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Changed sense of smell – what can be done?

FROM THE SPECIALTIES

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Olfactory dysfunction is common. Otorhinolaryngologists can perform examinations, but GPs can also provide treatment where the cause is known.

It became clear early in the pandemic that changed sense of smell was a cardinal symptom of SARS-CoV-2 infection. Olfactory dysfunction was common in cases of acute infection, but the symptom subsided rapidly and persistent symptoms after one year were uncommon (1).

Smell and taste are closely linked and are essential for avoiding danger and disease, for example by detecting smoke, gas or spoiled food. Our sense of smell also allows us to enjoy good food and drink and pleasant aromas that enhance our quality of life.

Olfactory dysfunction is a symptom of a diverse range of conditions, with nose and sinus disorders being the most common cause. The symptoms here are secondary to acute and chronic rhinosinusitis, nasal polyps, allergies or idiopathic rhinitis as well as intranasal tumours. Of other causes, infection was the most common even before the pandemic, and patients with post-infectious olfactory dysfunction more frequently experienced distorted perception of an odour stimulus (parosmia) (2). Olfactory dysfunction can also be post-traumatic, congenital or iatrogenic (as a result of surgery and medication), or caused by Parkinson's disease or Alzheimer's disease.

Before the COVID-19 pandemic, a population prevalence of 5 % was found for absence of all olfactory function (anosmia) and 15 % for quantitatively reduced olfactory function (hyposmia) (3). At the time of writing, more than one million Norwegians have been registered with a COVID-19 infection, and the number is rising rapidly. It is reported that the Delta and Omicron variants of the virus are less likely to cause olfactory dysfunction. Many start to improve after just one week, less than 16 % still have an impaired sense of smell after four months, and after one year this figure drops to 4 % (1).

Investigation at various levels

GPs can initiate treatment if the cause of olfactory dysfunction has been identified. If necessary, the patient can be referred to an otorhinolaryngologist for further examination. Specialist examination will include endoscopic rhinoscopy and an assessment of the entire nasal cavity.

Through the patient's medical history, clinical examination and validated odour testing, a distinction can be made between anosmia, hyposmia, parosmia, phantosmia (olfactory hallucination) and a normal sense of smell. Diagnostic imaging is performed if clinically indicated. MRI is performed in the case of congenital anosmia, a suspected tumour, or idiopathic olfactory dysfunction. A CT scan is performed if pathology of the nose or sinuses is suspected.

Treatment is available

Investigation and treatment of olfactory dysfunction are covered in otorhinolaryngologists' specialist training and are offered by hospitals and private specialists. Patients need information about smoke and gas alarms, caution with food that may be spoiled and personal hygiene.

Nose and sinus disorders are treated according to guidelines. Olfactory dysfunction associated with exposure to medications can often be corrected by changing the medication. Patients with post-infectious, post-traumatic and idiopathic anosmia have shown significant improvement following olfactory training, which consists of repeated exposure to familiar scents. Olfactory training is effective in both adults and children. We recommend ten minutes of smell training using essential oils in the morning and evening. The oils, which are available from pharmacies or health food stores, typically have rose, eucalyptus, lemon or clove aromas, but alternative fragrances can also be used. The effect increases over time, and training is recommended for a period of one year (3).

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