

Severe flexed knee treatment by release of the ipsilateral hip in patients with hemophilia

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Introduction: The flexed knee remains a serious problem to solve, especially because it occurs in young patients who do not have adequate access to factor replacement therapy. The literature showed that hamstring release is indicated when the knee flexion contracture is from 30° to 45° or more, associated with repeated haemarthroses, and failure of conservative treatment after 6 months. When the flexion contracture is more than 60°, hamstring release is not enough and we consider that the release have to make in the ipsilateral hip.

Objective: The aim of this study was to evaluate the results of hamstring and rectus femoris of quadriceps and fascia lata tendon release for the treatment of knee flexion contracture in patients with severe hemophilia.

Materials and Methods Four patients with seven knees were treated with hamstring and rectus femoris release. Three patients have bilateral flexed knees. All patients have severe hemophilia A, one has inhibitor. The follow-up was 3 years. The average age at the time of surgery was 11.5 years old (range 9-14). We evaluated knee flexion, knee flexion contracture and the possibility of walking, with or without assistance, twice per year

Results:: The average preoperative knee flexion contracture was improved from 87.9 ° preoperative to 30.7° postoperative ($p \leq 0.001$). The average preoperative knee flexion was 121.4° and the postoperative was 78.6° ($p = 0.001$). Three patients can not walk before the surgery and use wheelchair, one can walk with crutches but without weight on his affected lower limb. After surgery all patients were able to walk; only one with crutches.

Conclusion: Patients with severe degrees of knee flexion contracture have disability. This type of surgery allows patients to walk again, with a good range of motion in the affected knee

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Photo 1: Patient with flexed knee preoperative, 80°. He could not support the foot to walk



Photo 2: patient with 20° flexed knee postoperative. He can walk with the support of both feet without crutches