

**Educational Topic Presentations Title:** Pediatric Sports Injuries: Diagnosis, Treatment, and Prevention of Repetitive Stress Injuries to the Shoulder in the Young Athlete

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**Purpose:** To describe current best practices in the diagnosis, rehabilitative treatment, and prevention of pediatric sports injuries to the shoulder. **Description:** The pediatric athlete presents a unique challenge to clinicians due to both musculoskeletal growth and a developing neurological system. These ever changing systems make treatment of the pediatric athlete complex. The sports medicine clinician requires understanding of the mechanisms of injury and how these injuries affect the various systems at different developmental stages. This session will delineate the most pertinent aspects of sports physical therapy treatment for this special population. **Summary of use:** Evaluation, treatment, and prevention skills are presented for application to clinical management of shoulder injuries in young athletes. Strategies for comprehensive, evidence-based care of the pediatric athlete's shoulder will be presented with emphasis on biomechanics, identification of motor control impairments, and neurodevelopmental aspects affecting therapy. The use of the upper extremity functional scale questionnaire, hand held dynamometer strength ratings, and isokinetic testing of the shoulder will be presented as outcome measurement tools for use in return to play decision making. **Importance:** Since 2000 there has been a five-fold increase in the number of serious shoulder and elbow injuries in youth baseball and softball. More than half of these injuries are preventable. This session will advance the clinician's understanding of pediatric sports injuries to the shoulder and will identify the principles of rehabilitation to minimize the risk factors for recurrence. Prevention strategies will be discussed for reducing the incidence and impact of upper extremity injuries in youth sports.