

**MUSCULAR
TUBERCULOSIS: AN
UNUSUAL SEAT OF KOCH
BACILLUS****Tuberculose musculaire :
un siège inhabituel du
bacille de Koch****Erraji M, Kharaji A, Daoudi A, Agoumi O,
Abdeljaouad N, Daoudi A, Yacoubi H.****ABSTRACT:**

The authors report an unusual case of an isolated muscular tuberculosis of the hamstring muscles in a 34-years-old woman. The diagnosis was confirmed histologically. She was placed on anti-tuberculosis treatment for 9 months according to the Moroccan national protocol.

Keywords: Koch Bacillus, muscle, tuberculosis

RESUME:

Les auteurs rapportent un cas inhabituel de tuberculose musculaire isolée intéressant

Conflit d'intérêt : Les auteurs ne déclarent aucun conflit d'intérêt en rapport avec la rédaction de cet article

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les muscles de la loge postérieure de la cuisse gauche chez une patiente âgée de 34ans. Le diagnostic a été confirmé histologiquement. Elle a été mis sous traitement antituberculeux pendant 9 mois selon le protocole national marocain.

Mots-clés : bacille de Koch, muscle, tuberculose

INTRODUCTION

Soft tissue tuberculosis is relatively rare including bursal, synovial or muscle involvement. Selective and isolated muscular tuberculosis without skeletal or extra-skeletal tuberculosis disease is exceptional even in endemic countries of tuberculosis such as Morocco. We report an unusual case of an isolated muscular tuberculosis of the hamstring muscles.

PATIENT AND OBSERVATION:

A 34-year-old female consulted to the Trauma and Orthopedic Surgery Department to the Mohammed VI University Hospital in June 2015 for a voluminous tumefaction to the posterior side of left thigh. She didn't have any past medical history of tuberculosis disease nor close contact with tuberculosis patient. This thigh tumefaction (Figure 1) appeared insidiously in 6 months with weight loss of 5 kg without any others functional symptoms which can motivate a medical consultation. Physical examination found an inflammatory and soft tumefaction of firm consistency, fixed to the muscle and associated with a left inguinal adenopathy

moderately inflammatory. The rest of clinical examination was normal.



Figure 1: Clinical aspect of the left thigh tumefaction

A Pulmonary X-rays were normal. The ESR (Erythrocyte Sedimentation Rate) was 10 mm at the first hour and the Tuberculin skin test (TST) was negative. A thigh MRI (Figure 2) showed a subcutaneous mass located at the posterior and medial lower third of the thigh. The major axis of this mass measured 53 mm, well defined.



Figure 2: MRI scan of thigh showed the muscular lesion

We performed a surgical biopsy of the mass in emergency. Histopathology examination has eliminated malignant process and found a caseous necrosis granuloma which is specific to the tuberculosis disease. We achieved a

complete surgical resection of the muscular lesion (figure 3).



Figure 3: Tumefaction surgical resection

The histopathological examination confirmed the diagnosis of muscular tuberculosis (Figure 4).

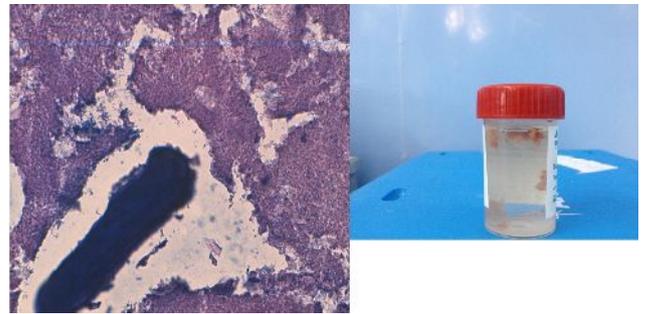


Figure 4: macroscopic and histologic aspect

Then, the patient was placed on anti-tuberculosis treatment for 9 months according to the Moroccan national protocol. The favourable development was noted after 6 months.

DISCUSSION:

Despite the introduction of anti-tuberculosis treatment and the achievement of vaccination campaigns since several decades, the prevalence of tuberculosis disease in Morocco still increasing. The disease is caused by the Koch bacillus which is transmitted to the lungs by aerial contamination, then it spreads through hematogenous route. Musculoskeletal system tuberculosis is associated with the lungs lesion in 30% of cases (1). More form of this disease could be associated with lungs tuberculosis such as tenosynovial tuberculosis or the involvement of bursas which are well knows (radius or ulna bursas, greater

tubercule or ischial tuberosity). However, primary bursas tuberculosis is rare (2).

In the medical literature, several cases of tuberculosis disease at the fibular sheath, anterior and posterior tibial sheaths were described (3). The muscle is often contaminated by directly extension from around of bone such as in the tuberculous spondylitis with psoas abscess (Pott's disease) (4).

In our case, any primary location of tuberculosis or notion of iatrogenic inoculation was detected. However, the contamination could be happened from a pulmonary origin of infection radiological undetectable or by a reactivation of vaccine bacillus.

The differential diagnosis of isolated muscular tuberculosis is rare. If it's not very important for the prognosis to evoked a not specific abscess or a hematoma, but it's primordial to eliminate:

- A myositis ossificans in its localized form that sometimes due to trauma. Clinical (enough well delimited mass) and radiological characters (calcifications) are not always observed.
- A soft tissue sarcoma which had a misleading aspect.
- Muscles mostly involved are these who works more (5,6) such as fore-arm muscles, quadriceps, biceps or triceps.

In contrary to Hoppe's theory (7) and our case, some authors explain the rareness of muscular tuberculosis due to the high concentration of lactic acid in this tissue. According to some authors that the tuberculosis affects muscles too or little sought (8,9). In fact, any satisfactory explication was done to the rareness of the muscular tuberculosis although that the disease is enough ubiquitous.

Indeed, the triple specific treatment is remarkably and rapidly active ensuring a full healing. Sometimes surgical evacuation of a caseous abscess can be

necessary. The prognosis is excellent on the vital and functional plans.

CONCLUSION:

This unusual seat of tuberculosis should be at least known. It should be thinking about systematically in front of a young African that presented a muscular tumefaction recently appeared associated to an inflammatory adenopathy, with a discreet deterioration of general status. The anti-tuberculosis treatment is effective by healing without after effects.

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