



Shelbourne Knee Center
at Methodist Hospital
Specialized Care for Knee Injuries

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**Classification and Management of Arthrofibrosis of the Knee after Anterior Cruciate Ligament Reconstruction.
Shelbourne KD, Patel DV, Martini DF: *Am J Sports Med* 24: 857-862, 1996**

Abstract: We report 72 patients with disabling knee arthrofibrosis who were treated at our clinic. All patients had painful restriction of extension or limitation of both extension and flexion that had persisted despite physical therapy. The level of arthrofibrosis was categorized into one of four types: Type 1 (25 patients), $<10^\circ$ extension and normal flexion; Type 2 (15 patients), $>10^\circ$ extension loss and $>25^\circ$ flexion loss with a tight patella; and Type 4 (16 patients), $>10^\circ$ extension loss, 30° or more flexion loss, and patella infera with marked patellar tightness. All patients were treated with outpatient arthroscopic surgery. Anterior scar resection down to the proximal tibia was required for all patients with Types 2, 3, and 4 arthrofibrosis. Notchplasty was performed when necessary. Medial and lateral capsular releases and knee manipulation were required for patients with Type 3 or 4 arthrofibrosis. Postoperatively, all patients with Types 2, 3, and 4 arthrofibrosis were treated with outpatient serial extension casting. At the time of latest follow-up (28 to 115 months), the mean improvement of range of motion was as follows: Type 1, 7° of extension; Type 2, 14° of extension; Type 3, 13° of extension and 27° of flexion. Improvement was also found for the mean stiffness, self-evaluation, functional activity, and Noyes knee scores in all groups.