

Successful Rehabilitation of Recalcitrant Knee Pain Due to Anterior Cruciate Ligament Injury Masked by Extensive Skin Graft: A Case Report

Authors : Geum Yeon Sim, Tyler Pigott, Julio Vasquez

Abstract : A 38-year-old obese female with no apparent past medical history presented with left knee pain. Six months ago, she sustained a left knee dislocation in a motor vehicle accident that was managed with a skin graft over the left lower extremity without any reconstructive surgery. She developed persistent pain and stiffness in her left knee that worsened with walking and stair climbing. Examination revealed healed extensive skin graft over the left lower extremity, including the left knee. Palpation showed moderate tenderness along the superior border of the patella, exquisite tenderness over MCL, and mild tenderness on the tibial tuberosity. There was normal sensation, reflexes, and strength in her lower extremities. There was limited active and passive range of motion of her left knee during flexion. There was instability noted upon the valgus stress test of the left knee. Left knee magnetic resonance imaging showed high-grade (grade 2-3) injury of the proximal superficial fibers of the MCL and diffuse thickening and signal abnormality of the cruciate ligaments, as well as edema-like subchondral marrow signal change in the anterolateral aspect of the lateral femoral condyle weight-bearing surface. There was also notable extensive scarring and edema of the skin, subcutaneous soft tissues, and musculature surrounding the knee. The patient was managed with left knee immobilization for five months, which was complicated by limited knee flexion. Physical therapy consisting of quadriceps, hamstrings, gastrocnemius stretching and strengthening, range of motion exercises, scar/soft tissue mobilization, and gait training was given with marked improvement in pain and range of motion. The patient experienced a further reduction in pain as well as an improvement in function with home exercises consisting of continued strengthening and stretching.

Keywords : ligamentous injury, trauma, rehabilitation, knee pain

Conference Title : ICPCMPM 2023 : International Conference on Palliative Care Medicine and Pain Management

Conference Location : Istanbul, Türkiye

Conference Dates : June 22-23, 2023