

MUSCULOSKELETAL ACL INJURY IN FEMALES

In a young woman presenting with a swollen knee after sustaining injury during sport always consider the possibility of an ACL injury, even if the mechanism of injury appears innocuous.

Their pre-existing biomechanics may predispose them to ACL injury, often consisting of a combination of the following: wide female pelvis, femoral anteversion, genu valgus, calcaneal valgus and supination of the foot.

The mechanism of injury often involves sudden deceleration with an associated twisting motion of the knee. Sports with an increased risk of ACL injury include netball, handball, basketball and football.

Do you need to x-ray the knee? MRI is the gold standard investigation, however, an x-ray taken on initial presentation may demonstrate the presence of a tibial spine avulsion or an associated injury, e.g., a Segond fracture (an avulsion fracture of the knee that involves the lateral aspect of the tibial plateau and is very frequently (~75% of cases) associated with an ACL tear).

