



Shelbourne Knee Center
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Specialized Care for Knee Injuries

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Arthroscopic Treatment of Symptomatic Extension Block Complicating Anterior Cruciate Ligament Reconstruction. Shelbourne KD, Fisher SE: *Am J Sports Med* 21:558-564, 1993.

ABSTRACT: Arthrofibrosis resulting in loss of knee extension compromises the results of anterior cruciate ligament reconstructions. We designed a study to clarify the symptoms and to evaluate the results of arthroscopic treatment of this complication. Forty-two patients in a series of 959 consecutive open anterior cruciate ligament reconstructions required further surgical treatment for relief of symptoms related to loss of extension. Arthroscopic examination of these knees confirmed the presence of an extension block caused by hypertrophy of the ligament or abundant tissue formation in the anterior tibiofemoral joint an average of 9 months after anterior cruciate ligament reconstruction. The offending tissues were excised arthroscopically and the patients were followed with an aggressive rehabilitation program. Thirty-five patients were available for follow-up an average of 28 months after excision of the tissue. Subjective functional status and symptomatic status were scored numerically using identical, patient-completed questionnaires before and after the excision procedure. Range of motion, Cybex, and KT-1000 arthrometer results were also recorded. The results were statistically compared with results from a control group demographically matched and selected at random from the 959 patients. Before excision of the offending tissue, the knee scores of the study group differed significantly from those of the control group. However, after the excision procedure, the knee scores of the 2 groups were nearly identical. Marked improvements in function and symptoms (most notably, activity-related anterior knee pain, crepitus at terminal extension, and knee stiffness) were noted in all patients in the study group after removal of the extension block and resumption of an accelerated rehabilitation program. The evidence from this study indicates that an intraarticular block to full knee extension is associated with definite symptoms and disability. When this problem fails to respond to nonoperative treatment, significant improvement can be obtained by arthroscopic excision of the impinging tissue followed by an aggressive rehabilitation program.