



Fig. 1. A gap (arrow) within the critical zone of a tendon on a T1W image (A) that becomes brighter on a T2W image (B)' a specific sign for a supraspinatus tendon tear.

improve diagnostic accuracy. However, it being an invasive procedure will decrease interest from clinicians.

## Frozen Shoulder

Frozen shoulder (or adhesive capsulitis) is the main cause of shoulder pain and dysfunction in middle-aged and elderly populations. Patients obviously suffer from motion restriction in external rotation and abduction. In general, double-contrast arthrography is the definite test for diagnosis of adhesive capsulitis. Joint capacity, normally 14 cc or greater, is usually less than 10 cc in adhesive capsulitis. Physical therapy is commonly employed for treatment.

One report has stated that MR images can easily



Fig. 2. Sagittal T1W image showing an avulsion tear of the ACL at its tibial insertion and associated lipohemarthrosis. A fat-serum level within the suprapatellar bursa is noted. (Fat, large arrow; serum, small arrow.)

depict thickening of the capsule.<sup>12</sup> The author recently investigated dynamic contrast-enhanced MR imaging in assessment of acute and chronic stages of shoulder adhesive capsulitis before and after physical therapy with use of arthrography as the gold standard. Predictive outcome was that patients could be effectively treated by conventional or possibly more aggressive procedures.

## THE KNEE

## **Anterior Cruciate Ligament Tears**

The anterior drawer and stress arthrometry tests are used clinically to assess anterior laxity of the knee resulting from complete tears of the anterior cruciate ligament (ACL). These tests may offer high sensitivity (78% to 95%) and specificity (75% to 100%), <sup>13,14</sup> but are somewhat subjective and dependent on the experience of the examining physician. Moreover, muscular guarding by the patient may limit clinical accuracy in an acute setting.

Conventional MR imaging criteria for assessing