



Shelbourne Knee Center
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Specialized Care for Knee Injuries

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Magnetic Resonance Imaging of Posterior Cruciate Ligament Injuries: Assessment of Healing. Shelbourne KD, Jennings RW: *Am J Knee Surg* 12:209-213, 1999

This study evaluated posterior cruciate ligament (PCL) healing using magnetic resonance imaging (MRI). Forty knees with acute PCL injuries underwent acute and follow-up (>6months) MRI examinations. Twenty-three knees had isolated injuries, and 17 knees had associated ligament damage. The initial MRI scans showed 22 high-grade injuries with complete disruption, 14 with mid-grade injuries with extensive edema on T2 images with some bridging fibers present, and 4 patients had low-grade injuries. At a mean of 3.2 ± 1.3 years after the initial MRI, the follow-up MRIS revealed the PCL healed with continuity in all of the low-grade and mid-grade injuries and in 19 of 22 high-grade injuries. Of the 19 high-grade PCL tears that healed, 4 healed with normal contour and 15 were continuous with altered morphology at follow-up. Of 11 high-grade PCL-injured knees with associated ligament damage, on 1 PCL failed to regain continuity. The 3 PCLs that did not regain continuity were 2 patients with isolated injuries and 1 patients with associated anterior cruciate and medial collateral ligament injuries. These results demonstrate that most nonoperatively treated PCL injuries, even in association with other knee ligament damage, can heal with continuity