

## Doc, I can't taste my food!

Sir,

It is not often that a patient complains of ageusia to a dermatologist and rightly so. There are very few dermatological causes of ageusia. A quick reference in most dermatology textbooks reveals that this symptom is not listed.

A 63 year-old male presented to us with a sudden loss of taste since 15 days. He became aware of the loss when he was unable to appreciate sweet foods. In the following 2 days, he lost all taste sensations. This disturbing symptom made him visit an ENT specialist and then a dentist. A thorough clinical evaluation by both did not reveal a possible cause for the symptom. The patient was then referred to a neurologist to rule out a central nervous system involvement. A detailed neurological evaluation and magnetic resonance imaging of the brain was carried out. Both were normal. The patient finally visited us as a last resort. A detailed history revealed that the patient was hypertensive and was taking treatment for the same since 5 years. Two months prior to the loss of taste, he was started on terbinafine 250 mg daily, for a suspected onychomycosis. Clinical examination revealed psoriatic plaques over his elbows and knees. An objective assessment of his taste function revealed complete loss of taste on both anterior and posterior parts of the tongue. Olfactory evaluation was normal. All hematological parameters were within the normal range. Because terbinafine was the only new medication at the time of developing ageusia, we advised him to stop the drug. Over the next few weeks, the patient gradually recovered his taste function. Taste function evaluation on follow-up after 1 month showed an improved recognition for sweet, salt and sour. His bitter taste sensation had not yet recovered. The temporal association of taste loss on starting terbinafine and its recovery on stopping the drug suggests that reversible ageusia in our patient was induced by terbinafine.

Alteration in the sense of taste may be due various central (involvement of the "Taste area" in the temporal lobe) or peripheral (changes in the receptor cell [taste buds] function as in xerostomia or damage to the gustatory afferents in the facial or the hypoglossal nerve, as a complication of tonsillectomy, uvulopalatopharyngoplasty or Bell's palsy) causes.<sup>[1]</sup> Drugs account for the most common cause of dysgeusia and a few culprit drugs include clopidogrel, enalapril, interferon, hydroxychloroquine and doxorubicin. Among the antimicrobials, terbinafine-induced ageusia has been well documented. The exact mechanism for this side-effect of terbinafine remains unknown but Richard and Boris hypothesize that terbinafine alters the cell structure/function of taste-related neurons by way of inhibition of the cholesterol synthesis pathway.<sup>[2]</sup> Old age (more than 55 years) and a low body mass index (BMI) (<21 kg/m<sup>2</sup>) are considered as predisposing factors with a mean latent period between first intake of terbinafine and taste loss of 35 days.<sup>[3]</sup> Our patient was 62 years old with a BMI of 25 kg/m<sup>2</sup> and had developed taste loss within 40 days of starting terbinafine. Most reported cases had a reversible loss of taste and most patients regain complete function within 4 months of stopping the drug. However, Bong *et al.* reported a patient failing to regain taste function even 3 years after discontinuation of the drug.<sup>[4]</sup> Bitter taste is the first to be affected and is the last to come back while sweet goes later and is the first to come back. A possible explanation could be that fewer fibers carry bitter taste signals while a larger number of fibers carry the sweet sensation signals. Our patient has now had a complete recovery of his sweet taste function and 50% of the sour and salty taste functions. The bitter taste function is still absent.

A pubmed search for reported cases of ageusia from India drew a blank and so this is possibly the first reported case. This highlights the rare possibility of a drug-induced loss of taste function, which every physician should be alert about.

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