Phantosmia - advice for primary care

Dept Clinical Neurosciences and ENT, NHS Lothian. 2024.

Phantosmia

Phantosmia is the smelling of an odour that isn't there. It is also called 'olfactory hallucination'. Hyposmia/anosmia means reduced/loss of sense of smell. Parosmia is when people have an altered sense of smell for something that other people can smell.

Key features
Phantosmia is nearly always benign
Smells are typically of something burnt, smoky, or foul but can be pleasant.
It can follow on from loss of smell and taste – e.g., after covid-19

Phantosmia is a surprisingly common reason for referral to our neurology outpatient service. This was the case even before Covid-19. Most people with phantosmia report it as an intermittent smell of something burnt, foul, or unpleasant. Cigarette smoke and petrol are common but olfactory experiences can be varied. Sometimes it can be persistent.

What causes Phantosmia?

There are many potential causes of phantosmia although most are 'idiopathic'. In a population study of 2569 Swedish adults over the age of 60, 5% had this symptom. Smoky/Burnt – was the runaway "smell" in this study.

Idiopathic – by far the commonest cause
Structural – much rarer**.** Just as people can develop Charles Bonnet visual hallucinations when they can't see, or musical hallucinations when they can't hear, so olfactory hallucinations can occur whenever the usual olfactory pathways, either in the nose or brain, are disrupted.

Should I be worried about neurological disease?

The answer is 'hardly ever', especially if 1 in 20 people already have it.

- **Migraine** - there is a statistical relationship with migraine, this included migraine olfactory aura but also relates to generalised brain hypersensitivity seen in people with migraine.
- **Epilepsy** – we were all taught this at medical school, but epilepsy is a rare cause; suspect if the episodes are very short (60 second or less), stereotyped and with other features of a focal epileptic seizure such as epigastric rising, fear and déjà vu. Phantosmia occurs in less than 5% of focal seizures.
- **Head injury** – head injury like any process associated with loss of sense of smell can trigger phantosmia.
- **Other** – there are case reports associating phantosmia with virtually every brain disease. But they are all rare.

Do they need to see a Neurologist or Psychiatrist?

Hardly ever. If your patient has this as an isolated symptom, without other focal neurological symptoms and signs, they need reassurance not investigation or treatment. If they have had a head injury you can explain the mechanism to them. Have a think about whether there are features of Parkinson's disease, migraine, or (rarely) epilepsy.
There is a condition called 'Olfactory reference syndrome' which is a form of obsessive compulsive disorder. In this condition the patient becomes convinced that they smell bad to other people.

Should they go to ENT?

Hardly ever. If there are nasal symptoms, then it may be worthwhile, but very unlikely if there are not. Essentially, therefore, like a neurological referral, make the referral based on the associated symptoms rather than phantosmia. A clue to a nose problem may be that the problem is in one nostril.

What treatments can I give and what can I tell my patient about the likely outcome?

Treatment studies only consist of case series of a handful of patients. There is no evidence based treatment.
The good news is that studies of idiopathic phantosmia are reassuring. In a study that followed 44 patients over 6 years, 30% resolved, 25% improved and 40% stayed the same. Worsening was rare and NONE developed a serious condition like Parkinson's disease. So, unless red flags, we would suggest simply explain how common and benign it is to your patient.
There are some links here - https://www.nhs.uk/conditions/lost-or-changed-sense-smell/

Jon Stone, Richard Davenport (Neurology) and Gillian Macdougall (ENT), NHS Lothian
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