

신경근육재활 및 전기진단

발표일시 및 장소 : 10 월 19 일(토) 14:50-15:00 Room C(5F)

OP3-3-6

The Correlation between Clinical, Prodromal and Residual Symptoms in Patients with Bell's Palsy

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Objective

Bell's palsy is an acute peripheral facial nerve paralysis of unknown cause with an annual incidence of 20-30 per 100,000 population. Previous studies had shown a variety of prodromal symptoms which mean symptoms of discomfort before facial paralysis such as postauricular pain, change of taste and dry eye, but there are no studies that have been conducted about correlation between prodromal symptoms and prognosis in Korea. The purpose of this study was to investigate the correlation between prodromal symptoms and clinical severity of Bell's palsy and to determine which prodromal symptoms are associated with worse prognosis 9 weeks after symptom onset.

Method

The investigation included 90 consecutive patients with Bell's palsy from August 2018 to April 2019. House-Brackmann scale (HBS) was used to assess the clinical severity of Bell's palsy and electrodiagnostic study was done for evaluating the facial nerve damage. Self-reported questionnaire was conducted about prodromal symptoms and symptoms that occurred on the same day as paralysis were excluded. The compound muscle action potential (CMAP) amplitudes were recorded, and the percentage of amplitude reduction was calculated by comparing the affected side with the unaffected side in each branch of the facial nerve. We had checked the remained symptoms by telephone 9 weeks after symptom onset.

Results

77 out of 90 patients complained of prodromal symptoms before paralysis, and prodromal symptoms were postauricular pain (59%), headache (22%), change in taste (21%), abnormal facial sensation (20%), tongue sensory decline (14%) and so on. Postauricular pain, facial sensory abnormality and taste change were more frequent in patients with initial HBS IV or higher ($p < 0.05$). When compared HBS with side-to-side CMAP amplitude reduction of each facial nerve branches, the CMAP difference of orbicularis oculi was most closely correlated with clinical severity (correlation coefficient=0.557, $p < 0.001$). More than 75% difference between the both sides of orbicularis oculi were significantly correlated

with postauricular pain and excessive tear ($p < 0.05$). Prodromal symptoms such as taste change and postauricular pain were statistically correlated with remained symptoms in patients with HBS IV or higher at 9 weeks after symptom onset.

Conclusion

This study showed that patients with Bell's palsy can have a various prodromal symptoms. This study also showed that if patients with Bell's palsy have postauricular pain and taste change before the onset of facial paralysis, it can mean to have worse initial clinical severity and residual symptoms.