
INTRODUCTION

Internal derangement of the knee has expanding interest in the application of MRI. The non invasive nature of MRI has facilitated evaluation of even acutely traumatized patients (*Deutsch and Mink, 1992*).

Increased soft tissue contrast coupled with multiplanner imaging capability allow to visualize all the structures within the knee joint in a way that is unprecedented (*Shankman and Beltran, 1994*).

MRI is the noninvasive imaging modality of choice supplementing the physical examination in the evaluation of both intra articular and extra articular injuries of the knee (*Crues et al. 1995*).

Fractures through cancellous bones appear on MR imaging as a linear or serpiginous bands of low signal intensity surrounded by high signal intensity oedema. Bone contusion within the marrow shows as decreased signal intensity on T1 and increased signal on T2 weighted images. There is high association with ligamentous injuries especially of the anterior cruciat ligament (*Vallet et al., 1991*).

Cruciate ligament injuries are reliably imaged by MR imaging with sensitivities and specificities greater than 90%. Signs of

abnormality include discontinuity, abnormal caliber and oedema which is seen as increased signal on T2 weighted images. Sagittal images are the optimum, though, coronal images can also support the diagnosis (*Rubin et al., 1994*).

The medial supporting structures of the knee include the deep fascia investing the sartorius and vastus medialis, the tibial collateral ligament and the medial capsular ligament while the lateral supporting structures include iliotibial band and biceps femoris tendon, lateral collateral ligament and lateral joint capsule (*Walker and Moore, 1997*).

Injuries to the lateral supporting structures are less common than their medial counterparts and results from more severe trauma (*Mink et al., 1993*).

Internal derangement involving the menisci can be depicted by MRI in up to 97% of cases (*Rubin et al., 1994*).

Developments in coil design and pulse sequences have contributed to an enhanced diagnostic capacity, and new applications continue to rapidly evolve (*Deutsch and Mink, 1992*).