

Extension for ACL Rehab

Strategies to restore pain-free knee extension can greatly assist the acute care management of tears to the anterior cruciate ligament.

The anterior cruciate ligament is a main stabilizer of the knee. It extends from the posterior margins of the femur to the insert on the anterior aspect of the tibia. The ACL limits anterior translation of the tibia and is most commonly injured when the knee is hyperextended. While surgical intervention is sometimes required in the presence of marked instability, the majority of ACL tears are best managed with a conservative approach that stresses rehabilitation.

Acute care management should include strategies to restore pain free extension. Studies confirm that early mobilization in extension by a continuous passive motion unit (CPM) can provide significant benefits in ligament healing, namely:

- Decrease swelling/edema
- Promote functional scar healing
- Enhance pain-free range of motion

In a private clinic, similar strategies can be provided by coupling adjunctive therapy with manual mobilization techniques. Presented is a simple three-step procedure to promote knee extension through patient positioning.

Step 1 (fig. 1)

Begin with a roll under the knee and in a semi-flexed position to provide optimum relief (fig 1). Ask the patient to extend the knee slowly through a pain-free zone.

Step 2 (fig.2)

When the patient is able to reach full extension in Step One, reposition the roll under the ankle and place a small pillow under the knee. Have the patient gently push the back of his knee into the pillow.

Step 3 (fig. 3)

Remove the pillow and repeat Step 2, to achieve slight hyperextension.

This three-step strategy when combined with adjunctive therapies and gentle mobilization can dramatically reduce swelling, enhance pain free movement and facilitate transition to an active rehabilitation program for ligamentous injuries to the knee. ♦



Fig 1

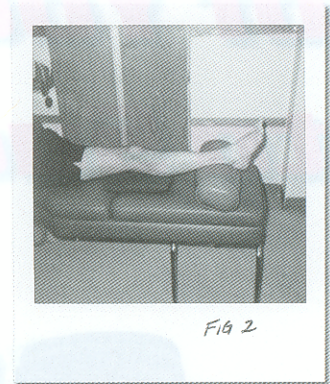


Fig 2

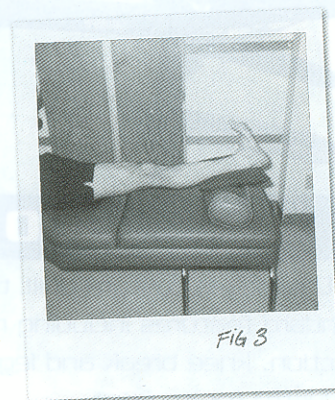


Fig 3



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