

Prevalence of cervical spondylosis and outcome: A hospital based study

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Abstract

Background: Spondylosis is the age-related degenerative change in the spinal column. Approximately quarter of the individuals below forty years of age, half of individuals above forty years of age and around 85% of individuals above sixty years of age have some degree of disc degeneration. **Objective:** The present study was done to describe the prevalence of Cervical Spondylosis and its outcome at orthopaedics inpatient department of a tertiary care hospital. **Methods:** The present clinical study was carried out at orthopaedics department of our tertiary care hospital. Study duration was from Jan 2013 to Dec 2013. Total patients admitted in the orthopaedics ward during the study period were analyzed. Prevalence of Cervical Spondylosis was assessed. Age and sex distribution of the patients and the outcome at orthopaedics inpatient department of a tertiary care hospital was described. **Results:** Total 2161 patients were admitted at the orthopaedics ward during the study period. Prevalence of Cervical Spondylosis was 5.23% with a total of 113 patients out of 2161 patients. Most of the patients were between 40 - 60 years of age. The average age of study group was 43.3 years. There was a predominance of females with a proportion of 66.37 percent i.e. 75 patients were females out of 113 patients. Outcome was good with all the patients being discharged with either improvement or recovery from clinical symptoms.

Keywords: Cervical Spondylosis, Degenerative disease.

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outcome at orthopaedics inpatient department of a tertiary care hospital.

METHODS

The present clinical study was carried out at orthopaedics department of our tertiary care hospital. Study duration was from Jan 2013 to Dec 2013. Total patients admitted in the orthopaedics ward during the study period were analyzed. Prevalence of Cervical Spondylosis was assessed. Age and sex distribution of the patients and the outcome at orthopaedics inpatient department of a tertiary care hospital was described.

RESULTS

Table 1: Age Distribution of Cases

Age (years)	Number of patients	Percentage
20-30	26	23
30-40	29	25.66
40-50	21	18.58
50-60	17	15.04
60-70	11	9.73
70-80	6	5.3
80-90	3	2.65
Total	113	100

INTRODUCTION

Cervical spondylosis is a degenerative disorder beginning in the intervertebral disc and progressing with the advancement in the age to involve more than one disc. It covers the pathology in spine as well as the neurological syndrome associated with it¹. Approximately quarter of the individuals below forty years of age, half of individuals above forty years of age and around 85% of individuals above sixty years of age have some degree of disc degeneration². The present study was done to describe the prevalence of Cervical Spondylosis and its

Table 2: Sex Distribution of Cases

Sex	Number of patients	Percentage
Male	38	33.63
Female	75	66.37
Total	113	100

Total 2161 patients were admitted at the orthopaedics ward during the study period. Prevalence of Cervical Spondylosis was 5.23% with a total of 113 patients out of 2161 patients. Most of the patients were between 40 - 60 years of age. The average age of study group was 43.3 years. There was a predominance of females with a proportion of 66.37 percent i.e. 75 patients were females out of 113 patients. Outcome was good with all the patients being discharged with either improvement or recovery from clinical symptoms.

DISCUSSION

Cervical spondylosis is a degenerative disorder which is characterized clinically by pain in the neck with or without radiation, tingling, numbness, and paresthesia and in later stages there is spondylotic myelopathy of the upper extremity and radiologically reduction in the intervertebral disc space and the formation of marginal osteophytes is observed. Posteriorly osteophytes protrude into spinal canal and laterally into the intervertebral foramina. The spinal cord as well as nerve root impingement by the posterior and lateral osteophytes and the bulging intervertebral disc would present as local neck stiffness and radicular pain along the offending nerve root. Long standing compression of the spinal cord can cause irreversible damage including demyelination and necrosis of the grey matter^{1,3}. In our study, prevalence of Cervical Spondylosis was 5.23% with a total of 113 patients out of 2161 patients. Most of the patients were between 40 - 60 years of age. There was a predominance of females with a proportion of 66.37

percent i.e. 75 patients were females out of 113 patients. Singh *et al*³ have also mentioned that cervical spondylosis is essentially a degenerative disorder common after fourth decade. They have observed that age and sex were determinants as risk factors for components of cervical spondylosis. Study by Gupta⁴ on normal healthy Indian adult subjects reported that mid sagittal diameter was smaller in females than males. Study by Sasaki⁵ reported higher incidence of spondylotic changes with the increasing age in the population. Limitation of our study was that it is a hospital based study so that we cannot get the population prevalence estimate from the study population. However, it has attempted to describe the prevalence in the hospital setting and give an insight into the age and sex distribution and outcome in the study population.

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