Synovial Hemangioma - A Rare Cause of Chronic Knee Joint Pain

¹Mohd Hazrul Hazid Hamazah; ²Nor Faissal Yasin

¹Department of Orthopaedic & Traumatology, International Islamic University of Malaysia, Kuantan, Pahang. ²Department of Orthopaedic, University Malaya Medical Centre, Petaling Jaya, Selangor.

INTRODUCTION:

Synovial hemangioma is a rare benign vascular malformation, usually originating in the subsynovial mesenchymal of the synovial membrane. There are subtypes: 3 into juxtaarticular hemangioma, intraarticular hemangioma, or an intermediate type of hemangioma with both intra extraarticular components.(1) Synovial hemangiomas constitute less than 1% of all hemangiomas and are most common in the knee joint, but have also reported in other joints, including elbow, ankle and wrist. (2)

REPORT:

A 21-year-old lady presented with lateral aspect of right knee pain for 4 years. Patient was treated several times for soft tissue injury of the knee. However, the pain was gradually increasing in severity for the past 1 year. Patient started to notice swelling over the lateral aspect of the knee in which becoming more obvious each day that bring patient to orthopedic clinic.

On examination, patient had a swelling over lateral aspect of the knee with well-defined margin. The swelling was non tender and not attached to the skin; however, swelling attached to the underlying structure. The knee had full range of motion and without any demonstrable ligamentous laxity.

Plain radiograph showed no significant finding. Further evaluation with magnetic resonance image (MRI) of the right knee showed a lobulated heterogenous lesion at the lateral aspect of right knee which extended into knee joint (Figure 1). The findings suggestive of right posterolateral knee slow flow vascular malformation with locoregional and intraarticular infiltration. It is likely venolymphatic malformation with predominant lymphatic component.

Marginal excision was done. Intraoperatively, there was soft tissue mass with brownish discoloration (Figure 2). The mass attached to lateral collateral ligament and iliotibial band and extending into the knee joint. The synovium looked friable and partial synovectomy was done to the diseased part.

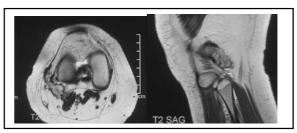


Figure 1: MRI images



Figure 2: Soft tissue mass

Histopathological examination results showed diffuse proliferation of variably dilated and congested vascular channels filled with blood within fibrofatty stroma. Associated fresh hemorrhage within fibrotic stroma and patchy hemosiderin-laden macrophages and lymphocytic infiltration are observed. No cytological atypia, giant cells, papillary projection or malignancy seen. The final impression was synovial hemangioma of right knee joint.

CONCLUSION:

In patients with a history of recurrent pain and swelling with hemarthrosis, synovial hemangioma is always one of the provisional diagnosis although it can mimic the meniscus pathologies or ligamentous injuries.(3)

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