Results of the surgical treatment of arthro-fibrosis of the knee

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This retrospective study reports the evaluation of the surgical treatment of arthrofibrosis of the knee joint. Patients (n = 53) developed arthrofibrosis due to different index operations and various causes. Based on severe preoperative disability, patients of our series can be considered as difficult to treat. Our management concept suggests a step by step, pathology-oriented treatment: if necessary, arthroscopic arthrolysis and gentle manipulation is supported by posterior capsulotomy. To evaluate the results, we assessed the range of motion of the knee joint, the relative gain in range of motion, extension- and flexion-deficit, as well as the Tegner, Lysholm and Flandry score. As a result of arthrolytic surgery, all 53 patients showed statistically significant (P < 0.01) improvement of the above parameters. The mean gain in the range of motion was 73%. To emphasize the importance of the correct timing of arthrolysis, patients were divided into early and late arthrolysis groups. Patients with an early arthrolysis obtained a significantly (P < 0.01) greater improvement in the absolute range of motion than those with a later treatment. By the additional procedure of a posterior capsulotomy, the average extension deficit (absolute) was significantly (P < 0.01) more reduced than for patients without this treatment. Our data support an early therapeutic intervention for patients with a large restriction in the range of motion. Patients with an extension deficit after arthroscopic arthrolysis and gentle manipulation will improve with the additional procedure of posterior capsulotomy.