

**TUBERCULOSIS: A DIAGNOSIS NOT TO BE MISUNDERSTOOD IN THE FACE OF MONOARTHRITIS; ABOUT A CASE AND REVIEW OF THE LITERATURE****Tarik El Mountassir\*, Karim El Hammiri, Moncef Boufettal, Reda Allah Bassir, Jalal Mekkaoui, Mohamed Kharmaz, Moulay Omar Lamrani and Mohamed Saleh Berrada**

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**ABSTRACT**

The tuberculous origin is rarely evoked in front of the clinical picture of a subacute monoarthritis, especially in front of an insidious evolution with atypical clinical presentation. We present the case of a 35-year-old patient who presented with tuberculosis of the right knee. The functional prognosis of tuberculous arthritis of the knee is primarily related to the early diagnosis and the rapid initiation of antituberculous treatment. followed by gentle and prolonged rehabilitation.

**KEYWORDS:** Tuberculosis- Knee.**A) INTRODUCTION**

The tuberculous origin is rarely evoked in front of the clinical picture of a subacute monoarthritis.

The evolution is often insidious with atypical clinical presentation.

Hence the interest of greater caution in the diagnostic and therapeutic approach.

**B) MATERIEL AND METHODES**

This is a 35-year-old man, victim of a public road accident in June 2015 (A joint wound in the right knee operated in emergency).

The consequences were a painful swelling of the same knee with stiffness.

On examination : Afebrile; he walks with flexum of the right knee

Soft swelling in the quadriceps fornices, without patellar shock

Biology : Absence of an inflammatory syndrome.

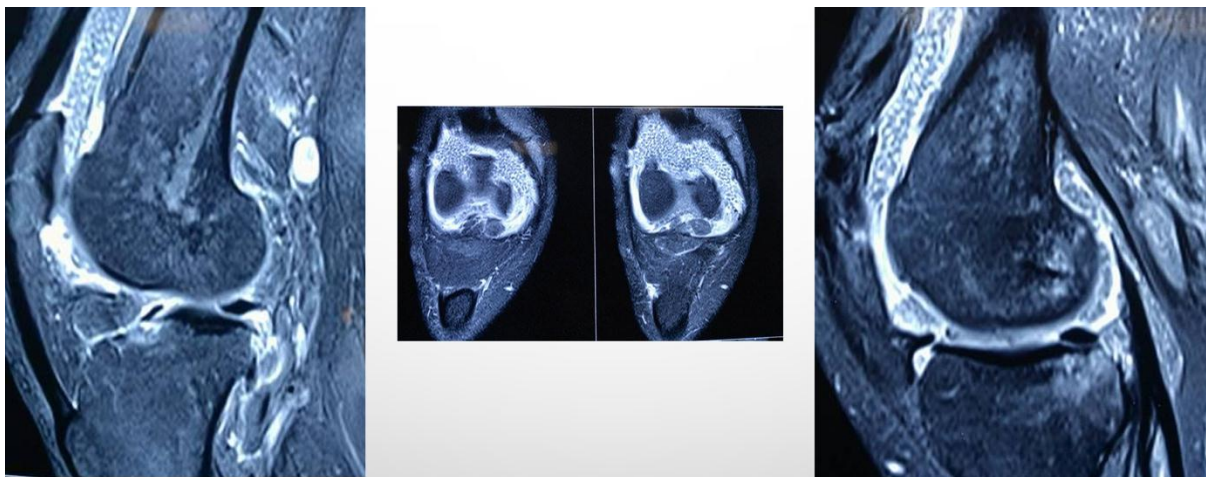
**C) RESULTS**

⇒ On the MRI: Inflammatory synovitis with fairly abundant hemarthrosis. (Fig1)

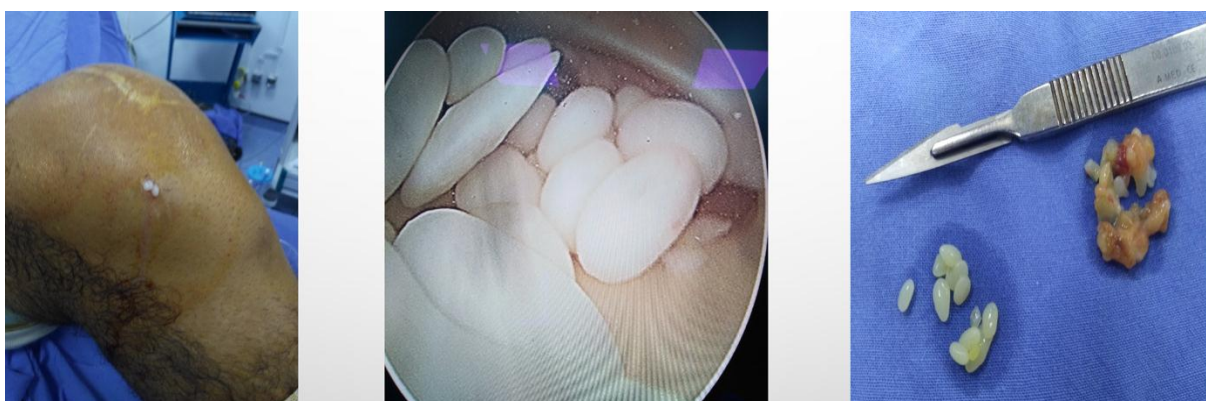
⇒ Arthroscopy:

- On exploration: An inflammatory synovium with knee stuffed with rice-like grains (Fig 2)

- Biopsy ==> Anatomic pathology: Subacute fibrinous synovitis with outline of epithelioid granulomas, without necrosis.
- ⇒ From a microbiological point of view: Bacteriological culture of synovial samples and joint fluid negative, Search for 16S ribosomal RNA : negative, IDR negative, search for BK negative, quantiferon negative, search for atypical bacteria negative, Wright serology negative.



**Fig. 1: Inflammatory synovitis with fairly abundant hemarthrosis.**

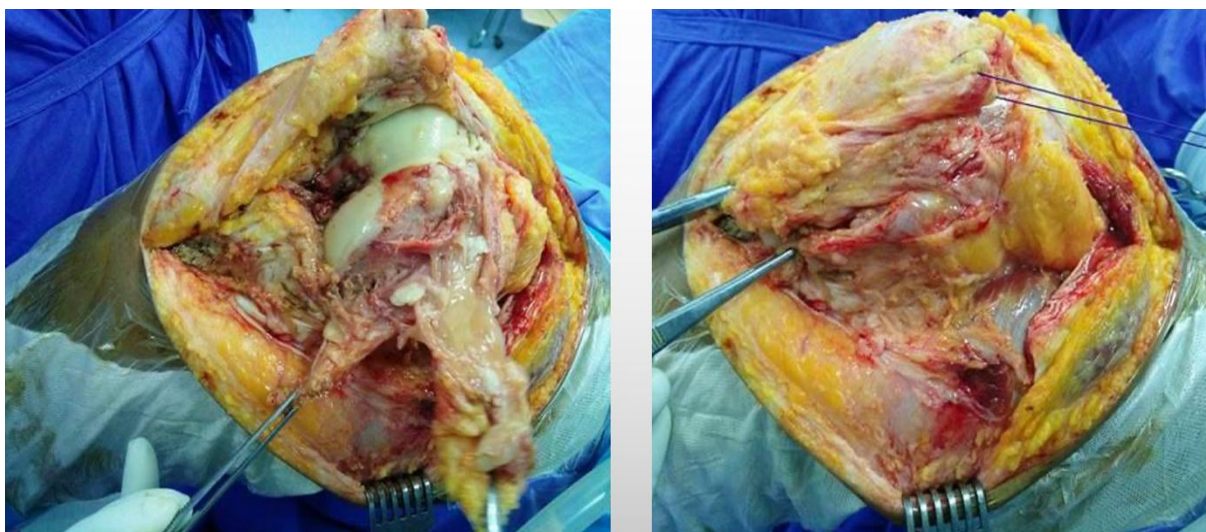


**Fig. 2: An inflammatory synovium with knee stuffed with rice-like grains.**

- ⇒ Subtotal synovectomy by anterior approach + lavage drainage of the right knee:
  - An anatomopathologic examination of the surgical specimen (Fig 3)



Tuberculous synovitis: Tuberculoid granuloma with caseous necrosis



**Fig. 3: Subtotal synovectomy by anterior approach + lavage drainage of the right knee.**

## D) DISCUSSION

Osteoarticular tuberculosis : 2 to 5% of all tuberculosis, it mainly affects the vertebrae ++, the knee and the hip. Tuberculous arthritis is most often bacillary pauci resulting from the reactivation of latent Koch's bacillus, hence the frequent negativity of articular fluid punctures and the need to resort to deep arthroscopic or even open samples.

The main contributing factor : A history of tuberculosis, trauma could be the cause of a reactivation of BK.<sup>[1]</sup>

Clinically : No specific sign suggesting a tuberculous origin.

Only questioning can guide the clinician.

The time between the onset of symptoms and diagnosis is quite long (13 to 21 months) on average.<sup>[1]</sup>

MRI is the most powerful diagnostic imaging test.

The diagnostic confirmation is based on the bacteriological examination of the local samples highlighting the BK and the anatomopathologic study revealing a typical granuloma.

The protocole of treatment is based on anti-tuberculosis (9 to 12 months), rehabilitation and surgery : Either initially (synovectomy, debridement), or later in the sequelae stage (arthrodesis, prosthesis).<sup>[1,2]</sup>

## E) CONCLUSION

The functional prognosis of tuberculous arthritis of the knee is primarily linked to the early diagnosis and the rapid initiation of antituberculous treatment followed by gentle and prolonged rehabilitation.

Multidisciplinary care (orthopedic surgeon, infectiologist and physical physician).

## CONSENT

The patients have given their informed consent for the case to be published.

## Competing Interests

The authors declare no competing interest.

## Authors 'Contributions

All authors have read and agreed to the final version of this manuscript and have equally contributed to its content and to the management of the manuscript.

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