

# Kassimir Physical Therapy Handprint Newsletter

## Summer 2005

### **Adhesive Capsulitis: Understanding & Treating a Persistent Condition**

Adhesive Capsulitis, often referred to as “Frozen Shoulder,” is characterized by stiffness, pain and loss of motion in the shoulder. It affects approximately two percent of the population and is more common in women between 40 to 60 years of age. The cause of Adhesive Capsulitis remains unknown. The process involves thickening and contracture of the capsule surrounding the shoulder joint especially adhesions in the anterior and inferior axial folds. During the physical exam, the patient usually presents with a “capsular pattern,” or restricted movement of external rotation > abduction > internal rotation.

Adhesive Capsulitis commonly occurs in individuals afflicted with Diabetes Mellitus. Approximately ten to twenty percent of individuals with Diabetes Mellitus develop Adhesive Capsulitis and are usually slower to respond to treatment. Other medical problems that are associated with increased risk of this condition include hypothyroidism, hyperthyroidism, Parkinson’s disease, cardiac disease, or surgery. Often a mild inflammation or strain with a period of rest and immobility can lead to the capsular tightness. It can develop post trauma, post surgical, if one has decreased pain tolerance or when immobilized for a period of time. Still, attempts to prevent Adhesive Capsulitis should include motion early into the pathology & a quick referral to physical therapy.

Symptoms of Adhesive Capsulitis include dull, aching pain in the joint area with referred pain to the lateral arm. The hallmark of this condition is restricted movement or stiffness in the shoulder & pain at end ROM actively and passively. Patients typically complain of decreased function with inability to reach their back pocket, clasp bra, and reach overhead and pain at night sleeping. Research shows that there are three stages of Adhesive Capsulitis that can occur without physical therapy intervention:

- **Stage One:** “Pre-adhesive Stage,” the patient experiences pain with any shoulder movement. There is synovial inflammation, minimal limitation of ROM with a spasm end feel.
- **Stage Two:** “Acute Adhesive Capsulitis Stage,” pain begins to diminish but the stiffness remains. There is usually less guarding and spasm and a capsular end feel.
- **Stage Three:** “Maturation Stage,” shoulder motion returns towards normal. In this stage there is loss of axillary folds and decreased synovitis.

Although Adhesive Capsulitis is self limiting and will eventually heal; it may take up to three years without intervention. Early intervention, Physical Therapy and aggressive ROM exercises are key to a more rapid recovery. At KPT, depending on the stage, patients achieve full ROM in two weeks to 2-3 months. Physicians generally recommend treatments aimed at pain control and restoration of motion.

Physical Therapy is often recommended alone or in conjunction with NSAIDs or Corticosteroid injections (maximum of three in a six month period). The purpose of Physical Therapy is to improve range of motion & flexibility, to improve function as well as to decrease pain. Joint mobilizations performed by the therapists to improve accessory capsular mobility, followed by passive ROM is crucial for recovery. Gentle PROM performed in Stage one becomes more aggressive in later stages. A high tolerance of pain is also a plus when it comes to stretching in Stage two and three. Stretching examples often used in rehabilitation include shoulder pulleys, wand/cane exercises, wall/ladder stretches and towel stretches. The Crossed-arm stretch is effective in stretching the posterior capsule. Modalities such as heat, ice, electrical stimulation, ultrasound, and light therapy can also aid in

recovery. Ultrasound treatment is most important when applied to the anteroinferior aspect of the shoulder while in abduction and external rotation to reach the most adhered are of the capsule. Exercise may begin with a UBE, Upper Body Ergometer, warm up followed by AAROM, PROM, postural exercise, and scapular and shoulder strengthening.

If the pain does not resolve and motion does not increase substantially, a shoulder manipulation under anesthesia may be needed. Other treatment options may be distension arthrography or arthroscopic capsular release. However, if the patient shows continued progress, additional physical therapy is often recommended.

Early diagnosis and treatment of Adhesive Capsulitis is needed for full return of mobility, function, and relief of pain. A good understanding of the stages and clinical courses of the condition is important. At Kassimir Physical Therapy, we have experienced therapists on staff and a proven track record of success to deal with these types of shoulder problems.

#### Reference:

1. Northeast Seminars, Recent Advances in the Treatment of the Shoulder, 2003, Kevin Wilk, PT.
2. Sandor M.D., Rick. (2000, September). The Physician and Sportsmedicine. Adhesive Capsulitis: Optimal Treatment of "Frozen Shoulder." Retrieved June 13, 2005, from [http://www.physsportsmed.com/issues/2000/09\\_00/sandor.htm](http://www.physsportsmed.com/issues/2000/09_00/sandor.htm).
3. Mayo Clinic. (2005, April). Reliable information for Medical Education and Research. *Frozen Shoulder*. Retrieved June 13, 2005, from <http://www.mayoclinic.com/invoke.cfm?id=DS00416>.

#### **About the Author: Jason Davis, PTA**

Jason graduated from Baltimore City Community College Physical Therapist Assistant program in June 2002. He joined KPT in August 2004 after 2 years of sports rehab experience. Jason is actively involved in many sports as well as strength training & through personal experience as well as clinical experince is able to appreciate and manage patients with such conditions.

#### **What's New at KPT?**

KPT welcomed **Kelly Leininger, DPT** to the Physical Therapist Staff. She graduated from the University of Pittsburgh in May 2005 and joined KPT after graduation. Kelly has an extensive background in cheerleading and toured nationally as an instructor and coach.

On June 5, 2005 Gary and KPT was the Bronze sponsor at the Race for Our Kids for childhood oncology at Sinai Hospital. It was a great event supporting a great cause. Our therapists, Jennifer Bachtel, MPT placed first in her age group in the 10 K and Jason Davis, PTA placed in third in the 5 K. Congratulations Jennifer & Jason!

Gary maintains our 92 gallon fish tank by adding new sea creatures as well as fish regularly. We continue to receive many compliments on the beauty and the therapeutic benefits of our tank from our patients, their family members as well as anyone that stops by.

To see pictures of recent events, our staff and news, check out our website at [www.kptrehab.com](http://www.kptrehab.com).