Clinical Features of Young Patients with Olfactory Disorders

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The aim of this study is to analyze clinical features of young patients with olfactory disorders. The number of pediatric patients with olfactory dysfunction is low, and only a few studies have examined the characteristics of such patients and evaluated the results of their treatment. In this study, we compared the clinical characteristics of olfactory dysfunction in young and adult patients.

Patients 19 years of age or younger who consulted the Department of Otorhinolaryngology at Showa University Hospital from 2000 to 2009 complaining of olfactory disorders, were investigated retrospectively. Olfactory functions were examined based on T&T olfactometry.

A total of 39 patients were identified. The mean age was 14.5 years. Twenty-one patients were male and 18 patients were female. The common causes of olfactory disorders were congenital dysosmia (28.2%), chronic rhinosinusitis (20.5%) and dysosmia after head trauma (17.9%). The average recognition threshold was 4.91 and the average detection threshold was 4.37 in T&T olfactometry. After treatment, re-examinations were performed in 17 patients. The average recognition threshold was 4.04 and the average detection threshold was 2.54. Five patients showed improvement of olfactory functions, but 12 patients showed no improvement.

Young patients with olfactory dysfunction represented only 1.7% of all patients who visited the Special Outpatient Clinic for Olfactory Dysfunction. Compared with adult patients, young patients more frequently had congenital or post-traumatic olfactory dysfunction, and less frequently had post-common cold and no drug-induced olfactory dysfunction.

The improvement rate of olfactory dysfunction was 39.1% in young patients and young patients with olfactory dysfunction due to sinusitis showed the highest rate of improvement. No significant difference in the improvement rate was observed between the young and adult patients.

It was difficult to perceive olfactory dysfunction in young children, and their parents tended to notice it and bring their children to the outpatient clinic.

Keywords : pediatric patients, olfactory dysfunction, T&T olfactometry

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Causes of olfactory disturbances

Compared with adult patients, young patients more frequently had congenital or post-traumatic olfactory dysfunction, and less frequently had post-common-cold and no drug-induced olfactory dysfunction.

Efficacy of treatment

Young patients with olfactory dysfunction due to sinusitis showed the highest rate of improvement. No significant difference in the improvement rate was observed between the young and adult patients.