Clinical features of female cluster headache in prospective cluster headache registry

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Background: Cluster headache (CH) is well known as a predominantly young male disorder. Therefore, most of the clinical characteristics of CH have been established through observation of men with CH. Epidemiological data of female CH are scarce in the previous studies. Here, we sought to assess the prevalence and clinical characteristics of female CH in comparison with male CH in prospective CH registry. Methods: Data used in this study were obtained from the Korean Cluster Headache Registry (KCHR), a prospective, cross-sectional, multicenter headache registry that collected data from consecutive patients diagnosed with CH. Demographics and clinical characteristics were compared between female and male CH patients. Results: In total, 193 patients were enrolled in this study; 32(16.6%) were female CH patients. Age of onset (female vs male, 31.0±17.0 years vs 29.1±11.5 years, p=0.368,) and diagnostic delay (7.2±8.9 years vs 8.7±8.0 years, p=0.360) did not differ between female and male subjects. Daily attack frequency (2.8±2.3 vs 2.2±1.8, p=0.155), attack duration (94±79 minutes vs 101±69 minutes, p=0.627), attack severity (numerical rating scale, 8.8±1.3 vs 9.0±1.2, p=0.454) of current bout also did not differ between female and male CH. Diurnal periodicity was similarly reported in both female and male patients. However, depression scale assessed by Patients Health Questionnaire (PHQ-9, 10.6±8.8 vs 6.7±5.5, p=0.028) and stress (Perceived Stress Scale 4, PSS-4, 7.8±3.5 vs 6.4±2.9, p=0.018) were significantly higher in female CH than male CH. Conclusions: Although decreasing male preponderance were suggested in recent western CH studies, female CH is still far less prevalent in female compared to male in Korean population. Clinical and demographic characteristics of female CH were similar with those of male CH. However, psychiatric comorbidities such as depression and stress might be highly associated with women with CH.