

## Shoulder Pain in the Throwing Athlete

**Condition:** Shoulder pain in a throwing athlete is caused by too much stress on the shoulder muscles or tendons. Sometimes the ball of the upper arm bone may come out of the socket in the shoulder. This is called a dislocation.

**Background:** The group of muscles and tendons in the shoulder is called the rotator cuff. Repeated throwing and/or improper technique can cause irritation, inflammation, and sometimes tears in the rotator cuff. Damage to the rotator cuff can lead to damage of surrounding structures over time.

**Risk Factors:** Shoulder pain in a throwing athlete usually results from overuse, poor technique, or weakness from a previous injury. Sometimes a person may be born with an unstable shoulder joint.

**History and Symptoms:** Pain may come on either suddenly or gradually during activity, and then progress to pain at rest. The throwing arm may feel “dead” or numb and throwing speed and accuracy may suffer. Throwing may also cause a popping sound from the shoulder.

**Physical Exam:** The doctor will test muscle strength and range of motion, and try to determine what kinds of movement are particularly painful.

**Diagnostic Tests:** X-rays and MRI scans of the shoulder may be done to look at the bones, muscles and tendons. CT scans or ultrasound imaging may also be done.

**Rehab Management:** The first step of treatment is to reduce the pain and inflammation with non-steroidal anti-inflammatory drugs (NSAIDs), ice, and sometimes ultrasound or electric stimulation. Then exercise can help strengthen the muscles. When the arm can move with no pain, the athlete can begin throwing, gradually increasing the number, distance, and speed of throws. Sometimes the way the athlete throws will need to be changed to prevent the injury from recurring. A physical medicine and rehabilitation (PM&R) physician is able to provide comprehensive care including pain management while getting the athlete back to play. The PM&R physician can prescribe the modalities listed above as well as oversee the physical therapy to making sure the athlete is progressing at the correct rate to avoid any setbacks or plateaus in therapy.

**Other Resources for Patients and Families:** Family support can help athletes stick to their rehab plan to include their home exercise plan, as well as cope with not being able to participate in their sport.

## Frequently Asked Questions

### **What is PM&R?**

Physical medicine and rehabilitation (PM&R), also known as physiatry, is a primary medical specialty that aims to enhance and restore functional ability and improve quality of life to those with injuries, physical impairments or disabilities affecting the brain, spinal cord, nerves, bones, joints, ligaments, muscles and tendons. PM&R physicians, known as physiatrists, evaluate and treat the whole body, maximize patients' independence in their daily life and are experts in designing comprehensive, patient-centered treatment plans to empower patients to achieve their goals. By taking the whole body into account, they can accurately pin-point problems, decrease pain, assist in recovery from devastating injuries and maximize overall outcomes and performance with non-surgical and peri-surgical options. To learn more, visit [www.aapmr.org/aboutpmr](http://www.aapmr.org/aboutpmr).

### **What makes PM&R physicians unique?**

PM&R physicians' training focuses not just on treating medical conditions, but on enhancing the patient's performance and quality of life in the context of those medical conditions. They focus not only on one part of the body, but instead on the development of a comprehensive program for putting the pieces of a person's life back together – medically, socially, emotionally and vocationally – after injury or disease. PM&R physicians make and manage medical diagnoses, design a treatment plan and prescribe the therapies that physical therapists or other allied therapists perform or that are carried out by the patients themselves. By providing an appropriate treatment plan, PM&R physicians help patients stay as active as possible at any age. Their broad medical expertise allows them to treat disabling conditions throughout a person's lifetime.

### **Why see a PM&R physician?**

A PM&R physician will thoroughly assess your condition, needs, and expectations and rule out any serious medical illnesses to develop a treatment plan. By understanding your condition and goals, you and your PM&R physician can develop a treatment plan suited to your unique needs.

### **How do I find a PM&R physician near me?**

Visit [www.aapmr.org/findapmrphysician](http://www.aapmr.org/findapmrphysician) or contact your primary care physician for a referral.