

Contracture Reduction Following Total Knee Arthroplasty, a Cohort Series

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ABSTRACT

Frequency of Total Knee Arthroplasty (TKA) is projected to triple in the next 25 years and knee flexion contracture evolves for greater than 40% of these patients. The only proven protocol for contracture reduction is manipulation under anaesthetics, and the purpose of this study was to determine how soon contracture reduction might be effectively achieved, following a TKA.

One hundred and seven patient histories were examined. These patients were prescribed Dynamic Splinting (DS) following a TKA for prolonged stretching as home therapy. There was a significant difference in maximal, active range of motion for all patients ($P < 0.001$) after a mean duration of only 3.25 weeks. None of the patients in this study required manipulation under anaesthetics to reduce contracture. DS contributed over 160 hours of prolonged stretching for each patient, and this is considered responsible for the beneficial gains in active range of motion.

Key Words: Contracture Reduction, Dynasplint, Home Therapy, Range of Motion

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