



THE IMPACT OF CERVICAL SPONDYLOSIS: A COMPARATIVE ANALYSIS BETWEEN HOUSEWIVES AND WOMEN IN COMPUTER-DEPENDENT PROFESSIONS

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Abstract:

Cervical spondylosis is a common problem in the female population specially in the elderly. Cervical spondylosis is a chronic degenerative disease of the cervical Intervertebral disc causing symptoms like chronic neck pain, headache, vertigo, Tingling and paresthesia of the upper limb. This prospective observational study was done on 160 female subjects of the age group 18-60 years.

Women in CDV were again categorized according to their daily working hours and total duration of occupation. Cervical spondylosis diagnosis was confirmed by MRI reports of symptomatic subjects. Prevalence of cervical spondylosis in HW was seen as 21.7% and among women in CDV it was 58%. Among women in CDV, the prevalence was in direct proportion to daily working hours and the total duration of occupation.

The prevalence of cervical spondylosis was more in people who assume sitting posture while working. Also there is gradual increase in the incidence of cervical spondylosis with increased hours of maintaining a fixed working posture. Although cervical spondylosis is age-related, researchers have been proposing prolonged postural activities around the neck such as bending of the neck, to be one of the major predisposing factor to cervical spondylosis as there are increased incidences in prolonged computer users.

Keywords: Cervical spondylosis, Chronic neck pain, Headache, Vertigo

INTRODUCTION:

- Cervical spondylosis is a common problem in the female population specially in the elderly.
- Cervical spondylosis is a chronic degenerative disease of the cervical Intervertebral disc causing symptoms like chronic neck pain, headache, vertigo, Tingling and paresthesia of the upper limb.
- The disease has multifactorial etiopathology- increasing age, occupational strain trauma, early menopause, hypothyroidism etc.

Materials & Methods:

- This prospective observational study was done on 160 female subjects of the age group 18-60 years.
 - For this study subjects were categorized into two different groups- housewives (HW; n=60) and women in computer-dependent vocations (CDV; n=100)
 - Women in CDV were again categorized according to their daily working hours and total duration of occupation.
 - Cervical spondylosis diagnosis was confirmed by MRI reports of symptomatic subjects.
- Statistical analysis was performed using MS Excel 2021.

RESULTS:

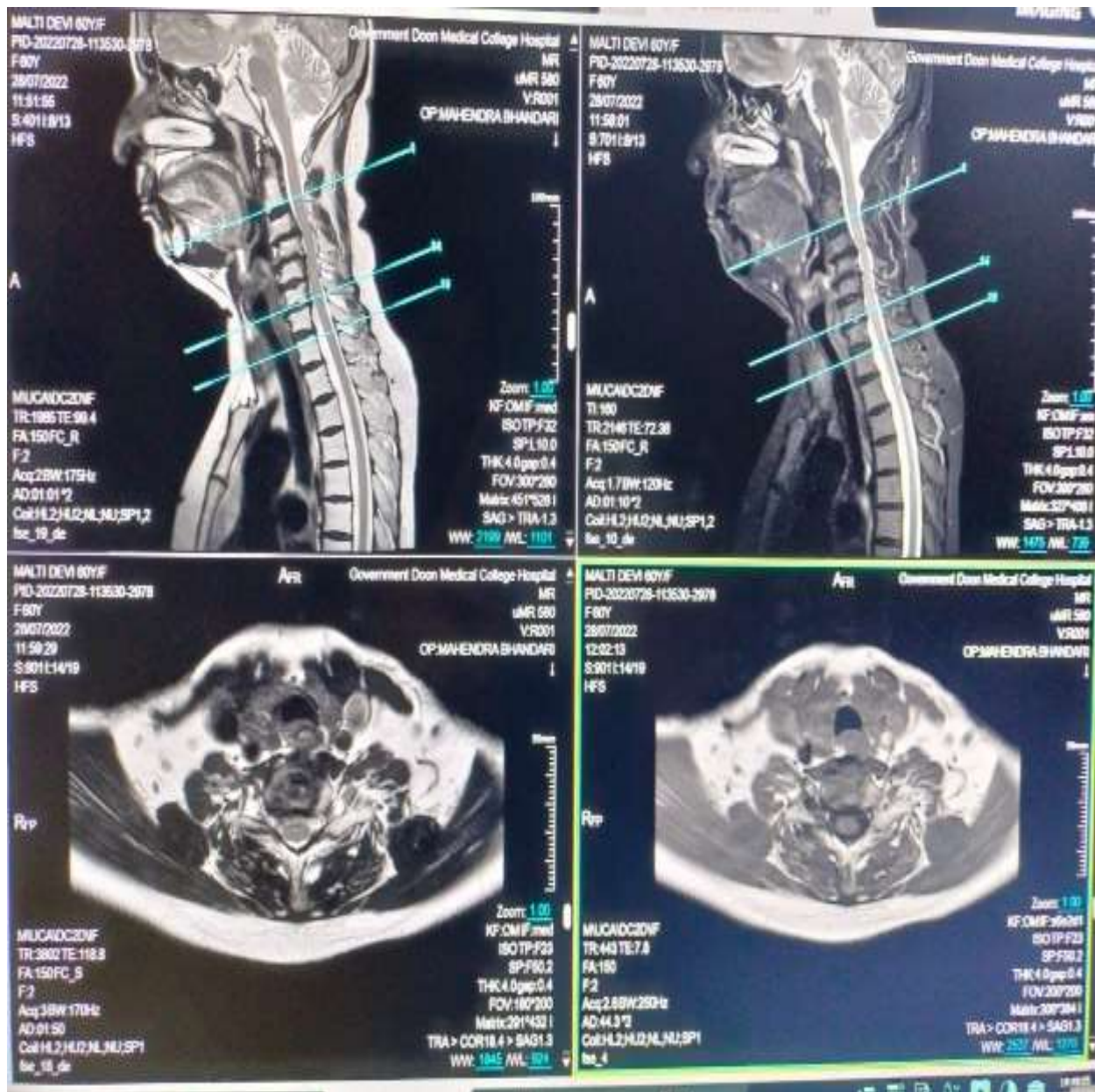
- Prevalence of cervical spondylosis in HW was seen as 21.7% and among women in CDV it was 58%.
- Among women in CDV, the prevalence was in direct proportion to daily working hours and the total duration of occupation.

Duration in occupation	Women in CDV (n=100)	Housewives (n=60)
<4 years	5 (12) 41.66%	13 (60) 21.66%
4-8 years	8 (18) 44.4%	
8-16 years	24 (40) 60.0%	
16-20 years	11 (15) 73.3 %	
>20 years	10 (15) 66.6%	

Table 1: Prevalence of cervical spondylosis in women with CDV according to their total duration of occupation in comparison with Housewives

Daily working hours	Women in CDV (n=100)	Housewives (n=60)
<2 hours	00 (8) 00%	13 (60) 21.66%
2-4 hours	02 (11) 18.2%	
4-6 hours	04 (15) 26.6%	
6-8 hours	22 (32) 68. 8%	
>8 hours	30 (34) 88.2%	

Table 2: Prevalence of cervical spondylosis in women with CDV according to their daily working hours on the computer in comparison with Housewives.



DISCUSSION:

- The prevalence of cervical spondylosis was more in people who assume sitting posture while working.
- Also there is gradual increase in the incidence of cervical spondylosis with increased hours of maintaining a fixed working posture.
- Although cervical spondylosis is age-related, researchers have been proposing prolonged postural activities around the neck such as bending of the neck, to be one of the major predisposing factor to cervical spondylosis as there are increased incidences in prolonged computer users.
- Al-Bustany et al found an increased prevalence of cervical spondylosis among computer users after excluding all other factors.
- These and other occupations that involve postural imbalances to the neck should be considered as a risk factor for the development of cervical spondylosis.
- In another research increased prevalence of cervical spondylosis has been seen with the increase in housework intensity and the people whose occupations are requiring the holding of a particular posture for about 1- 2.9 hours among the Chinese communities.

CONCLUSION:

- Present study shows that women in computer-dependent vocations are more prone to develop cervical spondylosis and longer hours of work put more risk on such females.
- The present study confirms the relationship between the duration of posture instabilities to the cervical vertebra or the neck and the development of cervical spondylosis.

REFERENCES:

1. Kehinde Alare, Taiwo Omoniyo, Tosin Adekanle. Postural Predisposition to Cervical Spondylosis Among Housewives, Teachers, Computers and Smart Phones Users. *International Journal of Neurologic Physical Therapy*. Vol. 7, No. 2, 2021, pp. 14-19.
2. Srivastava, R., Sharma, A., Prasad, A. (2019). Occupation Based Prevalence of Cervical Spondylosis. *JIGYASA*, 12 (2), 218-222.
3. Lisa A. Ferrara, (2012). The Biomechanics of Cervical Spondylosis, *Advances in Orthopedics*, vol. 2012, Article ID 493605, 5 pages, <https://doi.org/10.1155/2012/493605>
4. Lv, Y., Tian, W., Chen, D. (2018). The prevalence and associated factors of symptomatic cervical Spondylosis in Chinese adults: a community-based cross-sectional study. *BMC Musculoskeletal Disord* 19, 325 (2018). <https://doi.org/10.1186/s12891-018-2234-0>
5. Cervical Spondylosis among a Group of Computer Users in Erbil City. *Zanco Journal of Medical Sciences (Zanco J Med Sci)*, 13 (2), 28-36.
6. Lisa A. Ferrara, (2012). The Biomechanics of Cervical Spondylosis, *Advances in Orthopedics*, vol. 2012, Article ID 493605, 5 pages, <https://doi.org/10.1155/2012/493605>.
7. Al- Bustany, D, Aziz Z(2009). Cervical spondylosis among group of Computer users in Erbil City. *Zanco Journal of medical sciences (Zanco J Med Sci)*, 13 (2), 28-36.