Rehabilitation of a Male Volleyball Player with Suprascapular Nerve Entrapment

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**Background:** Suprascapular nerve entrapment is a commonly overlooked pathology in volleyball athletes that presents with pain and weakness during overhead motion. Nerve compression is thought to result from a rotator cuff strain, cysts formed following labrum tears, or abnormal scapulohumeral rhythm.

**Patient:** A 27-year-old male complained of shoulder pain and weakness for the past 2 months with no mechanism of injury. He reported sharp pain in the posterolateral aspect of his dominant shoulder when hitting. Physical examination revealed an internal rotation range-of-motion (ROM) deficit, muscle weakness across the shoulder girdle, upper cross syndrome, infraspinatus muscle atrophy, scapular dyskinesis, and impairments to activities of daily living (ADLs).

**Intervention:** The athletic trainer developed a rehabilitation plan that included exercises performed 4 times/week during volleyball season while the patient continued to compete. Soft tissue mobilization, stretching, and strengthening exercises were initially used to increase ROM deficits, decrease pain, and address aberrant muscle activation patterns. We progressed with the use of perturbations and upper extremity agility exercises to increase proprioception and restore sport-specific function.

**Outcomes:** After 7 weeks, the patient reported significant decrease in pain and weakness and improvements in ROM. Hypertrophy of the infraspinatus was visibly apparent and teres minor compensation patterns were no longer evident during overhead motion. The patient met discharge criteria that included clinician-based and patient-reported outcome measures such as the Functional Arm Scale for Throwers, and the Closed Kinetic Chain Upper Extremity Stability, Y-Upper Quarter Balance, and Wall Throw tests.

**Conclusions:** Suprascapular nerve entrapment causes alternate neuromuscular strategies that can be corrected with a traditional rehabilitation program that addresses ROM, strength, and neuromuscular control.

**Clinical Bottom Line:** Clinicians who observe overhead athletes with postural abnormalities and aberrant movement patterns should address these deficits early on to limit the development of more difficult problems such as suprascapular nerve entrapment.