

Time course of autonomic nerve function affected by olfactory (aroma) stimulation

Sho Kanzaki

Department of Otolaryngology, School of Medicine, Keio University

The olfactory epithelium includes the odorant receptors which connects adrenergic nerve fibers. Change occurs in the autonomic function by olfactory stimuli, symptoms appear in the circulatory system, such as a pulse.

However, a strong sense of smell has individual subjective elements and, it is difficult to be evaluated. Therefore, it is considered that if it is possible to observe a functional change in the autonomic nervous system involuntary, such as parasympathetic and sympathetic, highly accurate diagnosis can be done. It is considered that, it is compared to the response of Parkinson's disease by knowing the response of the autonomic nervous against odors variety of healthy subjects.

In this study, when it was in healthy subjects sniff the fragrance of the rose-like odor which is generally good smell, the activity of the autonomic nerves was increased. Further, when it was smell the odor of feces (skatole) like that are generally malodorous, it was found that the activity of the autonomic nerves is greatly enhanced, and the parasympathetic dominance yet.