



## Giant gluteal mass of tuberculosis origin

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### Abstract

**Introduction:** Tuberculosis is a common pathology in TB-endemic areas and is not unique in developed countries in immigrants or immunosuppressed individuals.

**Case Report:** This study reports a case of giant tuberculous abscess. This is about a 56 years old man with no particular history who consults for a gluteal mass of progressive installation over 3 years in a context of apyrexia with general state preservation.

**Discussion:** The bacteriological examination and culture in the environment LOWENSTEIN and JENSEN and histological study confirmed the diagnosis, the patient benefited from excision and surgical drainage associated with anti-bacillary medical treatment for 10 months, and the evolution has been favorable.

**Conclusion:** The diagnosis of extra-pulmonary TB is often difficult. This case has been reported to increase physicians' awareness of soft tissue TB. Although it is rare, doctors may encounter similar cases in the future.

**Keywords:** mass, buttock, tuberculosis, surgery, antibacillary

### Introduction

Tuberculosis is an infectious disease caused by Mycobacterium tuberculosis or Bacillus Koch (BK), the pulmonary form is the most common (70% of cases), and extra-pulmonary forms have re-emerged due to the increase of HIV-immunocompromised individuals.

The tuberculosis involvement prevalence of soft tissues was evaluated between 0.01 and 2%. The existence of an isolated soft tissues involvement during tuberculosis, without other localization is very rare. We report the observation of a patient who presented a tuberculous pseudo-tumoral gluteal mass without other localizations of this disease.

### Observation

this is a 56 years old patient with no specific history who consults for a gluteal mass of progressive installation over 3, without altering the patient's general condition and apyrexia whose clinical examination has objectified a left gluteal mass, painless, well limited, of soft consistency, and regular contours, of 25 cm long axis, with signs of inflammation without skin opposite fistulization of (Figure 1).

CT showed a polylobed lesion process, well limited, subcutaneous, next to left gluteal muscles, with which it keeps a separation border, this mass measures 64mm / 162mm (Figure 2, 3), weakly raised after injection of contrast medium and presents some peripheral calcifications (Figure 4).

Surgical exploration after a direct incision on the swelling found a lobulated mass. The procedure consisted of a mono block excision of the mass; this last measured 180 mm long axis and containing caseous fluid, followed by the gluteal region reconstruction.

The histological study was in favor of a remodeled tuberculoma with extensive, homogeneous, eosinophilic and acellular caseous necrosis. This last is overflowed at the periphery by an inflammatory crown, made of epitheloid

granuloma with giant cells.

The patient underwent a medical treatment based on Rifampicin, Isoniazid, Ethambutol and Pyrazinamide for 2 months, followed by a combination therapy with Rifampicin and Isoniazid for 9 months.

### Discussion

Buttock Tuberculous abscess is very rare [1]. Most often, it is studied as part of clinical manifestations of osteo-articular hip tuberculosis [1-3]. It occurs towards the fourth and fifth decades [2-4]. It is observed more in men. concerning the antecedents: the notion of trauma is largely highlighted in all studies [3-5].

It seems that the trauma creates tissue alterations able either to locally fix a tubercle bacillus or to awaken a quiescent home. In the majority of the studies carried out, we note the notion of tuberculous antecedents [4-6]. Tuberculosis usually involves the lungs and the hilum lymphatic nodes. Muscle involvement is very rare [7].

The percentage of musculoskeletal TB is 3% of all TB cases. Soft tissue involvement is usually associated with underlying disorders such as those in immunocompromised patients, during immunosuppressive therapy or vascular collagen disease, or in local injury [8,9]. The beginning is often insidious causing a delay of diagnosis.

The clinical signs are marked by a swelling of the soft tissues producing a cold abscess of variable volume [1,2]. Hip pain and movement limitations may be associated [2-4], fistulization is a consequence of late development. The general condition may be altered or preserved.

The originality of our case is based on the isolated tuberculosis of the soft tissues, as well as its important volume in an immuno competent subject with the absence of any respiratory symptomatology evoking a tumoral origin in the first place. The pseudo-tumoral form of tuberculosis is rare. It constitutes a deceptive radio-clinical entity, which poses real

problems of differential diagnosis. An evocative epidemiological context, concomitant pulmonary involvement, or a history of tuberculosis should suggest the diagnosis.

Biologically, sedimentation rate and blood count are usually normal. The intradermal reaction to tuberculin is positive. After needle aspiration of a collected abscess and staining of ZEHL, direct examination is positive but does not differentiate between tuberculous and atypical mycobacteria [5-10]. This precision is brought by the culture in field of LOWENSTEIN and JENSEN where the bacillus grows slowly in 21 to 72 days, from where the necessity to repeat the cultures.

Imagery plays a key role in the diagnosis and early management of pseudo-tumoral tuberculosis mainly through radio-guided specimens. The CT defines the degree of extension. Fistulography is used in case of distal fistula. Scintigraphy looks for early bone involvement [10-11].

The main differential diagnoses are pyogenic abscess, atypical mycobacteria, hydatid cyst, and some tumors. Surgical treatment is based on drainage and resection of the abscess pocket with heavy washing or repeated punctures. The medical treatment based on antibacillary [12-13] by the combination of 3 drugs in the initial phase (Rifampicin,

Pyrazinamide, and Streptomycin) and 2 drugs in the maintenance phase (Rifampicin, Pyrazinamide). Evolution is evaluated by clinical, biological, and radiological criteria.

The use of surgical exploration is often necessary. This last makes it possible to pose the diagnosis in more than 97%. In the majority of cases, the diagnosis of tuberculosis remains a surprise to the histological study of the biopsy or the surgical specimen after surgery. It makes it possible to correct the diagnosis by showing the gigantocellular granuloma with caseous necrosis, specific for the bacillus of koche. Histological examination of the various samples reveals epithelio-giganto-cellular follicles with caseous necrosis most often [5-12]. Once the histological evidence is obtained, the anti-bacillary treatment is often effective with a good clinical evolution is radiological.

### Conclusion

Tuberculosis again impresses us not only with this pseudo-tumoral form, but also with the fact that soft tissue involvement is very rarely isolated.

Any abscess of the soft parts must evoke the tuberculous origin. The etiological research must gather a spindle of anamnestic, clinical, and paraclinical arguments. Treatment should be adequate to avoid progression to complications.

### Figures



**Fig 1:** Clinical image in the operating theater showing tumefaction of the left buttock with inflammation of the skin



**Fig 2:** Scanographic image in cross section of the pelvis showing a large subcutaneous mass opposite the gluteal muscles



**Fig 3:** cross-sectional scanographic image (level of cut lower than Figure 1) of the pelvis showing the tumor mass



**Fig 4:** CT image after injection of the contrast product showing the tumor mass

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