10-MINUTE CONSULTATION

Olfactory loss

E Ofo,¹ B O'Reilly,² A O'Doherty²

¹Basildon and Thurrock University Hospitals NHS Foundation Trust, Nethermayne, Basildon SS16 5NL

²Hassengate Medical Centre, Stanford-le-Hope SS17 0PH

Correspondence to: E Ofo
eoyo@hotmail.com

BMJ 2007;334:423

doi: 10.1136/bmj.39035.624583.68

A 65 year old man presents with loss of smell and altered taste, affecting his appetite and food intake. He had an upper respiratory tract infection before the onset of symptoms nine months ago. Initially, normal odours were distorted, followed by a constant foul smell for three months, and then complete loss of smell.

What issues you should cover

Olfactory disorder or true taste complaint—Altered olfaction is common and invariably causes flavour loss, which most patients perceive as taste dysfunction. The ability to taste salt, sour, bitter, and sweet remains intact, as it is a function of the chorda tympani nerve with contribution from the glossopharyngeal and vagus nerves.

Degree of olfactory dysfunction—Anosmia is complete loss of the sense of smell. Most patients have hyposmia (decreased sensitivity to some or all odourants). Cacosmia is the detection of normal smell as foul or unpleasant. Dysosmia is distortion of perceived odours.

Quality of life—Do the symptoms affect his quality of life? Weight loss may result from a change in diet. Patients often worry they cannot detect spoiled food or toxic fumes.

Cause—Ascertain a possible cause (see box). In most cases the history, including the nature, timing, onset, duration, and pattern of symptoms, aids diagnosis. Is there altered odourant conduction in the nose or a sensorineural problem? Ask about nasal obstruction, rhinorrhoea, and postnasal drip—suggestive of chronic rhinosinusitis. Previous cold or influenza-like symptoms followed by olfactory loss suggests a viral cause. Has he had a recent head injury? Ask about tobacco and cocaine use. Treatments such as calcium channel blockers may alter smell, so take a drug history. Has he been exposed through work to toxic chemicals? Does he have neurological symptoms such as muscle weakness or visual disturbance? Multiple sclerosis, Alzheimer's disease, and rarely intracranial tumours (meningiomas, frontal gliomas) can present with altered olfaction.

What you should do**Physical examination**

Do a routine head and neck examination:

- Assess the nose using an otoscope (or nasoendoscope), looking for obstructive and inflammatory causes such as nasal polyps or rhinitis
- Examine the oral cavity to exclude dryness, dental problems, leukoplakia, and infection
- Assess the tympanic membrane for signs of middle ear disease, which may affect the chorda tympani nerve
- Evaluate cranial nerve function (especially cranial nerves V, IX, and X).

POSSIBLE CAUSES OF OLFATORY DYSFUNCTION

- Obstructive—Nasal polyposis,* deviated nasal septum,* intranasal tumour
 - Sensory—Viral infection,* chronic sinusitis,* allergic rhinitis,* cigarette smoke,* toxic chemical exposure, drugs
 - Neural—Head injury,* Alzheimer's disease, Parkinson's disease, hypothyroidism, intracranial tumour
- *Most common causes

Diagnosis and treatment

- Sinonasal disease, head injury, and upper respiratory tract infection account for most cases of olfactory dysfunction. Olfaction also reduces with advancing age, and consider "idiopathic" olfactory loss after exclusion of other causes.
- Conductive or inflammatory conditions such as nasal polyps or chronic rhinosinusitis may be treated with a short course of oral steroids (such as 40-60 mg prednisolone for one week) followed by a topical steroid spray for at least one month.
- If a previous (non-acute) upper respiratory tract infection or head injury is suspected, no specific treatment is needed. Olfactory loss may improve with time, and with head trauma, recovery of olfactory function is usual within 12 weeks of injury.
- Patients with sinonasal disease not responding to steroids and those with no obvious cause for altered olfaction should be referred to an ear, nose, and throat specialist.
- When olfaction is potentially irrecoverable, offer advice on managing the disability. Eating can be improved by enhancing flavours using marinades. Smoke alarms should be installed.
- Reassurance and explanation are crucial for patients with olfactory loss as patients often fear a more serious underlying problem

Competing interests: None declared.

USEFUL READING

Bromley SM. Smell and taste disorders: a primary care approach. *Am Fam Physician* 2000;61:427-36

Holbrook EH, Leopold DA. Anosmia: diagnosis and management. *Curr Opin Otolaryngol Head Neck Surg* 2003;11(1):54-60

Parker JN, Parker PM. *The official patient's sourcebook on smell and taste disorders*. San Diego: CON Health Publications, 2002

This is part of a series of occasional articles on common problems in primary care
The BMJ welcomes contributions from general practitioners to the series