

Application of the Cluster Headache Severity Scale in a Korean cohort of cluster headache

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Background: Cluster headache (CH) is famous for severe pain and clustering attacks. Recently CH severity scales (CHSS) was reported in a Swedish cohort. We applicated CHSS in a Korean cohort with CH. Methods: Consecutive patients with CH were prospectively recruited from 16 hospitals. We selected CH patients based on the third edition of the ICHD. CHSS were assessed by multiply of three factors: attack duration, attack daily frequency, bout duration. The range of the scores of CHSS were 3-12. Result: In total, 193 patients were enrolled: mean age were 38.0 ± 10.9 years, 16.6% were female. The mean score of CHSS was 5.8 ± 1.3 and 4.7% had a score of 9 or more. The mean scores of CHSS were different according to the subtypes of CH (first episode of CH: 6.6 ± 1.6 , episodic CH: 5.5 ± 1.0 , chronic CH: 6.5 ± 1.9 , probable CH: 5.9 ± 1.8 , $p = 0.001$). The mean scores of CHSS were not different according to sex (female: 6.1 ± 1.2 , male: 5.7 ± 1.4 , $p = 0.20$). CHSS were well correlated with age ($r = -0.15$, $p = 0.041$), quality of life ($r = -0.30$, $p = 0.001$), Headache Impact Test-6 ($r = 0.16$, $p = 0.025$), depression by the Patient Health Questionnaire-9 ($r = 0.25$, $p = 0.001$), anxiety by the Generalized Anxiety Disorder-7 ($r = 0.12$, $p = 0.090$), and stress by Short Form Perceived Stress Scale-4 ($r = 0.18$, $p = 0.017$). The severity of pain by numeric scale was not correlated with CHSS ($r = 0.07$, $p = 0.298$). Conclusion: CHSS might be a useful tool to assess impact of CH, but it is not well reflect the severity of pain.