

## Clinical History

52 year old male fell down stairs and felt a “popping sensation” anterior to the knee joint

Radiographs were obtained, and were compared with a previous radiograph of 6 months earlier





Current lateral radiograph



Radiograph 6 months earlier



Current lateral radiograph



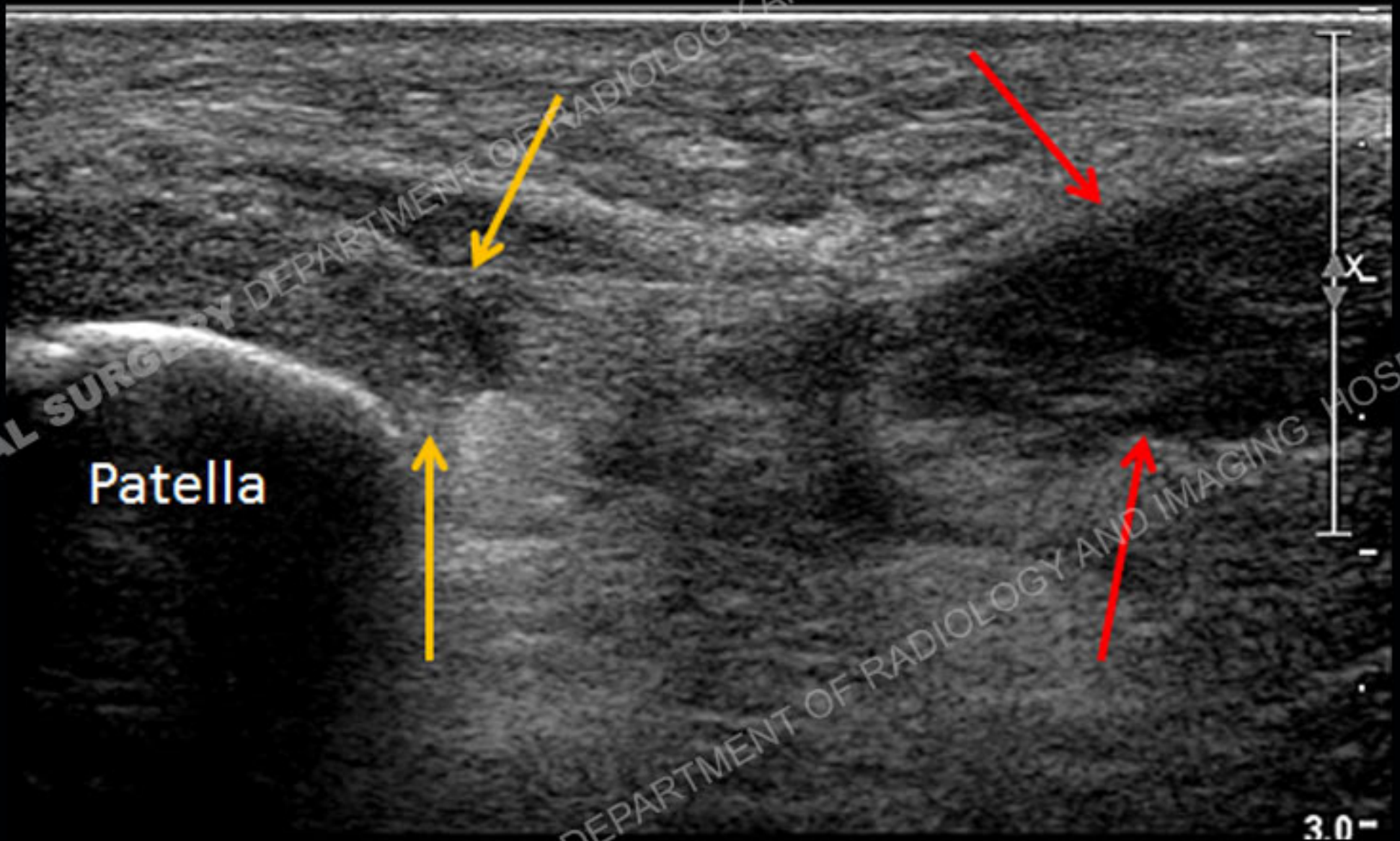
Radiograph 6 months earlier

The current radiograph demonstrates elevation of the patella and an increased patella-tibial tubercle distance (arrows) when compared to the prior exam.

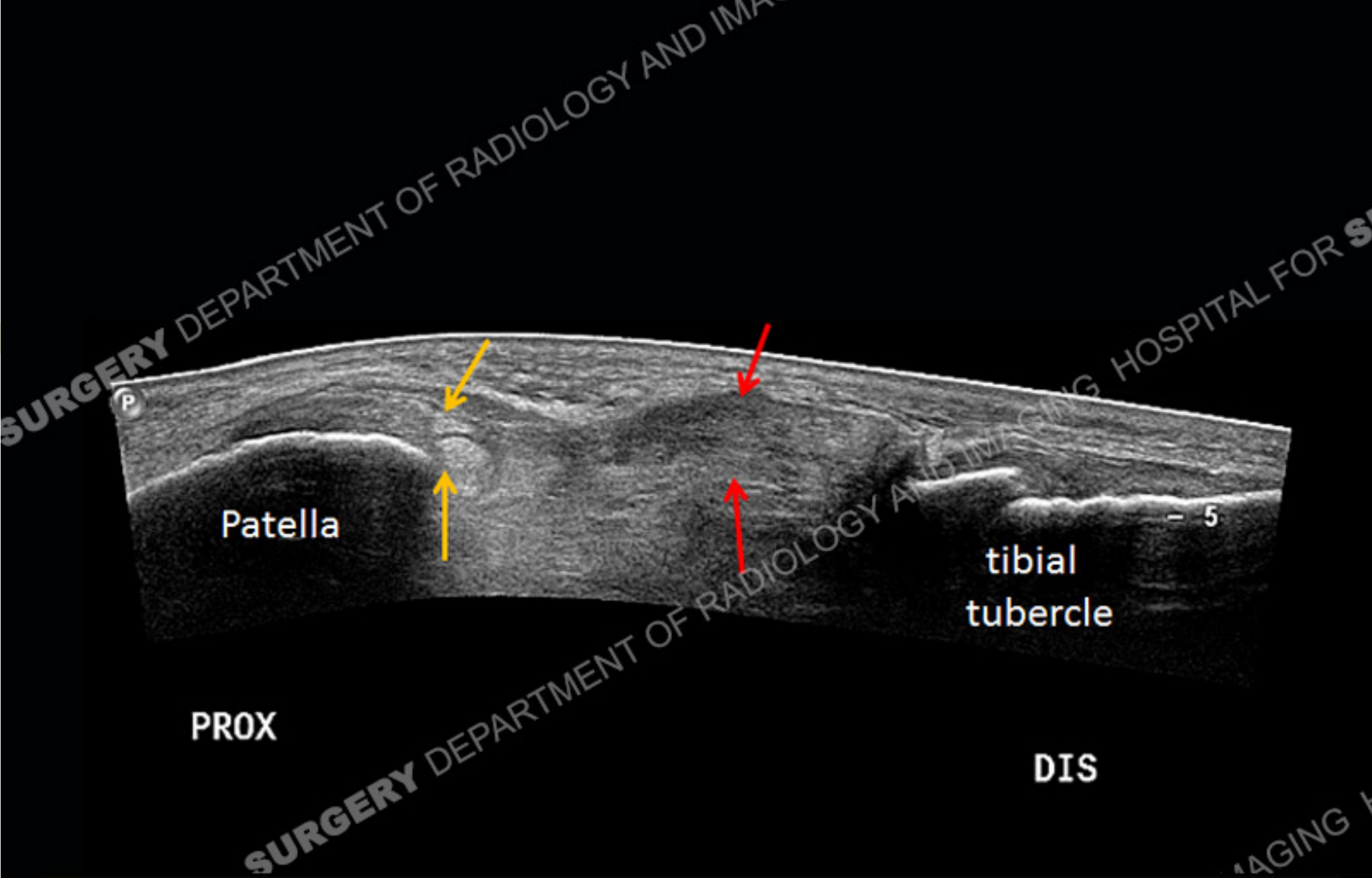
The interval elevation of the patella and increased patella-tibial tubercle distance was consistent with patellar tendon rupture

Sonographic evaluation was requested for confirmation and visualization of the patellar tendon and to facilitate surgical planning

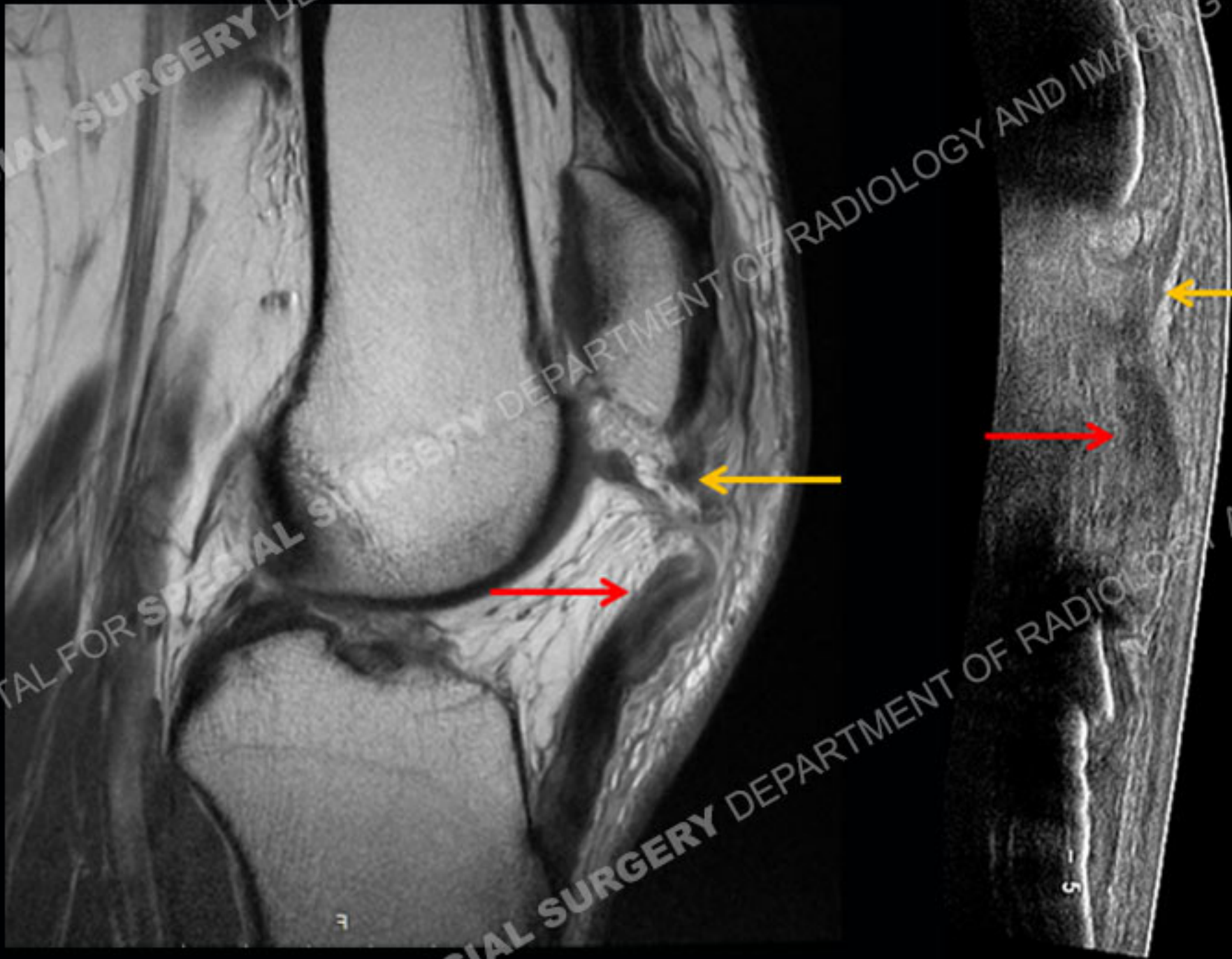




Long-axis view demonstrates disruption of the patellar tendon proximally (yellow arrows). A thickened and retracted distal tendon is also noted (red arrows).



Extended field of view ultrasound long-axis image demonstrates the entire extent of the tendon with tear (yellow arrows) and retracted tendon distally (red arrows).



Sagittal MRI ( 2 different patients) and rotated long-axis ultrasound shows the close correlation between the two imaging modalities in demonstrating tendon tear sites (yellow arrows) and the retracted tendon (red arrows)

## Discussion

In the evaluation of patellar tendon tears, both ultrasound and MRI are excellent modalities for confirmation of the diagnosis and delineation of the pertinent anatomy

MRI has the benefit of also providing a more global imaging examination of the remainder of the knee, if this is considered necessary

Ultrasound has the advantages of being a much faster and inexpensive means of evaluating the patellar tendon and may be used in claustrophobic patients or patients with other contraindications to MRI

