International Journal of Academic and Applied Research (IJAAR)
ISSN: 2643-9603
Vol. 6 Issue 6, June - 2022, Pages: 102-103

# Rare and Secondary Synovial Localization of a Squamous Cell Carcinoma Revealing a Primary Mediastinum-Pulmonary Tumor

**M.Ait-Rahou, O.Barchah, M.Lahdaili, H.Elhaoury, M.Madhar, R.Chafik, Y,Najeb**

Traumatology and orthopaedic surgery department, ibn Tofail hospital, Marrakesh, Morocco
Dr.m.aitrahou@gmail.com

***Abstract****: A 58-year-old chronic smoker referred for suspicion of tuberculosis arthritis of the left knee in front of feverish swelling, and total impotence evolving for 6 months with an altered general condition. He underwent drainage with biopsy of the synovial membrane and the results confirm a squamous cell carcinoma. The extension assessment revealed a primary lung tumor. Articular metastases are exceptional; they can reach the synovial membrane, the cartilage or the intra-articular spaces. The most affected joints are the knee first, the sternoclavicular, the shoulder, the hip, the interphalangeal, the wrist and finally the ankle.*

**Keywords:** Osteoarthritis- knee – synovial – squamous cell carcinoma

**Introduction:**

Osteoarthritis is a frequent pathology; it can simulate a tumoral pathology clinically and radiologically. Through this observation, we propose an update on a rare and unusual localization of a squamous cell carcinoma, which allowed us to retrograde the diagnosis of a mediastinum-pulmonary carcinoma.

**Observation:**

56-year-old patient, chronic smoker, without any other particular pathological history, who complains of inflammatory-looking gonalgia evolving for more than 6 months in a context of fever, and progressive deterioration of general condition. Made up of asthenia and weight loss amounting to 10 kg with the associated sign, he reports the notion of a chronic nocturnal cough. The clinical examination of his admission found a hyperthermic swollen knee, slightly painful on active mobilization. In addition, the general examination revealed the presence of multiple adenopathies of different sizes but of hard consistency and adhered to the posterior plane, especially at the level of the axillary hollow, above the clavicular and inguinal. It should be noted that the patient consulted in a general practice where he benefited from paraclinical examinations consisting of a biological assessment which showed hyperleukocytosis at 13000/mm3, with a CRP at 82 g/dl and a standard X-ray of the knee right which was not completely conclusive, apart from a calcification of the soft parts opposite.
Complementary MRI of the knee was in favor of multiple lesions of the two aggressive lower limbs with synovitis of the right knee suggesting a secondary origin.

The patient was referred to the emergency for suspected arthritis, tuberculosis, or a synovial tumour. He benefited from a bacteriological sample with a biopsy of the synovial membrane, and the anatomopathological study with immunohistochemical complement were in favor of a poorly differentiated non-keratinizing squamous cell carcinoma.
a body scan was requested to rule out a secondary location. This revealed a right mediastino hilar ganglio-tumor complex with central necrosis measuring approximately 40.36.40 mm, associated with supra and sub diaphragmatic lymphadenopathy, secondary adrenal lesions and peritoneal and subcutaneous nodules. We retained the diagnosis of a metastatic lung tumor revealed by a secondary localization of a squamous cell carcinoma of the synovial limb.

**DISCUSSION:**

Joint metastases are rare and exceptional, they can reach either the synovium, the cartilage or both, or even the intra-articular spaces. As for the most affected joints, we cite in order of frequency the cases described in the literature: the knee first, the sternoclavicular joint, the shoulder, the hip, the interphalangeal joint, the wrist and lastly the peg. [1]

The mechanism of dissemination remains unknown. Two hypotheses have been put forward: hematogenous dissemination versus direct invasion reflected by bone involvement. The latter seems to be the most likely in our case, this is explained by the associated bone involvement. [1,2]

The authors report that lung carcinoma is the most metastatic tumor likely to reach the synovial membranes. Approximately 50 cases of synovial metastases have been described in the literature, in patients followed for solid tumors. In our case, the main reason for admission to the emergency was chronic inflammatory gonalgia, with no signs of pulmonary appeal, apart from a chronic cough.

The tumor extension assessment revealed the presence of a pulmonary mediastino mass with multiple supraclavicular adenopathy. The biopsy-exeresis of an adenopathy confirms that the primary tumor is of pulmonary origin. [3]

Several diagnoses to be evoked in front of an intra-articular mass, malignant tumor are rarely involved. Similarly, inflammatory granuloma of tuberculous origin should not be neglected. [4] In our case, tuberculosis arthritis was the first diagnosis to be eliminated through a range of clinical and radiological arguments in a patient who lives in a tuberculosis-endemic country and who presents with chronic mono-arthritis, sweating nocturnal, weight loss and deterioration of general condition. This can also simulate a tumoral pathology, hence the interest of the bacteriological and anatomo-pathological study that makes it possible to decide between the two diagnoses. [3]

## CONCLUSION:

The presence of an unexplained arthritis, of chronic evolution, with a deterioration of the general state, must make evoke; among others; the presence of either a primary synovial tumor or a secondary location.

## Reference:

1. Thompson KS, Reyes CV, Jensen J, Gattuso P, Sacks R. Synovial metastasis: Diagnosis by fine-needle aspiration cytologic investigation. Diagn Cytopathol. 1996;15(4):334–337.

2. Herrak L, Bouchikh M, Maidi M, Fennane H, Ouchen F, Benosmane A. Métastase cardiaque d’un carcinome épidermoïde bronchique. Revue de Pneumologie Clinique. 2012;68(4):253–256.

3. Levine HR, Tingle E, Carter B, Dockery D. Synovial Metastasis from Lung Cancer. Baylor University Medical Center Proceedings. 2013;26(1):25–27.

4. Masson E. Monoarthrite secondaire à une métastase articulaire : à propos de deux cas et revue de la littérature. EM-Consulte. https://www.em-consulte.com/article/12430/monoarthrite-secondaire-a-une-metastase-articulair. Accessed 28 March 2022.