



Original Article

Clinical Pattern of Neck Pain among the Patients Attending in the Department of Physical Medicine, Bangabandhu Sheik Mujib Medical University (BSMMU), Dhaka

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Abstract

A study was conducted in the Department of Physical Medicine, BSMMU, during the period of June 1996 to March 1997 to find out the clinical patterns of neck pain and their causes. A total of 6476 patients attended the department of which 1360 (21.01%) patients presented with neck pain. Male and female ratio was 1:0.83. Highest number of patients was in the 40-49 years age group (41.44%). In respect to occupation, table workers constituted the majority (26.08%). Most of the patients (79.64) were diagnosed as cervical spondylosis. By these findings we can conclude that the cervical spondylosis is the commonest pattern of presentation of neck pain in the Department of Physical Medicine, BSMMU, Dhaka, Bangladesh.

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Introduction

Pain in the neck is a common clinical presentation in primary care and rheumatological practice. It has been estimated that half of the population will have an episode of neck pain during their life time¹. Cervical Spondylosis is one kind of osteoarthritis (OA). OA affects more than 80% of the population aged 55 years and older². A study showed cervical spondylosis was the commonest lesion (23.5%) in the rheumatology clinic in the Department of Physical Medicine, IPGM&R, amongst the various rheumatological disorders, which in also a cause of neck pain³. Up to one

third of all patients attending general practice with neck pain will have or had symptoms lasting more than six months or recurring in bout¹. Although pain in the neck exists in all occupational groups, neck stiffness appears first, followed by headache and shoulder-arm pain⁴. Pain in the neck region can originate from many tissue sites and can result from a number of mechanisms. One of the most common causes of pain and disability in the neck and arm is cervical degenerative arthritis (cervical spondylosis)⁵. Cervical spondylosis is a clinical syndrome in which cervical spine degenerates to such as extent that symptom arise⁶. It is characterized by osteophytosis, narrowing of inter-

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vertebral joint spaces and foramina and compression of the nerve roots and spinal cord. It runs a prolonged course with intermittent periods of relief. It commonly affects people above the age of 40 and is responsible for varying grades of disability⁷.

Neck pain, stiffness, and restriction of movements are frequent consequence of trauma and degenerative disorder of cervical spine. Neck stiffness exists as a common disorder among the age group 25-29 years working population reports a 25-30% of one or more attacks of stiffness are reported⁸. In the present study we observed the clinical patterns of neck pain in order to improve the present situation regarding diagnosis and treatment.

Materials and Methods

The study was conducted in the Department of Physical Medicine, Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka.

The patients having neck pain were selected from the Department of Physical Medicine who were referred from Out Patient Department (OPD) of BSMMU and also from general practitioners outside the hospital. On arrival at the department, detailed history was taken and clinical examination was carried out.

The patients were selected on the basis of the same criteria used in a trial in 1996, sponsored by British Association of Physical Medicine⁸.

Inclusion criteria of the patients:

1. Pain in the neck and arm, the symptoms having a root distribution and being associated with limited and painful movement of the neck.
2. Pain in the neck and arm of full root distribution with paresthesiae but without clinical evidence of abnormality in the neck.
3. Chronic pain and stiffness of the neck with or without any root distribution.
4. Age of the patient should be more than 30 years.

Exclusion criteria of the patients

- 1) Patients with local lesion like rotator cuff tears, tennis elbow and carpal tunnel syndrome.
- 2) Patients with abnormal neurological signs indicating cord compression.
- 3) Patients who had definite disorder of the cervical spine, such as rheumatoid arthritis, tuberculosis, or have a bony injury to the cervical spine.
- 4) Age of the patients less than 30 years.
- 5) Patients with acute pain and stiffness of the neck were excluded.

Clinical Examination: A thorough clinical examination of the cervical spine and upper limbs which included general examination, locomotor examinations, neurological examination was done to find out the cause of neck pain clinically. The lower limbs were also examined for abnormal signs. All signs were recorded accordingly and a clinical diagnosis was made.

Investigations: Full haematological examination, urine, stool examination and X-ray of the cervical spine were done for all the patients. Radiological examination of the chest, blood sugar estimation and RA test were done in some cases, where indicated. Special radiological views of cervical spine specially oblique views and lateral views in full flexion and extension were taken in a few selective patients, to rule out the causes of neck pain in some complicated cases. Then a confirmed diagnosis was made to find out the cause of neck pain.

Results

In our observation a total of 6476 patients attended the Physical Medicine Department of BSMMU. Among these patients 1360 (21.01%) patients presented with neck pain (Fig. No. 1). In the patients of neck pain there were 741 (54.44%) male and 620 (45.55%) female and the male female ratio was 1:0.83 (Table-1). In respect to occupation, the maximum patients were table workers (26.08%), followed by housewives (23.43%) and retired service men (14.08%, Table-

2). Regarding aetiological pattern of neck pain, maximum patients (79.64%) were diagnosed as cervical spondylosis and non-specific neck pain was in the second position (13.07%, Table-3). There are other causes of neck pain, which were found in our study such as-Whiplash injury, Torticollis, Fibromyalgia, Ankylosing spondylitis and Forrester's disease (Table-3).

Table 1: Distribution of neck pain among the patients attending the department of Physical Medicine BSMMU.

Total number of patients attended	Patients present with neck pain	
	Total	Percentage
6476	1360	21.01

Table 2: Age and sex distribution of patients with neck pain (n=1361)

Age group in years	Male	Female	Total (%)
10-19	07	03	10 (0.73)
20-29	91	60	151 (11.09)
30-39	130	142	272 (19.94)
40-49	301	254	564 (41.44)
50-59	116	94	204 (14.98)
60+	96	64	160 (11.75)
Total	741	620	1361
Percentage	54.44	45.55	100

Table 3: Occupational incidence of neck pain (n=1361)

Occupation	Number of patients	Percentage
1. Table worker	355	26.08
2. House wife	321	23.43
3. Retired serviceman	193	14.08
4. Businessman	129	9.41
5. Student	125	9.12
6. Teacher	89	6.49
7. Physician	81	5.91
8. Others	68	4.96

n=Number of patients having neck pain.

Table 4: Clinical pattern of neck pain. (n=1361)

Name of the disease	Total	Percent	Male	Female
1. Cervical spondylosis	1084	79.64	621	463
2. Non-specific neck pain	178	13.07	75	103
3. Cervical rib syndrome	69	5.06	26	43
4. Whiplash injury	14	1.02	10	4
5. Torticollis	07	0.51	05	02
6. Fibromyalgia	05	0.36	01	04
7. Ankylosing spondylitis	03	0.22	02	01
8. Forrester's disease	01	0.07	01	0

Discussion

Pain in the neck was found to be a common clinical presentation in our study. We observed a total of 6476 patients who attended the Physical Medicine Department of BSMMU. Out of them 1360 (21.01%) patients presented with neck pain. In a large-scale study in Britain in the 1960s⁹ gave similar and complementary information. On the other hand, Bhattecharjee B N et al. found in their study in 1993 in the same department that the hospital attendance of cervical spondylosis was 17.45% of total hospital patients, which was similar to our study (16.73%, n=6,476)¹⁰. Faruque ur Rashid et al. found that 53.33% patients of cervical spondylosis presented with neck pain¹¹. In our study maximum patients were also diagnosed as a case of cervical spondylosis (70.64%, n=6,476), which is to some extent more than that of the study of Faruque ur Rashid et al. This may be because of small number of samples (n=30) of their study in 1999 at IPGM&R. However they studied the patients with cervical spondylosis but study was on the patients with neck pain. Most of the patients in our study were in the 40-49 years age group (41.44%). Bhattecharjee et al. found in their study on cervical spondylosis that maximum number of patients in the 40-49 years, which favours the same result found in our study¹⁰. However, their sample size was small and they selected patients from different hospitals of Dhaka City. On the other hand, study of British Association of Physical Medicine showed most patients fell in the 40 to 60 years age group, which is also similar to our study⁸. In this series, there were 741 (54.44%) male patients and 620 (45.55%) female patients and the male: female

ratio was 1:0.5¹⁸. This is nearer to our study. The more female in our study may be due to awareness and increasing female education. Regarding occupation, table worker topped the list (26.08%); housewives were in the second position (23.43%). Highest number of patients seen in our study was table worker but Bhattecharjee et al. also found that highest number of patients was table worker and housewife was the second¹⁰. This is also in favour of our study.

Conclusion

Neck pain may affect at any age, but it is common in elderly age group. And the commonest cause of neck pain is cervical spondylosis as found in this present series.

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