

PHYSICAL THERAPY MANAGEMENT OF AN ISOLATED PECTORALIS MINOR TEAR IN A MALE PROFESSIONAL BASKETBALL PLAYER.

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BACKGROUND AND PURPOSE: Isolated tears of the pectoralis minor are rare. The purpose of this case study is to contribute to the body of literature regarding the physical therapy management of an isolated pectoralis minor tear by describing specific therapeutic interventions used.

CASE DESCRIPTION: The patient was attempting a "dip" exercise on a roman chair when his right arm slipped from the forearm support pad. He felt pain in the anterior and posterior chest wall but continued performing the exercise. Two days later, while playing basketball, he made a one handed dunk with his right arm forcefully contacting the rim of the basket. He was unable to continue playing as he experienced severe pain and limited function of his right shoulder. An MRI scan revealed a grade III strain of the pectoralis minor, with no injury to the pectoralis major. Physical therapy was initiated six days post injury. Evaluation parameters included range of motion and strength of the right shoulder complex, shoulder joint mobility and neuromuscular control and proprioception of both the rotator cuff and scapular stabilizers. Subjective pain level and functional abilities were also assessed. Therapeutic intervention began with pain free passive range of motion. As pain decreased, active range of motion was initiated. Neuromuscular control drills for the rotator cuff and scapular stabilizers were initiated early in the treatment. Once neuromuscular control was regained, the patient progressed to basic rotator cuff and scapular stabilizer strengthening using gravity neutral, short lever exercises. As pain decreased and neuromuscular control increased, the patient was progressed to closed chain, weight bearing scapular stabilization exercises. Next, dynamic functional patterns were introduced, beginning with gravity neutral positions, progressing to multi-planar, dynamic sport specific exercises, emphasizing scapular control in a long lever abducted position.

OUTCOME: Full, pain free passive range of motion was attained in one week. There was no night pain eight days after initiation of physical therapy. The patient returned to light, non-contact basketball activity after three weeks. After an additional week of treatment, the patient was cleared by the physician for full contact basketball. He was discharged from physical therapy at that time.

DISCUSSION: While this patient was able to return to playing professional basketball five weeks and three days after injury, further cases studies are needed to help develop treatment guidelines that will accelerate pain free return to prior functional status for the athlete and non-athlete who may sustain this injury.