

Case Report

“Feeling -The -Rice- Bag” Sign: A Pathognomonic Manifestation of Synovial Osteochondromatosis

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Abstract:

Synovial Osteochondromatosis is not rare in joint pathology. An orthopaedic surgeon may have around 30 cases in life career. The inner surface of synovium is presumably affected by inflammatory process and forms the osteochondral body. By the time this osteochondral formation detaches from synovium and becomes loose body in the joint. Synovial Osteochondromatosis is a pathological status in which there are multiple loose bodies inside the joint. Synovial Osteochondromatosis is presumably a benign disorder, but whose common complication is blockade of joint when loose body incarcerated between cartilages of joint causing acute pain and joint cannot move. In medical terminology there is Osteochondromatosis who is a different pathology, a kind of benign bone tumors, not the title of this article. Multiple loose bodies can be detected by Feeling- the- Rice- Bag Sign. Place the hand over the involved joint, we can feel the loose bodies as if we feel the rice grain in the bag. More loose bodies exist, easier we feel. More superficial the joint and/or loose bodies are, easier feeling is recognized. Feeling -the -Rice- Bag Sign is pathognomonic manifestation for the Synovial Osteochondromatosis.

Keywords: Feeling -the- Rice- Bag Sign, Pathognomonic Manifestation, Synovial Osteochondromatosis.

Introduction

Synovial Osteochondromatosis is a benign pathology of synovium in which there are many loose bodies inside the joint. The disease is not malignancy but often cause joint blockade when the loose bodies incarcerated between cartilages of the joint. Patient is acutely painful and the joint almost immobile. Feeling -the- Rice- Bag Sign enables physician to discover the loose bodies inside joint and access the clinical diagnosis.

Description

The involved joint is placed in relaxed and no- pain position. Muscles in the same relaxation. Examiner's hand placed over joint where there are as much as loose bodies possible and as superficial as possible (loose bodies deep inside the joint cannot be palpable). Examiner feels the loose bodies as if the rice grain in the bag . More loose bodies exist, easier examiner feels. More superficial loose bodies are, easier feeling is recognised. Feeling- the- Rice- Bag Sign is pathognomonic manifestation for Synovial Osteochondromatosis, this sign is sufficient to diagnose the disorder. However, X-rays are necessary to confirm the diagnosis and show the characteristics of synovium and loose bodies, as well as the lesions of cartilage and bone of joint. Figure 1,2,3.

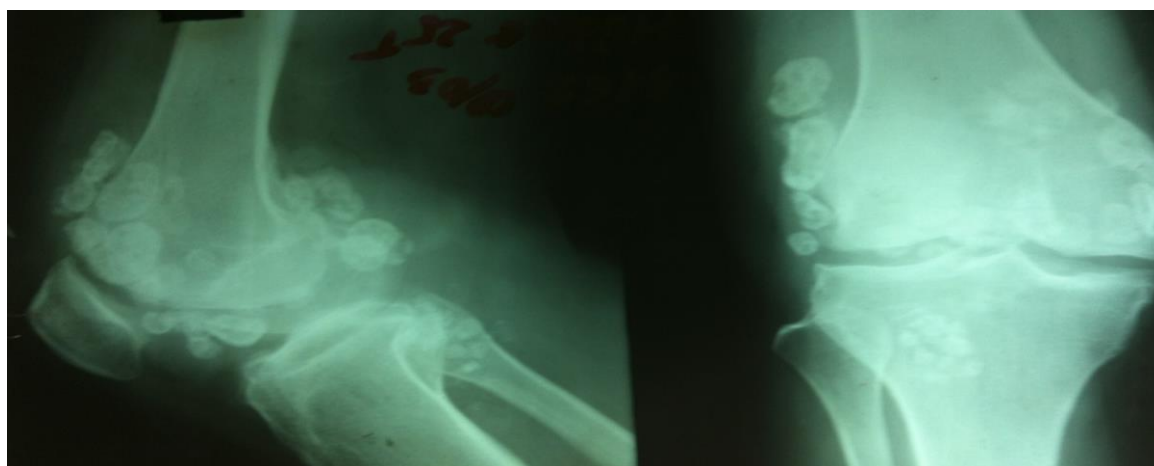


Figure 1: Male 27 years old. Synovial Osteochondromatosis of the right knee. Many loose bodies inside the joint. They were seen in lateral & anterior & posterior synovial cavity. Feeling-the-Rice-Bag Sign was clearly positive.

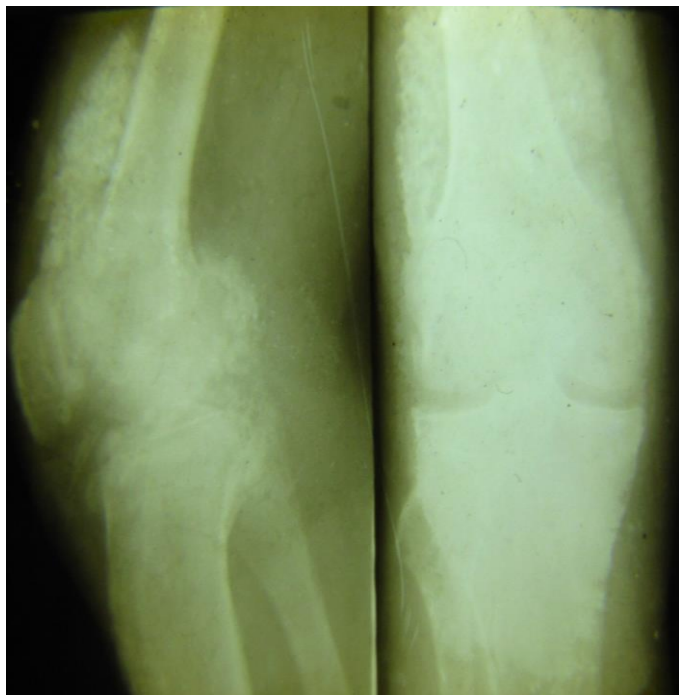


Figure 2: Female 32 years old. Synovial Osteochondromatosis of the right knee. Many loose bodies were seen in the medial and lateral synovial cavity, as well as beneath the Rectus Femoris muscle. Feeling-the-Rice-Bag Sign was easily positive.



Figure 3: Female 25 years old. Synovial Osteochondromatosis of the right ankle. Loose bodies concentrated at lateral & anterior ankle. Feeling-the-Rice-Bag Sign was subtly positive.

Discussion

Clinical examination is very important to diagnose a lesion of skeleton system [1-3]. Synovial Osteochondromatosis is not exceptional, needs clinical manifestations and medical imagery to access the definite diagnosis [4]. The pathology of Synovial Osteochondromatosis typically presents multiple loose bodies in the joint which are palpable by examiner [5]. That is the birth of Feeling-the-Rice-Bag Sign. Examination of a joint affected by Synovial Osteochondromatosis, physician perceives a sensation of feeling the rice grain in bag. More loose bodies exist, more sensation is perceived. More superficial the joint is, more easier the examiner feels. Feeling-the-Rice-Bag Sign is pathognomonic manifestation of Synovial Osteochondromatosis. This sign enables physician to get diagnosis with exactness. Of course, medical imagery will confirm and clear up all details of disorder.


Conclusion

Feeling-the-Rice-Bag Sign is very helpful to access the diagnosis of Synovial Osteochondromatosis. It is a relevant clinical finding which examier should look for in all joints under suspicion of Synovial Osteochondromatosis. The sign should be recognised as a contribution to the medical literature of orthopaedic semiology.

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