Tennis Leg Mimicking Compartment Syndrome And Deep Vein Thrombosis Of Right Leg: A Case Study

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INTRODUCTION:

Tennis leg is an uncommon Orthopaedic injury. It is described as gastrocnemius muscle injury at the musculotendinous junction which results from forceful contractions of the calf muscles. Tennis leg may mimic Deep vein thrombosis or Compartment syndrome of the leg.

MATERIALS & METHODS:

A 25 years old man, alleged sports injury (while playing futsal), where he forcefully stopped while running. During this time, his right foot was inverted and he heard a snapping sound over his right calf. He had sudden sharp pain over his right calf and his leg was swollen (Figure 1). He went to hospital a day later and was referred to Orthopaedic team. Differential diagnosis for this patient was compartment syndrome and deep vein thrombosis of the leg apart from tennis leg.

RESULTS:

Compartment was soft and passive stretch test was negative. A ultrasound showed no deep vein thrombosis. MRI study was done, the report was consistent with tennis leg where it showed fluid seen deep to medial head of right gastrocnemius muscle and superficial to the right soleus muscle, at the level of myotendinous junction. It also showed suggestive tear over head of the gastrocnemius muscle with muscle edema (Figure 2). The patient was treated with RICE (rest, ice, compression and elevatation). He also was given analgesia and sent to rehabilitation as a part of treatment.



Figure 1: Bruises can be seen over medial aspect of right proximal calf.



Figure 2: MRI image of right tennis leg

DISCUSSIONS:

The uniqueness of the study was this condition is uncommon among futsal players and it may mimic compartment syndrome and deep vein thrombosis of the leg. Rehabilitation and analgesia is the mainstay of treatment of this injury.

CONCLUSION:

High index of suspicion together with clinical features supported by imaging studies is helpful in recognition of this injury.

REFERENCES:

1. Shah JR, Shah BR, Shah AB. Pictorial essay: Ultrasonography in 'tennis leg'. Indian J Radiol Imaging. 2010;20(4):269-73.