

Effective ACL Rehabilitation with Fitter

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Active participation in an effective rehabilitation program following and ACL reconstruction is crucial to the functional outcome of the lower extremity. Treatment protocols must be specifically designed for patients based upon their pre- and post-operative state. A successful rehabilitation program helps the patient achieve full motion, early weight bearing, appropriate patellar tracking and strength gains of the VMO and posterior knee musculature. Improving coordination, agility, balance and endurance will also aid in the return to full participation in pain-free activities.

This article presents a Fitter rehabilitation protocol specifically designed for the patient following ACL reconstruction. This program, based on recent research and clinical experiences, is designed to incorporate techniques for ROM and strength while preserving the stability of the knee joint.

Use of the Fitter can easily accommodate the needs of a post surgical ACL individual. By adjusting the tension, one can vary the required muscle contraction. The tension ranges from 0 (passive) to 4 (maximum resistance).

This variable becomes significant during the progressive states of the rehabilitation program. Passive, isometric and isotonic exercises can all be performed on the Fitter.

All major muscle groups surrounding the knee can be strengthened with the Fitter. It provides unique techniques to actively strengthen the posterior musculature of the knee, important in preventing anterior excursion of the tibia. By emphasizing closed kinematic chain activities, the Fitter also places a functional stress on the lower extremity in ways similar to weight-bearing activities. Thus, the Fitter provides inherent joint stability and a strenuous workout without the sheering forces seen in most open chain activities. By carefully selecting proper foot position while exercising, the Fitter can also emphasize appropriate patellar tracking by recognizing the VMO and lateral stabilizers.

It is, however, the clinician's responsibility to recognize the signs and symptoms of an exercise inappropriate for a specific individual. The chart below progressively outlines several ACL rehabilitation exercises using the Fitter.

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