Soft Tissue Sarcoma Versus Shoulder Bursitis in Adult Patient: Report of a Case

Lorena Pena1*, Esteban López-Anglada1, Javier Pena1, Susana Junceda2 and Alejandro F Braña1

1Orthopaedic Surgery Department, Hospital Universitario Central de Asturias, Spain
2Pathological Anatomy Department, Hospital Universitario Central de Asturias, Spain

*Corresponding Author: Lorena Pena, Orthopaedic Surgery Department, Hospital Universitario Central de Asturias, Spain.

Received: February 27, 2021; Published: March 31, 2021

Abstract

An unusual case of bursitis in shoulder that presented with a shoulder mass and simulated a sarcoma is described, which initially was mistaken for a malignant lesion. The patient underwent a surgical resection. Her radiographic, histologic, and surgical findings are discussed. Although bursitis is frequent in shoulder, such size of the mass is seen rarely. Patient achieved complete recovery after surgical resection. A review of the literature on shoulder bursitis is included.

Keywords: Soft Tissue Tumor; Sarcoma; Shoulder Bursitis; Adult; Surgery; Shoulder Joint

Abbreviation

MRI: Magnetic Resonance Imaging

Introduction

An unusual case of bursitis in shoulder that presented with a shoulder mass and simulated a sarcoma is described, which initially was mistaken for a malignant lesion.

Case Report

We report the case of a 46-year-old female patient presented to the outpatient department with a painful subdeltoid mass on the left shoulder and restriction of the movements (Image 1). She gave no history of trauma, fever, or constitutional symptoms. There was no history of pain in her elbow or hand joints or of morning stiffness. The local temperature was not raised, and there was no overlying redness.

Image 1: A huge mass in the left shoulder.

Plain radiographs revealed no osseous or articular lesion in the shoulder, and no abnormalities were seen in the chest image. Magnetic resonance imaging (MRI) revealed a focal area of signal alteration on the subdeltoid bursa. There was no bone edema of fluid in the joint space. The differential diagnosis of benign soft tissue tumor and chronic synovitis were suggested on MRI (Figure 1).

![Figure 1a and 1b: MRI showing areas of signal alteration on the subdeltoid bursa.](image1)

Results of a subsequent cytology analysis of a wide excision biopsy were conclusive (Image 2). No pus or granulation tissue was seen.

![Image 2: Histopathology showing epithelioid cell granuloma and synovium (Hematoxylin and Eosin 10x).](image2)

She had complete resolution of her symptoms at 3 months postoperatively and had regained full range of motion. When last seen at the 2-year follow-up, the patient was completely asymptomatic and had full range-of-motion of shoulder, with no recurrence.

**Discussion and Conclusion**

To our knowledge, such huge bursitis in shoulder has not been reported before. Exact assessment of tumor existence inside the joint can be difficult in osteosarcoma and chondrosarcoma, so abnormal radiologic findings should be regarded as proof of existence of tumor, and extraarticular wide resection should be planned [1]. The rarity of this lesion in this case makes diagnosis difficult. MRI is the best modality for evaluating soft tissue masses but cannot differentiate neoplasms from nonneoplastic diseases [2-5]. The most sensitive clinical method has been open biopsy [6]. Surgery should be undertaken to confirm the diagnosis and to obtain tissue for histopathology [7-9].

In conclusion, this case illustrates that a huge mass in shoulder can be a benign lesion apart from a malignant tumor. Not only the importance of the biopsy is obvious, but also the surgical planning of the wide excision.

**Conflict of Interest**

The authors, their immediate families, and any research foundations with which they are affiliated have not received any financial payments or other benefits from any commercial entity related to the subject of this article.

**Bibliography**