

## Testicular tuberculosis revealing HIV infection: Case report

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### Introduction

Testicular tuberculosis accounts for less than 1% of cases of extrapulmonary TBK. Rare, it often presents as a scrotal mass simulating a tumor. Its diagnosis is frequently delayed due to the absence of specific symptoms. Furthermore, its association with HIV infection is documented, but it may be the mode of revelation of HIV positivity.

### Objective

Report a case of testicular tuberculosis revealing HIV infection in a patient at Infectious diseases department in Ibn Rochd University Hospital in Casablanca.

### Case Presentation

58-year-old patient, without any particular pathological history, having presented a painless swelling of the left testicle evolving for several months, with weight loss estimated at 5 kg/3 months and asthenia. On clinical examination, The patient was hemodynamically and respiratory stable, a firm, non-tender mass was found, with no local signs of inflammation in the left testicle, the rest of the clinical examination was unremarkable.

a testicular ultrasound showed a **heterogeneous lesion suggesting a tumor**. the chest x-ray was normal. The blood count shows lymphopenia at 800 elements/mm<sup>3</sup> , the crp was negative, the liver and kidney function tests were normal. the result of the urinary BK test is not yet available , the search for BK in the sputum was negative. In front of lymphopenia, an **HIV serology** test came back **positive**, the results of HVB, HVC, Syphilis, CMV and Toxoplasmosis serology are not yet available as well as CD4 lymphocyte count and viral load.

An orchiectomy was performed, the pathological analysis revealed **case of follicular granulomatous disease typical of tuberculosis**, with no signs of malignancy. The diagnosis of **testicular tuberculosis** was made and the patient was started on anti-tuberculosis treatment.

### Discussion

According to the WHO, of all new TB episodes estimated worldwide in 2022, 6.3% (671,000 cases) are among people living with HIV. TB is the leading cause of death among PLHIV, accounting for nearly 167,000 deaths among PLHIV in 2022, or approximately 27% of all HIV-related deaths. During HIV infection, The deeper the deficiency, the higher the risk of extrapulmonary TB, as well as rapid progression of the disease. According to the literature, testicular TB is a rare form of genito-urinary tuberculosis. It accounts for approximately 7 to 14% of genito-urinary tuberculosis cases in men. Pseudotumoral testicular TBK is a rare differential diagnosis of testicular tumors. In our case, the clinical picture was misleading, initially suggesting testicular cancer.

### Conclusion

Our case demonstrates the importance of considering tuberculosis in the differential diagnosis of testicular masses, particularly in chronic testicular mass especially in endemic areas and atypical contexts, or in the presence of risk factors for immunosuppression such as HIV. The concomitant discovery of HIV infection underlines the importance of systematic screening in cases of extrapulmonary tuberculosis.

Early and coordinated management of tuberculosis and HIV infection is essential to improve prognosis.

### Conflicts of interest

The authors declare that they have no competing interests.

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