# Manual Osteopathic Management Of Shoulder Pain

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By: Joan Fay B. Ganaba-Bhargav (2017)

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### **Shoulder Pain** (Caroline Mitchell, 2005) (Caroline mitchell, 2008)

Shoulder pain is on of the most common musculoskeletal complaint. Occupational, recreational, and normal daily activities stress the shoulder joint and may result in pain from acute injury or, more commonly, chronic overuse condition. Shoulder movement due to pain, stiffness, or weakness can cause substantial disability and affect person's ability to carry out daily activities (eating, dressing, and personal hygiene) and work. Self-reported prevalence of shoulder pain is estimated to be between 16% and 26% in general population. It is the most common third musculoskeletal disorder in the primary care presentation (alter back and neck pain), and most of the patient will recover within 3 months, there is some chronic and recurrence symptoms are common with the patient in the society.

A complex feature of the examination of shoulder pain is where the pain is originated from pathology extrinsic disorders to the shoulder joints or from the intrinsic disorders that are causing referred pain. Sometimes, due to over differentiated diagnostic examination; we still have to do follow up and proper care treatment management and patient aware about "red flags" system to identify the indication of the serious disease.

### What is Osteopathy

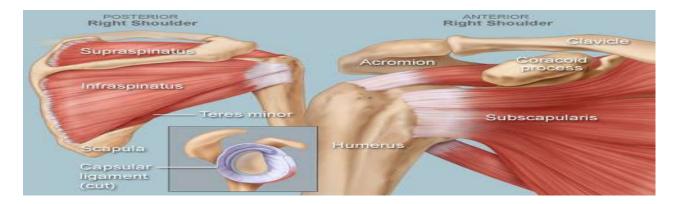
Is a total system of healthcare which professes and teaches the osteopathic philosophy:

- 1. The body is a unit.
- 2. It has its own self-protecting and regulating mechanisms.
- 3. Structure and function are reciprocally interrelated.
  Osteopathy also encompasses all recognized tools of diagnosis and healing including osteopathic palpatory and manipulative treatment methods. (Jon Parsons, 2006)

# **The Goal of Therapy of Osteopathic Manual Therapy Of Shoulder Pain:** (NAO, notes) (Houglum)

- > To relieve pain and inflammation
- > To increase range of motion
- To increase the strength and flexibility
- To increase the blood circulation to the area by doing mobilization technique to speed up the healing process and to reduce inflammation
- To relax muscle, decrease spasm
- > To prevent from injury

**Anatomy of Shoulder** (By Matthew Hoffman, 2005-20117)



The shoulder joint is formed where the humerus (upper arm bone) fits into the scapula (shoulder blade) like a ball and socket. Important bone in the shoulder includes: (By Matthew Hoffman, 2005-20117)

- > The acromion is a bony projection of the scapula.
- The clavicle (collarbone) meets the acromion in the acromioclavicular joint.
- The coracoid process is a hook like bony projection from the scapula.

The shoulder has several other important structures: (By Matthew Hoffman, 2005-20117)

- ➤ The rotator cuff is a collection of muscles and tendons that surround the shoulder, giving it support and allowing a wide range of motion.
- The bursa is a small sac of fluid that cushions and protects the tendons of the rotator cuff.

A cuff of cartilage called the labrum forms of a cup for the ball-like head of the humerus to fit into.

Four Muscle of the Shoulder:

- Supraspinatus
- > Infraspinatus
- > Teres Minor
- > Subscapularis

Risk Factors That Triggers the Shoulder Disorder: (By Matthew Hoffman, 2005-20117)

> Psychological factors such as stress, the pressure in the workplace.

- An Occupation like construction workers, hairdressing, painters and decorators, cashier, meat/food processing, welders, working on the computer for long hours are the one having a tendency to have a shoulder.
- > Physical factors such as repetitive movements in the wrong position.
- ➤ Playing sports such as rugby or any sports must rest for at least 6 weeks until they will feel comfortable.
- ➤ Shoulder injury or surgery and diabetes and other health problems such as lung or heart disease and overactive thyroid.
- Also, a patient who is heavy smoker must stop, high alcohol intake but they can for at least 0 to 2 drinks per day.
- A Patient who is driving must stop until they will feel comfortable driving.

# Clinical Features: (David M. Cline, 2012)

The pain of musculoskeletal shoulder pathology often is described by patients as an aching sensation, particularly in the setting of a more chronic process. Nighttime pain is a common feature of intrinsic shoulder pathology. Decreased range of motion, crepitus, weakness or muscular atrophy may be associated with certain conditions. Any systemic symptoms (shortness of breath, fever, or radiation of pain from the chest or abdomen) should raise suspicion for extrinsic and potentially life-threatening problems.

#### **History** (Caroline Mitchell, 2005) (Caroline mitchell, 2008)

- Determine the onset, characteristics and functional impact of shoulder pain?
- > Is pain at movement or at rest, or both?
- > Do you have pain at night? Or Does your pain disturb your sleeping position?
- ➤ Is the pain affecting your daily activities (sports /occupation)?
- > Do you have any history of trauma, shoulder pain or any affected joints pain?
- Are there any systemic symptoms illness (fever, rash, weight loss, night sweats, respiratory symptoms)?
- Are you taking any medication or drug treatment that may cause some side effects of the joint pains?
- Asking patient about significant co-morbidity (stroke, cancer, diabetes, respiratory, gastrointestinal or renal disease, psoriasis, ischemic heart disease)?
- ➤ Is it tolerable or non-tolerable in your affected arm?

Contraindication of Osteopathic Manual Therapy (Alexander S. Nicholas, 2008) (Brett D Owens, et al., 2016)

- > Tumor: signs and symptoms of cancer, swelling or mass, unexplained deformity, lymphadenopathy, history of cancer
- ➤ Neurological lesion: unexplained effect sensory or motor deficit.
- > Infection: fever, red skin and systematically sick.
- Acute rotator cuff tear: positive in empty can test or hornblower sign or positive arm test, recent trauma, acute malfunction and having a weakness
- Acute inflammation to severe strain or sprain (Alexander S. Nicholas, 2008)
- Fracture, dislocation, or joint instability in the area affected by the treatment
- Acute inflammatory joint disease in the area affected by the treatment
- ➤ Metastasis in the affected by the treatment

# **Shoulder Pain Examination**: (Lecture Notes of Orthopedic Examination, NAO) (Caroline mitchell, 2008) (Caroline Mitchell, 2005)

- ➤ Palpate the shoulder from the different angle: front, from the side and from the back for muscle wasting, inspect if there is any swelling and deformity/dislocation or bruising.
- > Evaluate the range of motion of the cervical spine.
- ➤ Check the chest wall, neck, axillae
- ➤ Compare power, stability, range of motion (active, passive, resisted of both shoulder)
- Test passive external rotation (less than 50% range of motion compared to the unaffected side suggest a glenohumeral problem).
- $\triangleright$  Test for acromioclavicular joint: Painful arc test: 0-30 degrees-----deltoid

30 – 140 degrees – Supraspinatus 140 – 180 degrees — AC joint

➤ Test for rotator cuff: (6) Supraspinatus: Empty can test

Infraspinatus and Teres Minor: Hornblower sign

Subscapularis: Gerber Lift Off Test

➤ Test for Shoulder Stability: (6) Sulcus Sign

Anterior and Posterior shift and load test

➤ Test for Long Head of Biceps: (6) Biceps Tendon Test

Snap Test

Observe scapular movement

This chart below show a Diagnosis of Shoulder Problem (2): (Caroline Mitchell, 2005)



**Investigation** (: Laura J. Martin, 2015) (2005-2017)

As a manual osteopath, we can ask some result of their MRI, X-ray, ultrasound and blood test it depends on the practitioner. For example:

<u>Blood Test: ESR (Erythrocyte Sedimentation Rate)</u> = it is a test that indirectly measures how much inflammation in the body. This is useful for monitoring bone infection, forming arthritis, autoimmune disease (such as diabetes which caused much sugar/glucose in the blood that will be the one caused of developing frozen shoulder)

<u>: CRP (C-Reactive Protein)=</u> is a good indicator if there is any disease or infection that causes inflammation such as osteomyelitis (infection of the bone), rheumatoid arthritis (painful swelling of the tissues that line the joints).

<u>Magnetic Resonance Imaging (MRI) Scan</u>: it gives information about the structure of the body especially the muscles, ligament, and tendons.

(Caroline Mitchell, 2005)

<u>Ultrasound:</u> Shoulder Examination

X-Ray: use to picture out or detect the problem in the bones like fractures or joint space.

We can refer patients to the medical doctors if there are any red flags that indicate trauma or inflammation or any malignancy suspected that causes pain. However, is not more often indicated in the primary care assessment.

#### **Causes of Shoulder Pain**

<u>Rotator Cuff Disorder Includes:</u> (Caroline Mitchell, 2005)-(Caroline mitchell, 2008)-(Author:, 2016)

Inflammation of the tendons (<u>tendonitis</u>) or a bursa (<u>bursitis</u>). (10) Rotator cuff tendonitis and bursitis are usually the results of irritation and inflammation caused by a shoulder injury or overuse of the shoulder. For example, throwing sports or tennis, heavy lifting or repetitive movement. (5) In examining the patient, it will show the results: active and resisted movements are painful and may be partially restricted, whereas passive movement is full. (2) The positive results of the painful arc are neither specific or sensitive as a clinical sign, reinforces the diagnosis of rotator cuff disorder.

Partial or complete tears of the rotator cuff disorder <sup>(3)</sup> (Author:, 2016). Through the history of the patient and their age, occupational background or their everyday activities can affect the rotator cuff. And also, in simple movement can also damage your rotator cuff if your posture is incorrectly or some musculoskeletal disorder like osteoarthritis as a secondary caused of rotator cuff tears.

<u>Rotator cuff Impingement</u>, it occurs when inflammation, bone spurs, or fluid buildup causes a rotator cuff tendon o be squeezed and rub against the bone <sup>(9)</sup>.

Calcium builds up in the tendons, which causes a painful condition which called <u>Calcific</u> Tendinitis.

# Non-Pharmacological Therapy or Early Management of Soft Tissue

<u>Rest</u>----Immobilization is recommended for at least 24 hours to avoid the aggravation of the injury. If long term rest is indicated, the unaffected joint(s) should be exercised to prevent atrophy and loss of coordination. (shirin abadi, 2014)

<u>Ice</u>----Application of cold therapy to an injury reduces local blood flow by constricting blood vessels, limiting the swelling. As a general rule a preferred immediate treatment (first 24 – 48 hours) for the most musculoskeletal injuries. The application time ranges from 10-30 minutes. Applying directly to the skin can cause frostbite and tissue damage. A thin towel can be placed between the ice bag and skin to prevent frostbite. Be cautious using a cold therapy in a patient with poor circulation, such as diabetes or Raynaud's disease, this patient had already reduced local blood flow. Whilst,

Application of Heat Therapy is recommended after the first 48 hours when the swelling has subsided and during the chronic rehabilitative phases of the injury. Local heat produces analgesia by affecting free nerve endings, decreases the incidence of painful muscle spasms by relaxing muscles and reduces joint stiffness by decreasing synovial fluid viscosity. Heat causes vasodilation, increased blood flow, which in turn helps provide a greater local supply of nutrients, oxygen, antibodies, leukocytes and enzymes to the injured area. Heat may be applied for 20-30 minutes every 2-4 hours as needed. Contraindication patients who are unconscious, impaired skin sensitivity, poor circulation or open wounds. (shirin abadi, 2014)

As much as possible, whatever aggravates your pain should avoid it or stop for at least two weeks or if not use some braces to control or hold the movement of the affected area.

Take a non-steroidal anti-inflammatory drug to reduce pain and inflammation as needed and should be taken with food to avoid gastric acidity.

Mobilize the hypermobility joints, restore the range of movement.

Diminish hypertonicity and trigger points.

Stretching or exercise the muscles.

<u>Physician</u> refers also <u>their patient to the Manual Osteopath</u>, <u>physiother</u> apy or occupational therapy.

The last resort is surgery in a patient that are really in severe pain and patient who have a very restricted motion of movement to do the daily living activity who tried the non-pharmacological and prescription medication.

Can Manual Osteopath Therapy help the tendonitis and bursitis or impingement syndrome and rotator cuff?

By giving an accurate step of treatment to your patient will be more effective. You have to do more effort in the affected area through joint mobilization to increase blood flow, increase the range of movement, decreased the pain, to improve the function and to gain more strength. You can also help patient to do exercise or guide them to strengthening their muscles. Muscle energy technique as well helps the patient to contract their muscle and also to decrease localized edema. The best way to treat this rotator cuff disorder is to combine shoulder/clavicle and scapula mobilization and MET technique and Soft tissue manipulation in the last or you can combine all together. During our internship, that's what I do with my patient and they feel better after treatment. And if the patient still not improving for few months refer to the doctor most especially patient in the presence of numbness/tingling, joint swelling or muscle weakness. This is a good guide for the treatment of Manual Osteopath Therapy for the Rotator Cuff Disorder.

According to this book: Trigger Point Releases for the Rotator Cuff: (Houglum, 2011).

# **Supraspinatus:**

<u>Referral Pattern:</u> Can refer pain into the pain. The referred pain pattern is a deep ache that occurs around the lateral shoulder in the middle deltoid area down to the deltoid insertion.

<u>Location of Trigger Point:</u> There are two sites that are the most common for this muscle. One is at the juncture of the middle third and lateral third of the muscle and the other is at the junction of the middle third and medial third of the muscle. Of these, the more tender site is the trigger point site just above the clavicular spine, 2 to 3 cm (0.8-1.2 in.) lateral to the vertebral border.

### **Subscapularis:**

<u>Referral Pattern:</u> The subscapularis refers pain to the posterior wrist and in the inferior aspect of the posterior shoulder region where the arm meets the trunk. It can also occasionally refer pain into the scapula, down the posterior arm to the elbow, and circumferentially around the wrist. <u>Location of Trigger:</u> Lateral anterior region of the scapula.

#### **Teres Minor:**

<u>Referral Pattern:</u> Refers pain to the upper posterior arm, just proximal to the posterior deltoid attachment, where the area of referred pain less than 5 cm (2.0 in.) in diameter. The pain is frequently described as deep and sharp. The spillover area of pain referral remains in the proximal aspect of the posterior upper arm and the lateral arm from the acromion downward. <u>Location of Trigger Point:</u> In the teres minor muscle belly along the lateral scapular border between the teres major inferiorly and the infraspinatus superiorly.

#### **Infraspinatus:**

<u>Referral Pattern:</u> Most often refers to the anterior shoulder, to the anterior arm, to the wrist, and to the radial fingers. On occasion, vertebral borders scapular pain or pain at the base of the skull can also occur. Pain can be felt deep in the anterior shoulder as well.

<u>Location of Trigger Point:</u> The superior aspect of the muscle inferior to the scapular spine and along the vertebral border.

<u>Scapular Muscles</u>= refer pain primarily to the upper back, they can also refer pain to the chest and upper extremity. As with the rotator cuff, the scapular muscles have pain-referral patterns that are unique for each muscle. (Houglum, 2011)

<u>Trigger Point Releases for the Scapular Muscles:</u> (Houglum, 2011) <u>Serratus Anterior:</u>

<u>Referral Pattern:</u> Laterally to the midchest area or to the inferior angle of the scapula. Spillover referral pain can also be experienced as abnormal breast sensitivity, pain down the anteromedial forearm to the palm and ulnar digits, or pectoralis major pain.

<u>Location of Trigger Point:</u> Level of the 5<sup>th</sup> and 6<sup>th</sup> rib just anterior to the midaxillary line at the nipple level.

# **Rhomboids:**

<u>Referral Pattern:</u> Similar to those of the levator scapulae except that there is no neck component. The pain referral pattern is along the vertebral border of the scapula, with some pain possible into the medial supraspinatus area.

<u>Location of Trigger Point:</u> Tender bands are located along the vertebral border of the scapula. Locate the nodule within each tender band identified.

# **Pectoralis Minor:**

<u>Referral Pattern</u>: Pain over the anterior deltoid with some spillover into the subclavicular area; entire pectoral area; and ulnar aspect of the arm, forearm, palmar band, and fingers. <u>Location of Trigger Point</u>: Directly below the concavity of the clavicle at the third and fourth ribs.

#### **Acromioclavicular Joint Problems**

AC joint injuries are seen mostly with the athletic sports, any kind of accident (car or bicycles). According to the survey, the male is more affected than female, ratio approximately 5:1. Most are a young population at the age of 20's. Several ligaments surround this joint, and depending on the severity of the injury, a person may wear one or all the ligaments. Torn ligaments lead to acromioclavicular joint sprain and separation. (Brett D Owens, et al., 2016). If the acromioclavicular joint got injured the cartilage within the joint also got hurt and after this traumatic accident once the shoulder has been dislocated this can lead or develop osteoarthritis or distal clavicular osteolysis may cause acromioclavicular impingement. Due to repetitive movement, trauma, high uric acid or overuse of the shoulder joint. Tenderness, swelling, and pain in the joint. I read also in the article that if both shoulders joint the AC and glenohumeral is having pain in all the area the patient has rheumatoid arthritis. You can test the patient if they have a restriction doing a crossed arm adduction stress test.

Clinical Features of Osteoarthritis and Rheumatoid Arthritis (shirin abadi, 2014)

Feature Osteoarthritis Rheumatoid Arthritis

**Symptoms:** 

Stiffness Morning or after periods of Significant, prolonged (>60min) in the

Inactivity; usually lasts <30min. morning.

Symptoms Yes-limited to affected joints. No

localized

Pain Worsen with activity or after Worsen after prolonged inactivity;

usually

Prolonged use (especially with improves with activity.

Weight-bearing activity)

Signs:

Symmetry Occasional Common

Tenderness Unusual Over entire exposed joint spaces

Inflammation Unusual Common
Instability Occasional; buckling or joint Uncommon

Instability can result in decreased

ROM and falls

Multisystem No Often feel systemically unwell (e.g.,

can have one

Disease or more of fatigue, fever, chills,

weight loss, hair

Loss, dry mouth or dry eyes)

There are 6 Types of injury in Acromioclavicular Joint

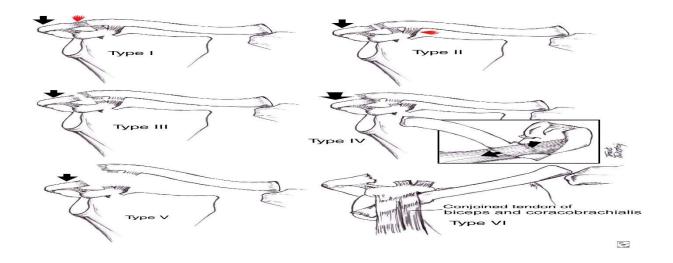
Type I – The AC ligaments got a minor injury, the deltoid and trapezoid and the coracoclavicular ligaments are solid.

Type II – The AC ligaments are fractured, twisted the coracoclavicular ligaments and the deltoid and trapezoid are slightly detached.

Type III – The AC ligaments and the coracoclavicular ligament is completely fractured, the distal clavicle move superiorly maybe let say more than 25%, so the deltoid and trapezoid separated.

Type IV – The AC ligament and the coracoclavicular ligaments are completely fractured, the distal clavicle dislodged posteriorly through trapezius, so the deltoid and trapezoid separated. Type V – The AC ligaments and the coracoclavicular ligaments are completely fractured, the distal clavicle is dislocated tremendously overhead, so the deltoid and trapezoid separated. Type VI – The AC ligaments and the coracoclavicular ligaments are completely fractured, the deltoid and trapezoid are completely detached, the clavicle is dislocated behind the tendon of the biceps and coracobrachialis.

This picture below is the Classification of AC Joint Injuries (Brett D Owens, et al., 2016), illustrated above:



# Non-Pharmacological or Management of AC Joints:

#### Osteoarthritis/Rheumatoid Arthritis/Synovitis/Distal Clavicle Osteolysis

- =same as above (see rotator cuff disorder)
- =Taking a supplement like glucosamine chondroitin, vitamin C, Omega -3, arginine they are good for the inflammation and help to increase blood flow and most especially patient who are lack of nutrition, but make sure to ask your physician or pharmacist before taking any supplement to avoid drug interaction that will cause you more problems.
- =Taking a prescription medication like corticosteroids for a patient who are acutely inflamed.
- =Avoid food that will affect the joints like caffeine, sugar, high gluten food, alcohol and dairy, potatoes, corn.
- =Drink plenty of water, eat food that is high in fiber, fish like salmon or mackerel, eat fruits like pineapple, and also vegetable like cabbage.
- =Avoid also chemicals that will build up in the joints.

#### Type I – II – III

- =**Rest** make sure the arm is rested to abstain from irritation for the first 2 to 3 days.
- = $\underline{\text{Ice}}$  Applied an ice pack to the affected area to reduce pain and swelling and make sure that is not directly applied to the skin, make sure that it was wrapped in the towel, do it for at least 4 to 5 times a day for 15-20 minutes.
- =<u>Compression</u> Use bandaged or tape by putting tension down to the clavicle to support the AC joints to work with healing and re-aligned the position of the joints for at least 14 days to 21 days of taping the joints, I read it one article.
- =<u>Elevation</u> Use a sling to support the arm to minimize the swelling, however, if you are resting try removed the sling and use a pillow to support the arm. This will take 2 days for a minor injury and at least 6 weeks for the severe injury. You can do a very light exercise as part of your rehabilitation by moving your wrist (pronation/supination), and also play with your finger (open/close), stretch your elbow by 90 degrees (internal/external) and also your palm up and down, this is a good exercise for the early period and do this every day until you come out from the sling. And always bear in not to forget your posture while using the sling.

- =Then after 3 weeks or so, after removing the sling you can do active and passive internal/external rotation, flexion/extension and abduction.
- =And after 6 weeks or so, after gaining a full force of range of movement, they can do more hard therapy.
- =Take anti-inflammatory to reduce pain and inflammation.
- =Using TENS also is good to ameliorate pain and also in severe cases, I read it in one article.
- =Physician can also prescribe intra-articular corticosteroids
- =Most of the AC joints, they are treated with conservative treatment combination with exercise to gain strength following with immobilization stage once pain tolerates. If the type III doesn't respond to the conservative treatment, surgery will be the last option.

#### Type IV - V - VI

=They do a different kind of surgical procedure to reconstruct the torn AC and CC ligament and the stabilization of the deltoid and trapezoid fascia. However, to do the surgery not everyone is qualified it depends on their condition if they are capable or is it worth it to do the surgery for the patient.

# Can Manual Osteopath Therapy help the AC Joint problems?

Osteoarthritis/Rheumatoid Arthritis/Synovitis/Distal Clavicle Osteolysis yes it helps for the patient.

To examine for acromioclavicular joint impairment. To increase the range of motion into acromioclavicular anterior/posterior glide. To increase the range of motion at the shoulder complex. To decrease pain. To improve periarticular muscle performance. The <u>3 Techniques</u> are <u>Posterior Glide</u> and <u>Anterior Glide</u> use caution in performing this technique because this motion might be hypermobile and also the last technique <u>Superior Glide</u> of the acromion on the <u>clavicle/Manipulation</u> it is important to screen for glenohumeral joint impairments before performing this technique, this technique should be performed using grade V manipulation and also helpful for treating acromioclavicular impairments when the acromioclavicular joint is tender to palpation. (Edmond, 2006). We can also do mobilization and muscle energy technique same explanation above. Type IV-V-VI surgery procedure and type III it depends on if conservative treatment is not effective next procedure will gonna be applied.

#### **Glenohumeral Disorders:**

Glenohumeral arthritis and Adhesive Capsulitis (Frozen Shoulder) are characterized by restriction of range of motion that will affect the activity daily living due to a negative effect on the external rotation of the shoulder. According to the research most woman are affected between 45 – 60 years old. To evaluate the shoulder pain and movement deficiency is related with the major -adhesive capsulitis and minor – adhesive capsulitis is resolute after taking their physical and history evaluation. Patients come to you with a painful and limited active and passive range of motion and external rotation. Also if pain is severe, patient are unable to sleep at night. The patient can't move the shoulder because of pain and this complaint will lead to stiffness of the shoulder. Because of this discomfort, it will affect their daily living activities like combing the hair, difficulty putting on the bra. The major adhesive capsulitis the most cause is

autoimmune disease most especially diabetes and thyroid problems it will develop due to lack of mobility. There is also another major cause of scapular fracture, calcified tendonitis. Other cause also in which is indirectly related to shoulder that my cause pain and stiffness like a heart attack or immobility. When it comes to the treatment I think they have to do the assessment before the recommendation of the treatment. It depends on the scenario when it will be cured, however, most of the systemic disease who develop stiffness and pain it will take years according to research from 18 – 24 months but not absolutely cured some pain or symptoms is still present 3 years or more.

#### Non-Pharmacological and Pharmacological Treatment of Glenohumeral Disorder:

- =Applying heat compression to help soften the affected area before stretching.
- =Exercise or stretching is good especially for diabetes to keep their blood sugar level.
- =Taking a non-steroidal anti-inflammatory drug to help pain and inflammation but this one is not good to the patient for a range of movement. Be careful with a patient who has a gastric problem take it after food and also a patient who had other condition like cardiovascular problem or patient taking a blood thinner to consult first with their physician.
- =Intra-articular Corticosteroid is good if together with stretching or exercise to help increase the range of motion. According to the article, more effective in providing short-term (4-6 weeks) pain relief and improved function compared to shoulder mobility and stretching exercises alone. (MARTIN J. KELLEY, 2013)
- =Physician refer them to therapies like manual osteopath practitioner especially for the acute case for them to guide them through the stretching and exercise and doing a mobilization technique because most of the patient who is in pain are confused. To help them for the movement and flexibility.

### Can Manual Osteopath Therapy help Glenohumeral Disorder?

Same as above.

Osteokinematic motions:

- =Flexion/Extension
- =Abduction/adduction
- =medial/lateral
- =Horizontal abduction/adduction

Resting position: 55 degrees of abduction and 30 degrees of horizontal adduction (55 degrees of scapt<sup>i</sup>ion), slight lateral rotation 30 to 40 degrees of abduction, no flexion, neutral rotation. The capsular pattern of restriction: Lateral rotation more limited than abduction, which is more limited than medial rotation. (Edmond, 2006). By performing all the different technique that there is no contraindication with the patient problem all the technique will really help the patient as long we do it in the positioning.

Being a Manual Osteopath Practitioner, to help the patient for having a disorder we must do the procedure on how to help them ease their pain to get 100% satisfaction from us.

In my opinion, by giving them a treatment we should not only concentrate in the shoulder itself but also we can do the scapula together with the clavicle mobilization technique and muscle energy technique and after that, we can give them soft tissue therapy. While I'm

doing the clinical internship I do most of the patient and patient giving me feedback they feel better after. I combine the different technique with them.

#### **Conclusion:**

Manual Osteopath Therapy is really a good treatment for shoulder pain disorders, the patient who is in pain if patient bothered them from their pain they should not ignore until it got worse to prevent aggravated restriction into the shoulder joint. They should discontinue the exasperating factors that will help them stop the pain. Patient education after the treatment is very important, to do exercise at least 4 to 5 times a week to strengthen their muscle and to become more mobile. All the Osteopathy technique are very important in the treatment and on how you apply them to your patients.

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