality suspicious of malignancy. Histology of the cervical biopsy specimens showed granulomatous inflammatory lesions organized in follicles consisting of epithelioid cells and Langhans-type giant cells without visible necrosis (Figs. 1 and 2). The diagnosis of cervical tuberculosis was made on the basis of the presumptive clinical and histological evidence.

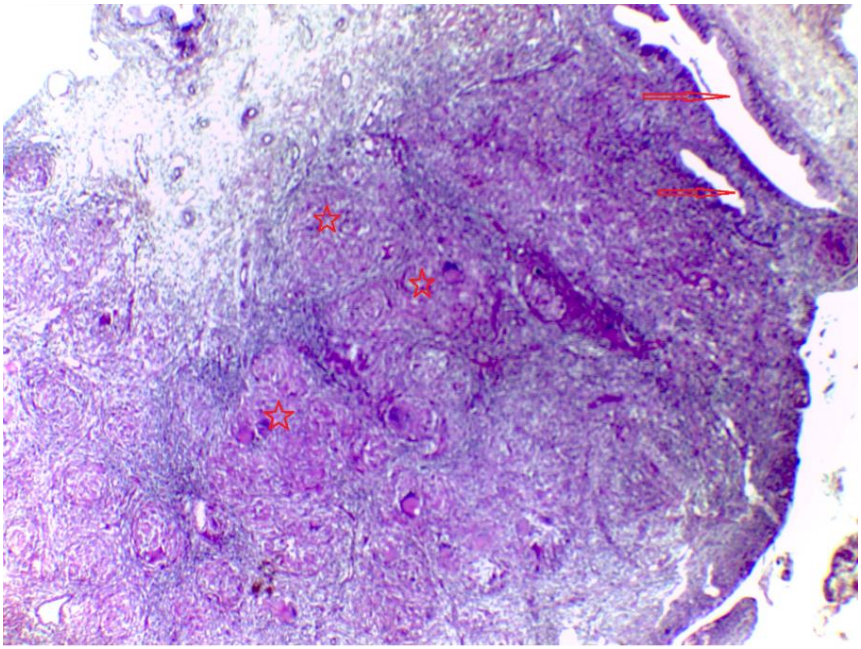

Fig. 1. Cervical biopsy (high magnification with Haematoxilin Eosin stain) showing tuberculoid granulomas (stars) and endocervical glands (arrows)

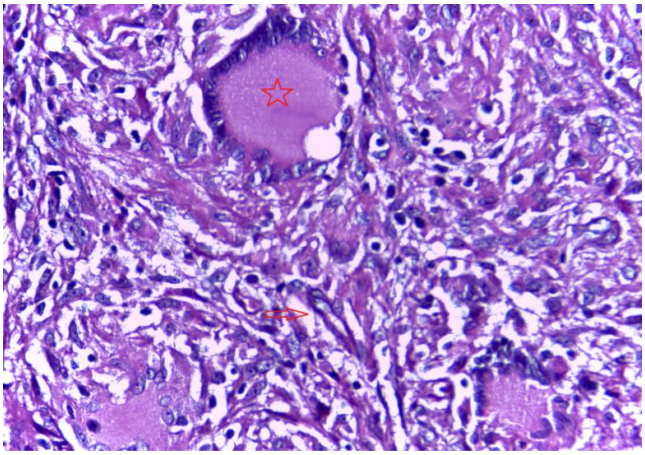

Fig. 2. endocervical mucosa with a granulomatous inflammatory infiltrate consisting of Langhans-type giant cells (stars) and epithelial cells

Anti-tuberculosis treatment was initiated for a period of 6 months. The treatment consisted of a therapy combining Rifampicin, Isoniazid, Pyrazinamide and Etambutol for 2 months, followed by a dual therapy combining Rifampicin and Isoniazid for 4 months.

The evolution was favorable. After four months of treatment, we noted a disappearance of pelvic pain and fever, a return of appetite and weight (58 kg). On vaginal examination, the cervix was swollen but regular and without bleeding on contact. The control C - reactive protein was 6 mg/l.

3. DISCUSSION

We reported an observation of tuberculosis of the uterine cervix simulating carcinoma. Anatomopathological study allowed us to correct the diagnosis.

Tuberculosis is a contagious disease caused by infection with bacilli of the Mycobacterium tuberculosis complex. It is most often localized in the lungs [8]. Genital involvement is a rare extra-pulmonary localization that is difficult to diagnose. It poses the problem of functional prognosis with a risk of infertility [9]. Involvement of the cervix is rare. In fact, this localization represents 0.1 to 0.65% of tuberculosis cases and 5 to 24% of genital tract involvement [10]. Infection generally occurs via the hematogenous route or by contiguity with endometrial, ovarian, or fallopian tube involvement. More rarely, sexual transmission is possible [11].

The clinical presentation is variable and the signs are non-specific and may mimic other pelvic pathologies, particularly neoplasia. Most often, spontaneous, or provoked metrorrhagia and leucorrhea are the presenting signs [7,11]. Pelvic pain and metrorrhagia were the main reasons for our patient's consultation. The macroscopic ulcerating appearance of the cervix was primarily suggestive of cervical carcinoma in our case. In several publications, a problem of differential diagnosis with cervical cancer has arisen [4,5,6].

Histological examination plays a fundamental role in the diagnosis by demonstrating an inflammatory granuloma with caseous necrosis. However, inflammatory granulomatous forms without necrosis, as reported in our case, can be found [12]. As the clinical signs are misleading, histology can help to correct the diagnosis [5,6,7]. However, other infectious or inflammatory pathologies may give rise to an inflammatory granuloma. Thus, culture of the biopsy specimen with isolation of mycobacterium is the gold standard for diagnosis [2,5]. However, the culture may be negative in one third of cases [5]. Gene Xpert could also have contributed to the diagnosis. The culture of the biopsy specimen was not performed in our case. Nevertheless, the clinical evolution under anti-tuberculosis treatment was an important therapeutic argument. The discovery of extra pulmonary tuberculosis requires the search for immunodepression, particularly infection with the human immunodeficiency virus. Our patient had a negative retroviral serology.

Anti-tuberculosis treatment was conducted according to the current national protocol.

The evolution was favorable with medical treatment in our observation. Surgical treatment is reserved for complications (abscesses, fistulas) or in case of failure of the well conducted medical treatment [9]. However, some publications highlight the occurrence of sequelae responsible for infertility [11]. The long-term follow-up of our patient will allow us to evaluate the obstetrical prognosis.

4. CONCLUSION

This observation underlines the particularity of this rare condition, occurring here in an immunocompetent patient. It mimicked cervical cancer. Histology was the key diagnostic test.

CONSENT

As per international standard or university standard, patients' written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Tékpa G, Fikouma V, Téngothi RMM, et al. Epidemiological and clinical aspects of tuberculosis in hospitals in Bangui. The Pan African Medical Journal. 2019;33:31.
2. Dubernard G, Ansquer Y, Marcollet A, et al. Pseudotumoral tuberculosis of the cervix. Obstetrics and Fertility Gynecology. 2003;31:446–448.
3. Mukerji S, Moncur L, Sanders B, et al. Difficulties in diagnosing tuberculosis of the cervix in a post menopausal woman: Case report and literature review. AMJ. 2013;6(7):367-370.
4. Sachan R, Patel ML, Gupta P, et al. Genital tuberculosis with variable presentation: a series of three cases. BMJ Case Reports. 2012;10:1136.
5. Barmon D, Kataki AC, Sharma JD, et al. A case of cervical tuberculosis mimicking cervical carcinoma? The Journal of Obstetrics and Gynecology of India. 2013;63(4):285-287.
6. Dembélé A, Konségré V, Birba E et al. Cervical tuberculosis simulating cervical cancer: a case report, at the Souro Sanou University Hospital Center in Bobo-Dioulasso, Burkina Faso. Science and technology, Health sciences. 2016;39:1-2.
7. Ndour MA, Sow M, Thiam I, et al. Pseudotumoral tuberculosis of the cervix. Pan African Medical Journal. 2019;32:163.
8. WHO. WHO global tuberculosis report; 2019. Available:https://www.who.int/tb/publications/global_report/en/
9. Zayet S, Berriche A, Ammaril L, et al. Epidemiological characteristics of genital tuberculosis in Tunisian women: A series of 47 cases. Pan African Medical Journal. 2018;30:71.
10. Lamba H, Byrne M, Goldin R, et al. Tuberculosis of the cervix: Case presentation and a review of the literature. Sex Transm Inf. 2002;78:62–63.
11. Grace GA, Devaleenal DB, Natrajan M. Genital tuberculosis in females Indian J Med Res. 2017;145(4):425–436.
12. Guenaoui K, Harir N, Zeggai S. Epidemiological and histological profile of extra-pulmonary tuberculosis in the region of Sidi-Bel-Abbès (Algeria) from 2000 to 2011. Antropo. 2015;34:73-79. Available:www.didac.ehu.es/antropo

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