PRACTICE PEARLS

PHILIPPINE JOURNAL OF OTOLARYNGOLOGY-HEAD AND NECK SURGERY VOL. 41 NO. 1 JANUARY – JUNE 2026

How to Approach Patients With Smell-Related Complaints?

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Olfactory dysfunction (OD) affects approximately 20-30% of the general population[1] and can significantly impact daily life, including the enjoyment of food and drinks, detection of environmental hazards, social interactions and overall well-being. Olfactory dysfunction is also associated with several medical conditions, including neurodegenerative diseases (e.g., Alzheimer's and Parkinson's disease),[2] as well as psychiatric conditions like depression.[3] Despite limited local data on prevalence and constraints in diagnostic resources and treatment options, clinicians should be prepared to evaluate patients effectively. A brief, structured clinical assessment allows early recognition, guide management, and helps identify patients who may benefit from specialist referrals.

What is Smell Loss?

Olfactory dysfunction can be classified into quantitative (hyposmia, anosmia) and qualitative disorders (parosmia, phantosmia). See *Table 1*.

Clinical Evaluation

A detailed history is the cornerstone of a good evaluation. Onset and duration of dysfunction are important to clarify, as sudden loss often suggests post-viral or post-traumatic causes, while gradual decline may indicate a chronic condition like neurodegenerative disease. Fluctuating olfactory changes may suggest chronic rhinosinusitis or allergic disease. Associated symptoms, such as nasal obstruction, congestion, rhinorrhea or headache; along with relevant past medical history (e.g., prior head trauma), or findings such as neurological deficits, are also important to note, as they provide additional diagnostic clues. Safety-related questions are important to ask. For example, are patients able to detect threats in their environment (e.g., smoke, gas, spoiled food)? Clinicians should also ask about appetite and any weight changes[5] which may indicate the severity of the condition. A review of medications and medical history, including prior sinonasal surgery, head trauma, chemotherapy or illicit intranasal drug use, may help identify contributing factors.

Keywords: *smell; olfaction disorders; olfactory training*

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Disclosures: The author signed a disclosure that there are no financial or other (including personal) relationships, intellectual passion, political or religious beliefs, and institutional affiliations that might lead to a conflict of interest.

Philipp J Otolaryngol Head Neck Surg 2026; 41 (1) 72-74

Table 1. Common olfactory dysfunction terms

Term	Definition
Normosmia	Quantitatively normal olfactory function
Hyposmia	Quantitatively reduced olfactory function
Anosmia	Loss of sense of smell to the extent that it is not useful in daily life (not always complete loss)
Parosmia	Distorted perception of an odor stimulus in the presence of an odorant (e.g. onion smells like unpleasant burning smell)
Phantosmia	Perception of an odor in the absence of a stimulus (i.e., 'olfactory hallucination')

Adapted from Hernandez *et al.*, 2020, ORL Karger.[4]

Physical Examination

Physical examination should include a thorough assessment of the nasal cavity and olfactory cleft, ideally using nasal endoscopy, when available. The nasal cavity should be inspected for polyps, septal deviation, tumors, or signs of inflammation, and the sinuses should be palpated to identify tenderness suggestive of sinusitis. Clinicians should also observe cognitive function, for example: by asking patients to recall three unrelated words at the beginning and end of the consultation, by seeing how they follow conversation and instructions, as well as the ease in which they perform tasks requiring naming, among others. Although extensive olfactory testing (involving threshold, differentiation, and identification) is ideal and several tests are widely used internationally, a widely adopted, locally validated olfactory identification test with normative data is not currently available in the Philippines. In the meantime, familiar and safe odors, such as coffee, calamansi or lemon, and rose, may be used for informal screening, similar to the procedure described by Sorokowska *et al.*,[6] with local validation anticipated in the future.

While a full neurologic examination may be beyond the scope of an ENT evaluation, clinicians should remain alert for signs or symptoms suggestive of neurological deficits (e.g., cognitive changes [memory loss, confusion, attention difficulty], weakness, gait disturbances, tremors, speech difficulty) during the assessment and refer to a neurologist as appropriate.

Additional Assessments

Imaging should be guided by the suspected underlying etiology.[7] Computed Tomography (CT) scans are preferred for evaluating the nasal cavity and paranasal sinuses when chronic rhinosinusitis or bony abnormalities are suspected. Magnetic Resonance Imaging (MRI) is indicated if intracranial pathology is suspected or if detailed assessment of the olfactory bulbs and sulci is required. Idiopathic olfactory loss is generally a diagnosis of exclusion and should only be made after a comprehensive evaluation, including a normal MRI and ruling out any underlying inflammatory conditions. An MRI should ideally include the entire brain and the olfactory bulbs, which are better assessed using coronal T2-weighted images with the following parameters: T2 coronal scans, repetition time = 6770 ms; echo time = 84 ms; flip angle = 150°; slice thickness = 1 mm; field of view matrix = 263 × 350.[7] High-resolution axial T1 images may be used for assessment of other structures. Pertinent findings may include absent or hypoplastic olfactory bulbs, as well as shallow olfactory sulci.[8]

Subjective olfactory function may also be assessed using Visual Analogue Scale ratings[5] and quality of life among patients with olfactory-related complaints may also be evaluated using the 17-item questionnaire on olfactory disorders-negative statements (QOD-NS), which has already been adapted into Filipino.[9]

Diagnosis and Management

Once the history, physical examination, and any other assessments have been completed, clinicians can interpret the findings to guide management. Olfactory loss due to sinonasal disease often responds to topical corticosteroids or surgical intervention, whereas post-viral olfactory loss (also referred to as post-infectious to include other possible causative pathogens such as bacteria, fungi, or rare organisms like microfilaria[7]) or post-traumatic loss may benefit from olfactory training. Olfactory training remains the gold-standard therapy for OD regardless of etiology, with the greatest benefit observed in post-infectious cases.[10]

Olfactory training, originally proposed by Hummel *et al.* in 2009[11], involves sniffing four odors (rose [flowery], lemon [fruity], cloves [aromatic], and eucalyptus [resinous]) for at least 10 seconds each (in our center, we advise sniffing for 30 seconds each), twice daily, for a minimum of 12 weeks. Odors can be selected based on these aforementioned qualities, as well as accessibility, affordability, and stable intensity over the training period.[9] Periodically changing the odors (including odors like jasmine, tangerine, menthol, and thyme) may improve adherence and enhance training success.[12] Improvement is greatest during the first 16 weeks of olfactory training, and although progress eventually plateaus, continuing training beyond can yield additional gains that are sustained.[13]

Persistent, progressive, or treatment-resistant loss should prompt formal olfactory testing, imaging, and specialist referral. Referral is also indicated for patients with cognitive or neurological changes, significant head trauma, suspected tumors, or rapidly progressive or severe parosmia that compromises safety or nutrition. Clinicians can incorporate olfactory assessment into routine visits with minimal equipment, documenting baseline function for at-risk patients. Patient education is essential: emphasize safety measures such as smoke

and gas alarms as well as food safety measures. Encourage olfactory training[11] with repeated exposure to a set of odors over several weeks, as consistent practice has been shown to improve olfactory function.

The 2023 Position Paper on Olfactory Dysfunction[7] provides comprehensive guidance on standardized evaluation and management. Early recognition of olfactory loss not only enables timely and appropriate treatment but also safeguards patient safety and quality of life. Even with minimal time and resources, clinicians can perform a meaningful olfactory assessment, enhance patient care, and identify those who would benefit from specialist referral.

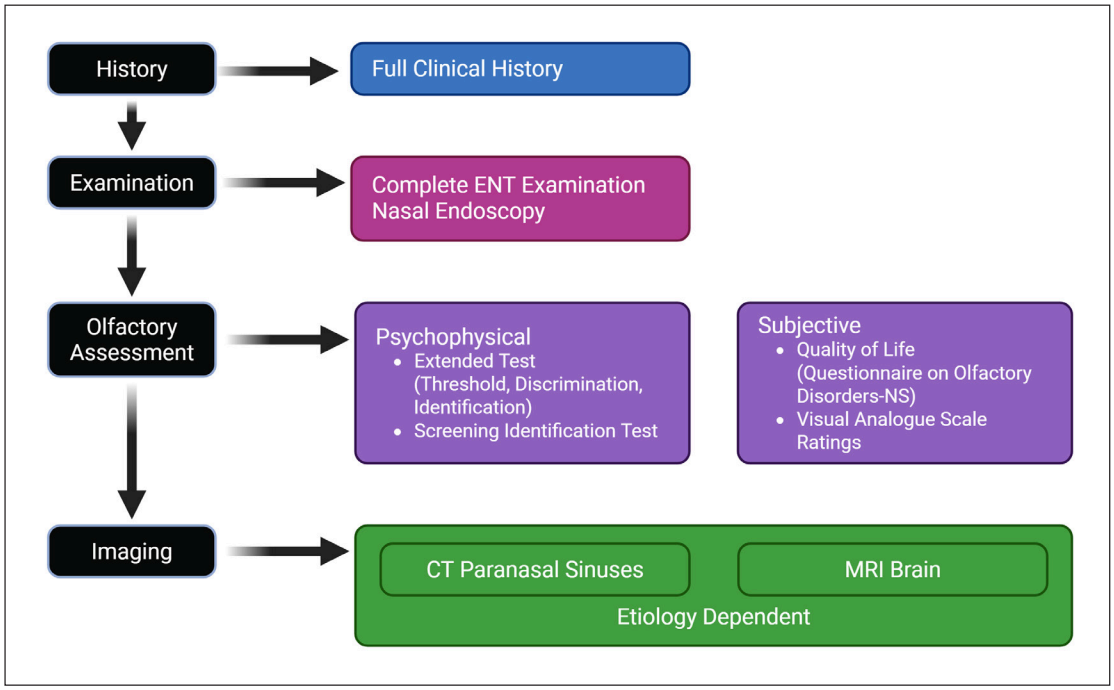

Figure 1. Flowchart of Basic Clinical Olfactory Dysfunction Evaluation. Adapted, with permission, from Whitcroft *et al.*.11 Created in BioRender. Hernandez, A. K. (2026) https://BioRender.com/cjxnhkn

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