

Doctor, I Can't Felt My Leg!!!

N Khadijah¹, MPL Deepanesh¹, TW Koh², MA Kamalruzaman²
Department of Orthopedic, Hospital Enche' Besar Hajjah Khalsom, Johor

INTRODUCTION:

Avulsion fractures of the posterior cruciate ligament (PCL) are common but complication such as compartment syndrome of leg are rare occurrence.

CASE REPORT:

19 years old boy, alleged motor vehicle accident, with the knee hit the road in hyperflexion position of the knee.

Post trauma he presented with right knee and leg pain, swelling and unable to move the leg.

On clinical examination, there was significant effusion on the affected knee, as well pain out of proportion over the right leg together with increase pain on passive stretch of compartment muscles.

Plain radiograph of right knee showed PCL avulsion.



Figure 1: Plain radiograph of the right knee

A clinical diagnosis of acute compartment syndrome was made and urgent fasciotomy was performed and intraoperatively noted deep and superficial compartment muscle swollen and bulging up.

DISCUSSION:

The morphology of the tibial insertion site of the PCL may be the cause of this specific PCL injury. The PCL separates into the anterolateral and posteromedial bundles which is intracapsular but extrasynovial². However, the shapes and positions of these insertion sites are consistent in osseous landmarks. The PCL is attached to the posterior intercondylar fossa between the tibial plateaus, and it also extends below the posterior part of the tibial rim. This fossa is trapezoid in shape, and it widens inferiorly. Peripheral fibers of the PCL are attached extensively to the distal tibial periosteum. This area directly connected to the deep compartment of the leg, plus the trauma itself also can elicit the cause of compartment¹.

CONCLUSION:

We present a rare case of PCL avulsion injury complicated with compartment syndrome which was identified early and was managed successfully with urgent fasciotomy.

REFERENCES:

1. Konda et al: Acute Compartment Syndrome of the Leg, J Orthop Trauma 2017;31:S17-S18
2. Ogawa et al: Posterior cruciate ligament mediated avulsion fracture of the lateral tibial condyle: a case report, Journal of Orthopaedic Surgery and Research 2010, 5:67