

Acute Exertional Compartment Syndrome In Young Amateur Footballer; A Case Report

Asrizuzairudin MA

Department Of Orthopaedics, Universiti Sains Malaysia, Kelantan

INTRODUCTION:

Acute exertional compartment syndrome is rare and characterized by a rise in pressure within a closed fascia space in absence specific traumatic event.

MATERIALS & METHODS:

A 31 year old malay guy presented with acute onset of right leg pain and swelling for 1 day after playing soccer which progressively worsening by hours .No direct trauma had occurred .The pain and swelling become worsening and also complaint of numbness and foot drop.On examination his left leg was grossly swollen .Dorsalis pedal and posterior tibialis artery were normal bilaterally, no sensation to light touch in dorsal left foot .The patient demonstrated foot and toes drop.Passive stretch test positive and anterolateral compartment was tense and posterior compartment was soft.

RESULTS:

Radiographs of the leg show no fracture.MRI shows hematoma formation over anterolateral compartment and compartment syndrome over that compartment.(Figure1)

The patient was diagnosed with acute exertional compartment syndrome over anterolateral compartment of left leg with common peroneal nerve palsy. He was taken to operating room for emergent anterolateral compartment fasciotomy approximately more than 12 hours after onset of his initial symptom,Figure 2.intraop finding



FIGURE 1



FIGURE 2

DISCUSSIONS:

Acute compartment syndrome is usually associated with traumatic event most commonly with proximal tibial fracture .Not all compartment syndromes occur after acute trauma as this patient who always involved in sport activity because are associated with strenuous muscle activity. It tends to be occur after activities involving prolonged exertion such as repeating kicking ,marching and running.Diagnosis of compartment syndrome is primarily clinical based on sign symptom of severe pain .This patient come with swollen and painful left calf which claim by patient progressively associated with foot and toe drop

CONCLUSION:

Acute exertional compartment syndrome is a rare cause of leg pain and can be easily missed without high degree of clinical suspicion often associated with delay in diagnosis and potentially leading to irreversible muscle and nerve damage.

REFERENCES:

1. Acute Atraumatic Compartment Syndrome in an Athlete: A Case Report J.Athl Train. 1997 Jul-Sep; 32(3): 248–250.