NECK PAIN – A PROBLEM WITH MAJOR EFFECTS

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ABSTRACT

Objective: To study the prevalence of neck pain in patients and their effects on daily performance.

Design: Hospital based observational study.

Setting: OPD of Mayo Hospital and private chamber of the consultant.

Main outcome measures: Neck pain as a cause of morbidity in both genders with loss of work hours leading to economic and household pressures.

Results: A total of 100 patients were studied. Out of these 54% were males and 46% were females. Age range was 15-70 years with the mean of 37+15.12 years. Duration of pain was from range 1-10 years with the mean of 4+3.80 years. Sixty nine percent were married and 31% were unmarried, 74% had urban and 26% had rural background. Out of these 69% were working in sitting posture and 31% in standing posture with bent necks on their jobs. Pain was radiating to arms in 53%, dull localized in 34%, stabbing in 9% and of burning character in 4% of patients. No neurological deficit was noted except that movements of neck were painful with associated muscle spasm. These patients were put on muscle relaxants, analgesics, advised extension exercises and told to improve their working conditions by keeping high desks or soft cervical collar. 78% patients showed improvement in the pain and radiation whereas 22% did not get any relief who were referred to physiotherapy department.

Conclusions: Neck pain and associated neck muscle pain is a common symptom. The muscle spasm can be overcome by good posture, proper position of neck during work, avoiding very long hours of bent neck. NSAIDs, muscle relaxants and light extension along with exercises of neck can overcome such problems.

KEY WORDS: Neck pain, shoulder pain, cervical spine, musculoskeletal disorders, muscle relaxants, bad posture.

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INTRODUCTION

It is not possible that any individual has never suffered from neck, shoulder or interscapular pain. This pain can be of trivial nature and at times can lead to complications. Neck pain usually arises from diseases of cervical spine and soft tissues of the neck. Neck pain arising from cervical spine is typically precipitated by movements and may be accompanied by focal tenderness and limitation of movements.[1] Sometimes confusion arises when pain arises from brachial plexus, shoulder or peripheral nerves which can be easily identified and differentiated on detailed history and examination of patient. Unilateral or bilateral muscular pain can be due to spasm of muscles caused by injury, falling asleep in awkward position or prolonged working with bent neck. This sort of pain is usually self limiting.[2] Muscular pain is not localized but affects the trapezius muscle, C_7, spinous process, paracervical musculature or all of these. If this spasm is for a long period i.e. for months this

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becomes a chronic pain in neck and trapezei. This is sometimes felt as shoulder girdle pain. This may also radiate to occiput but rarely beyond shoulder with vague distribution. It might be associated with unilateral or bilateral tension headaches, pain radiating over the head to the temple and eye described as pressure or tight band. This could be confused with fibromyalgias which have similar features.

Neck pain should be identified, and diagnosed properly because it can be relieved by simple analgesics, posture correction and exercise. At times this pain may be so severe which is usually traumatic or infective that patient has to undergo cervical spine surgery.[3]

PATIENTS AND METHODS

It is an observational, hospital based study carried out in OPD of West Medical Ward Mayo Hospital Lahore and in the private consultation chamber between 15th June 2004 to 30th September 2004. It was done by convenience sampling. Blood C/E, blood sugar, serum uric acid, Rheumatoid factor and antinuclear antibodies (ANA) were performed where ever required. All the patients of any age, both sexes who presented with neck pain or referred pain to the arms were included in the study. All the parameter were recorded on a pretested standard proforma. X-ray cervical spine AP and lateral view were carried out on all the patients and in few even X-ray shoulder joint and X-ray lumbosacral with sacroiliac joints was also taken. All those patients who were having hyperuricaemia, congenital, malignant, traumatic conditions of neck were excluded.

RESULTS

A total of one hundred patients were enrolled in this study. Out of these 54% were males and 46% were females. Age range was 15-70 years with the mean of 37±15.12 years. Duration of pain was from range 1-10 years with the mean of 4±3.80 years. Sixty nine percent were married and 31% were unmarried, 74% had urban and 26% had rural background. As regards occupations it was housewives (42%) students (28%), employees with prolonged office hours (20%) drivers and labourers (9%) and sportsmen were 1%. Out of these 69% were working in sitting posture and 31% in standing posture with bent necks on their jobs.

Pain was radiating to arms in 53%, dull localized in 34%, stabbing in 9% and of burning character in 4% of patients. No neurological deficit was noted except that movements of neck were painful with associated muscle spasm. These patients were given muscle relaxants, analgesics, advised extension exercises and told to improve their working conditions by keeping high desks or soft cervical collar so that neck muscles remain relaxed. By these measures 78% patients showed improvement in the pain and radiation whereas 22% did not get any relief who were referred to physiotherapy department for further management.

DISCUSSION

Neck pain and associated neck muscle pain is a common symptom that almost every person suffers in lifetime due to variety of reasons. To seek relief people in general visit general practitioners or indulge in self medication. Very few directly go to Neuro-physicians or Orthopaedic Surgeons. Physicians come across such problem when the patients do not get any relief from other practitioners or the patients come with some other problem and complain for this as an associated symptom. Neck pain was more common in males (54%) while (46%) females also complained about it with the mean age of 37.40 ± 15.12, which is the most productive age. The most mobile part of spine are cervical and lumbar region which suffer most loading stress.[2] Women are reported to have more upper extremity musculoskeletal disorders but it was not observed in our study.[4] If work hours or days are lost or performance is not good it has an impact on economic conditions and household affairs. Some patients suffer from depression. There are families in which the eldest daughter has to face the music by leaving education or study half heartedly because the mother cannot work and look after household chores. The commonest site of pain in these patients was in lower cervical, scapular, and shoulder region which is in accordance with

other studies.[5-7] Similarly men who have severe muscular pain are required to change their job. Those patients (53%) who had pain radiating to arms, specially left arm had developed cardiac neurosis and were getting repeated ECG every now and then, 34% had constant dull ache in the middle of neck in the region of cervical spine with strain on both trapezei. These groups of patients were able to manage work in early hours of the day but were uncomfortable after few hours of work and would take analgesics to carry on the affairs of the day. Schoenfeld et al has reported upper back pain and tingling sensations in upper arm amongst ultrasonographers as an occupational hazard.[8] Stabbing pain (9%) makes the patients horrified and rushes to the hospital burning pain (4%) is also quite bothersome although these are due to pressure on roots.[9] Those patients who were given emergency treatment for these panicky states were not counselled or told how to avoid such complaints. Sixty four patients were desk workers having prolonged hours of work in bent neck posture, 31% had standing jobs on work and their neck was bent with abnormal postures, like keeping bent neck on one side and thus overstretching muscles of opposite side. Such problem was also noted in desk workers who have the habit of holding telephone receiver between the mandible and shoulder. Amongst the working class of drivers and labourers it was noted that majority would either have abnormal postures, long driving hours or lifting heavy weights on head which effects neck muscles and vertebrae.[10] Students were also found to have such symptoms during preparation leaves or during examination either while sitting in bad postures in chair or having very high pillows for hours at length while studying in lying posture.

It is pertinent to note that in all these patients we did not find infective i.e. tuberculous cervical spine[11,12] or extension of disease to cervical spine in ankylosing spondylitis[13] as reported in literature where atlantoaxial ossification appear to be common in these patients which is the cause of restriction of movement and muscle spasm which leads to chronic pain in the neck.

CONCLUSIONS

Neck pain and associated neck muscle pain is a common symptom which may not be due to congenital infective, traumatic, metabolic or malignant causes of cervical spine. When this pain radiates to upper arm or has vague distribution on left half of the body, it gives rise to emergency like situation in some patients. The muscle spasm can be overcome by good posture, proper position of neck during work besides avoiding working for long hours with bent neck. NSAIDs, muscle relaxants along with light extension exercises of neck can overcome such problems. Counselling of patients specially those with cardiac neurosis will build up the morale of the patient as well as the family.

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