PARIPET

Original Research Paper

Orthopedics

ENHANCE TECHNIQUE FOR THE CONDENSE THE UPPER-CROSSED SYNDROME

ShubhrenduPhysiotherpist, Banaras Hindu University & Students Health Care, S SShekhar PandeyHospital Complex

This paper serve a review on the enhance technique for the condense Upper-Crossed Syndrome which is very common diseases these days, it is caused mainly due to postural abnormality along with many other factors. Our studies based on 100 patients, close observation of their symptoms and their treatment differentiation gives a proper figure to distinguish exact effective methods. According to Ayurveda, this problem caused by Vaat-Vyaadi somewhat our research find true reported by every patient having constipation, gastritis who suffered with upper cross syndrome.

Research cantered at : In our special group, patients were working hard towards building their career and taking lots of mental stress, anxiety, lack of physical activities, prolong sitting in wrong posture makes weakness of their muscles not only of upper limb muscles, even lower limb muscles too. Overall it creates improper digestion as well as postural abnormality too. In general, patients misdiagnosed initially such as angina pain, cervical pathologies, shoulder pathologies, etc. A team of doctors, physiotherapists and yoga therapists, massage therapist gives wonderful results in such patients.

KEYWORDS

Upper-Crossed Syndrome, Subscapular pain, upper back pain.

INTRODUCTION

5

ABSTRA

There is a tightness of upper trapezius, levator scapulae and pectoris major and minor muscles. As well as, weakness in scapular stabilizer muscle group that is lower trapezius, rhomboids muscles, lattismus dorsi muscles and cervical flexor muscles. This is mainly because of improper posture due to prolong sitting in a droop posture, prolong biking with rounded upper back position, poor exercise technique i.e. Pectrolis strengthen where back muscles poorly trained and many other multi-factorial reasons. Both shoulders often look like slightly Curved forward, there is with the observation one shoulder is raised on severely affected side and the symmetry of the shoulder appears unequal, there might be a difference of 10-12 cm on affected side in which severe tightness of upper trapezius and levator scapulae muscles are there in a group of 10 students out of 100.

Methods

This study was performed at 100 patients with upper cross syndrome, patient were from students health care complex have come across all over India at Student health care complex, BHU, Varanasi, India in Physiotherapy department where the students are coming from all over the world and at my Clinic Relievo Physiotherapy & Slimming Centre.The data has taken from the secondary data (available data). Mythology for the analysis of upper cross syndrome using the following way

A) Define the Problem B) Analysis the Problem C) Observe the Patient's Problem D) Categories the Symptom E) Questioner to the Patient E) Length of the Problem

F) Length of the Problem

We have categorized the Groups on basis of their age, Sex and Similar Problem. We have putted 50 Patients in each Groups and named Group A and Group B.

Under the **Group A** we followed the traditional treatments on 50 patients for the UPPER CROSS Syndrome that treatments are as follows:

- 1. Ultrasound therapy
- 2. Short wave diathermy
- 3. Inferential Therapy

4. Exercise of neck flexor and shoulder girdle muscles strengthen.

Under the Group B (another 50 Patients) we followed the

methodology we proposed below :

Methodology Proposed -

By the available earlier research/experiment/analysis done in this filed and on design based on survey both qualitative and quantitative

Sampling - Random Process

Population - Varanasi (U.P) India

Tool of data gathering – schedule /questionnaire acquisition/External Data

Data analysis - Data analysis based on 100 patients diagnosed for upper cross syndrome-

1. Data Analysis for age factor-



Figure 1: Analysis for the Age

Figure 1 shows that younger age group in analysis much affected than elder. It may be this group is much oriented towards their carrier. And they are mainly travelling and sitting in long time in wrong position.

2) Data Analysis on Male/Female Ratio-



Figure 2: Male/Female Effect

Figure 2 shows that in female this issue is broadly found. As we know that there are major changes in the physiological parameters in Male /Female.

3. Data based on Profession -



Figure 3: Study on Students/Professional

Figure 3 Shows that students are much affected with upper cross syndrome than professionals. As students always instinct reaction at any activity.

4. Data analysis based on whether affecting symptoms of UCS-



Figure 4: Analysis with different weather condition

Figure 4 shows that moderate temperature is in between July to November, in this interval this upper cross syndrome found in huge ration as compare to hot and cold session.

5) Data based on body texture –



Figure 5: Analysis based on body type

Figure 5 Shows that lean type body structure person are more effected as compare to obese and healthy type body structure person by the case study on 100 Patients.

6) Data based side of Pain -



Figure 6: Pain Analysis on sides

Figure 6 shows that Upper back pain affected mostly on unilateral Side, Occurs mostly on left side in right handed patient. Very few Left handed patients complaint right side problem. In our comparative study 20% patients affected upper cross syndrome complaining both side pain, but all are right handed.

7. Data analysis based on onset of the pain –



Figure 7: Analysis by stages

Figure 7 shows that onset of pain in acute stage are immediate, and in chronic stage gradual, based on comparative study.

8. Data based on Pain grading (according to VAS scale)-



Figure 8 Shows that grade 1-2 in chronic condition 90%; Grade 3-5 in acute condition 10%.

OBSERVATION AND ANALYSIS-

- Forward head posture
- Increased cervical lordosis and thoracic kyphosis
- Elevated and protracted shoulders
- Abduction and winging of the scapula

There was massive tighten muscle group over sub-scapular region between lateral border of scapula and thoracic spine. Winging of scapula was closely observed. Suffer are a special group of occupational such as students, medical health practitioner, professors, lawyer, shopkeeper, marketing executives, news editors etc.

There was massive tighten muscle group over sub-scapular region between lateral border of scapula and thoracic spine. Winging of scapula was closely observed. Suffer are a special group of occupational such as students, medical health practitioner, professors, lawyer, shopkeeper, marketing executives, news editors etc.

Patient's with the **acute conditions** have come with the symptoms of pain over thoracic region diffused dull aching type of crude pain aggravates with the deep breathing there were involvement of muscle spasm over intercostalis muscle group.

In upper crossed syndrome, there is not only involvement of shoulder girdle muscles causing scapulo- thoracic joint dysfunction, even though it affects cervical, thoracic and lumbar curvature and gleno humeral joint. Which can lead to biceps tendonitis, Rotator cuff impingement, thoracic outlet syndrome, peri-arthritis, cervical spondylitis, lumber spondylitis, sacro- ileitis caused by secondly affecting Para-spinal muscles.

This is because of following vital reasons-

- Psycho-social stress
- Poor posture •
- Poor body built obese or lean body
- Professional hazard .
- Hectic lifestyle .
- Excessive work load
- Poor food habit. .
- Prolong shoulder immobilization after traumatic injury.

The pathophysiology of the cervicogenic headache has also been associated with degenerative changes in the upper cervical spine. [3] The most common origin of pain is typically in the upper cervical joints, namely the occiput through C1 and the C1 and C2 segments. [3] Degenerative processes cause lack of movement and dysfunction, which cause irritation to the pain-sensitive structures. [3] Many researchers believe that the cervicogenic headache actually emanates from the C2 nerve root and have found that a C2 blockade produces temporary to long-lasting relief. [4] Lower or middle segments can also produce cervicogenic headache.

Treatment

Firstly, in a part of conservative management, physiotherapy treatment plays an important role.

Aim and Objective

- Correction of posture.
- Reduction of muscle spasm.
- Pain management.
- Release of tightened muscle group i.e. trapezius, levator • scapulae and pectrolis minor and major muscle.
- In a third step strengthening of weakened scapular stabilizer muscles, shoulder, neck flexor and back extensor muscle group.

Physiotherapy Management-

Physiotherapy application with following step -

Myo- facial release technique with moderate pressure application on trigger point over sub-occipital muscle, upper fiber of trapezius, levator scapulae, rhomboids major and pectrolis major for at least 10-15 min. Ice therapy directly over the trigger point for 5 min, need at least 3-4 ice packs to cover whole area. Stretching of tighten musculature i.e. upper trapezius, levator scapulae and pectrolis major, neck muscles. Application of electro- therapeutic modalities such as IFT 4 Pole / RUSSIAN CURRENT 4 Pole /TENS for 15 min.

Along with Application of Ultrasound therapy 1Mhz over the trigger point with moderate pressure in low intensity between 0.9 mA-2.5 mA applied by circular motion.

Active strengthening exercises –

- 1) Shoulder girdle elevation and depression -
- Alternate unilateral each 30 times in a session
- Bilateral 30 times in a session

2) Shoulder girdle protraction and retraction -

- Alternate unilateral each 30 times in a session
- Bilateral 30 times in a session •

3) Shoulder girdle circumduction clock and anti-clock wise 15-20times each

4) Active shoulder strengthening exercises associated with deep breathing 15-20 times each in a session.

5) Active shoulder horizontal abduction -adduction exercises 30 times in a session.

6) Neck flexor strengthening exercise

7) Active thoracic mobility exercises with gym ball.

Gait training along with proper hand movement is also necessary. Patients have to advice brisk walk at least for 15-20 minutes. Reduction of weight and strengthening of abdominal muscles will help partially with this syndrome in obese patient. Proper sitting/standing posture of the patient analyzed by the physiother-

apist with recommendation of postural exercises and explaining posture correcting methods. Patient is advised methods to relieve from stress which includes proper nutritious diet includes favorite dishes (contains rich carbohydrate, protein, plenty of salads, sprouts, plenty of water, etc.), proper life style (disciplined routine of work and proper sleep, etc.), Meditation, Entertainment (listening music, engaging the self in humour evoking activities, playing outdoor games, etc.)

References

- Miller MH, Topliss DJ, Prince Henry's Hospital, Melbourne, Australia."Chronic upper limb pain syndrome (repetitive strain injury) in the Australian workforce: a systematic cross sectional rheumato logical study of 229 patients. The Journal of Rheumatology [1988, 15(11):1705-1712.
- Upper Crossed Syndrome and Its Relationship to Cervicogenic Headache Michele 2. K. Moore, DC Pfaffenrath, V, Dandekar, R, and Pollmann, W.Cervicogenic headache-the clinical
- 3 picture, radiological findings and hypotheses on its pathophysiology. Headache. 1987; 27: 495–499.
- Sjaastad 0, Fredriksen TA, Pfaffenrath V. Cervicogenic headache: diagnostic criteria. 4. Headache.1998;38:442-445.
- Jull G, Trott P, Potter H, Zito G, Niere K, Shirley D, et al. A randomized controlled trial of exercise and manipulative therapy for cervicogenic headache. Spine. 5 2002;27:1835-1843.
- Bremner-Smith AT, Unwin AJ, Williams WW.Sensory pathways in the spinal 6. accessory nerve. J Bone Joint Surg Br. 1999;81:226-228. Travell JG. Referred pain from skeletal muscle. NY State J Med. 1955;55:331-340.
- Wheeler AH. Botulinum toxin A: adjunctive therapy for refractory headaches 8 associated with pericranial muscle tension. Headache. 1998;38:468-471.