PAIN MANAGEMENT * SPECIAL INTEREST GROUP

ORTHOPAEDIC SECTION. APTA

In 1989 as many as 80 million Americans suffered chronic pain syndromes. Shoulder pain is one of the most predominant pain syndromes in this area and has a plethora of treatment modalities which vary from the conservative treatments of ice, heat, exercise and NSAIDs to numerous surgical interventions. These treatment selections are usually the result of the diagnosis of the cause of the problem and the specialty of the clinician making the diagnosis. Numerous experts agree that the best treatment approach to healthcare is a multidisciplinary team approach. The following case study describes such an approach in which an injured worker successfully completed a comprehensive pain management program:

GJ was a 50 year old, white male who presented to the multidisciplinary clinic with complaints of left shoulder pain for five years after involvement in an on-the-job motor vehicle accident. He had initially received treatment at a local hospital ER and was followed up by a local orthopaedic physician who diagnosed his condition as traumatic tendinitis. He was injected and referred to a local physical therapy clinic for 6 weeks of therapy. His therapy consisted of heat, ice, ultrasound, and exercises. This conservative program showed no improvement or increase in symptoms for the six week period. He was then referred by his orthopaedic physician to a local work hardening program for another 6 weeks. He failed to complete the program due to complaints of increased pain and decreased ROM/strength. He was discharged by his physician back to work with the recommendation he be placed at a job rated at the sedentary level. He was given an office job at this level which he was still performing but with increasing difficulty.

He stated the symptoms gradually had worsened over the past year, making it more difficult to raise his left arm over his head. He described his shoulder pain as a persistent, dull ache deep in the shoulder with an occasional sharp stabbing pain in the left deltoid and axillary areas. Shoulder pain increased with movement and subsided with rest. He expressed frustration that despite prompt interventions his condition not only did not improve but he had to accept a lower paying job to stay with his company. He reported he could not lift his grandchildren without suffering the next day nor could he play golf or cycle as he did prior to his injury. The patient stated he slept 6-7 hours a night but would be awakened 1-2 times a night by the pain.

The patient underwent consecutive evaluations by a physician, psychologist, physical therapist and nurse. At the team meeting the following observations were reported: the psychologist's evaluation revealed no mental disorder, his pain was graded as an 8 out of 10 on a 10 point pain visual analog scale (VAS); Beck Depression Questionnaire

was 6, and his McGill Pain Questionnaire was 15. Subjective pain tolerances indicated severe to moderate impairment of activities of daily living secondary to pain.

The physical therapist performed a musculoskeletal exam which revealed muscle strength at wrist and elbows to be 5/5 yet strength at the left shoulder was 3/5 in the available ROM. No signs of inflammation were noted and no signs of tenderness were noted on palpation. Active and passive abduction was limited. (40 deg. AROM, 50 deg. PROM). External rotation was WNL but internal rotation was restricted to 20 deg. Cervical evaluation revealed normal ROM. Thoracic evaluation revealed restrictions at levels T1-T3.

Team recommendations were initially for biofeedback, participation in a behavior modification group, cervical steroid nerve blocks, and physical and occupational therapy. The therapy was to begin with a Functional Capacity Exam (FCE) then followed up with concentration on manual therapy techniques, closed kinetic chain, and functional activities utilizing Unloading Principles as described by Kelsey.

The patient initially underwent a FCE and was rated at the sedentary-light category. He received a cervical epidural steroid block 10 days after his initial evaluation. Physical and occupational therapy was started 2 days prior to his first injection. His first injection was $7\ ml$ of 0.25%preservative-free bupivacaine and 80 mg preservative free methylprednisolone (Depo-Medrol). Five days later, GJ had 0% pain relief and a second injection was given and eight days later even with intensive PT and OT he reported a 20% reduction in pain. A third injection was given and upon his report six days later, the patient had 95% relief and no further injections were given. Re-evaluation revealed marked increase ROM of the left upper extremity with full abduction and internal rotation. The team, utilizing critical pathways for chronic pain, recommended continuation in the program. No further psychological or anesthesiological intervention was recommended but vocational counseling and PT/OT was. He began a four week work conditioning program followed up with a four week work hardening program after which the team would reevaluate his progress.

A final FCE was completed at the three month mark, which revealed the patient was capable of performing at the medium level. He was found to have good overall work endurance, was cycling 20 miles 3-4 days per week and had resumed playing golf. Subjective pain tolerance scores indicated no impairment of activities of daily living secondary to pain. He also reported he could now pick up and play with his grandchildren without pain.

SUGGESTED READINGS:

Blossom, BN (1983): Role of Physical Therapist. SF Brena, SL Champman (eds), Management of Patients with Chronic Pain. S.P. Medical and Scientific Books, York, pp. 211-216.

Cronen MC, Waldman SD: Cervical Steroid Epidural Nerve Blocks in the Palliation of Pain Secondary to Intractable Tension-type Headaches. Journal of Pain and Symptom Management 1990;5:379-381.

Matsen FA, Bonica JJ. Pain in the Shoulder, Arm and Elbow. In: Bonica JJ. Management of Pain, Philadelphia Lee and Febiger, 1990.

PMSIG UPDATE

The PMSIG meeting was held at the CSM on February 17, 1996 and the following goals were adopted:

 Establish certification criteria and exam section for all specialties in pain management that could be added on to present exams.

Adopt a mail ballot for upcoming elections.

• Facilitate a central liaison for APTA and Orthopaedic Section with International/National Pain Management Organizations.

• Establish a PMSIG newsletter by end of 1996.

- Develop a study course for the Orthopaedic Section on Pain Management.
- Function as a ready resource on Pain Management for the APTA and its members.

Further developments within the PMSIG include: Liaisons with the American Academy of Pain Management (AAPM), International Association for the Study of Pain (IASP), and the American Pain Society have been instituted with the APTA and Gaetano Scotece, PT is serving as the liaison for the APTA.

Tom Watson, PT will assume the office as PMSIG Chairperson on June 10, 1996.

Any APTA member who wants to join the Pain Management SIG, to run for office or volunteer for a committee please contact the Orthopaedic Section at 1-800-444-3982 and submit your name.