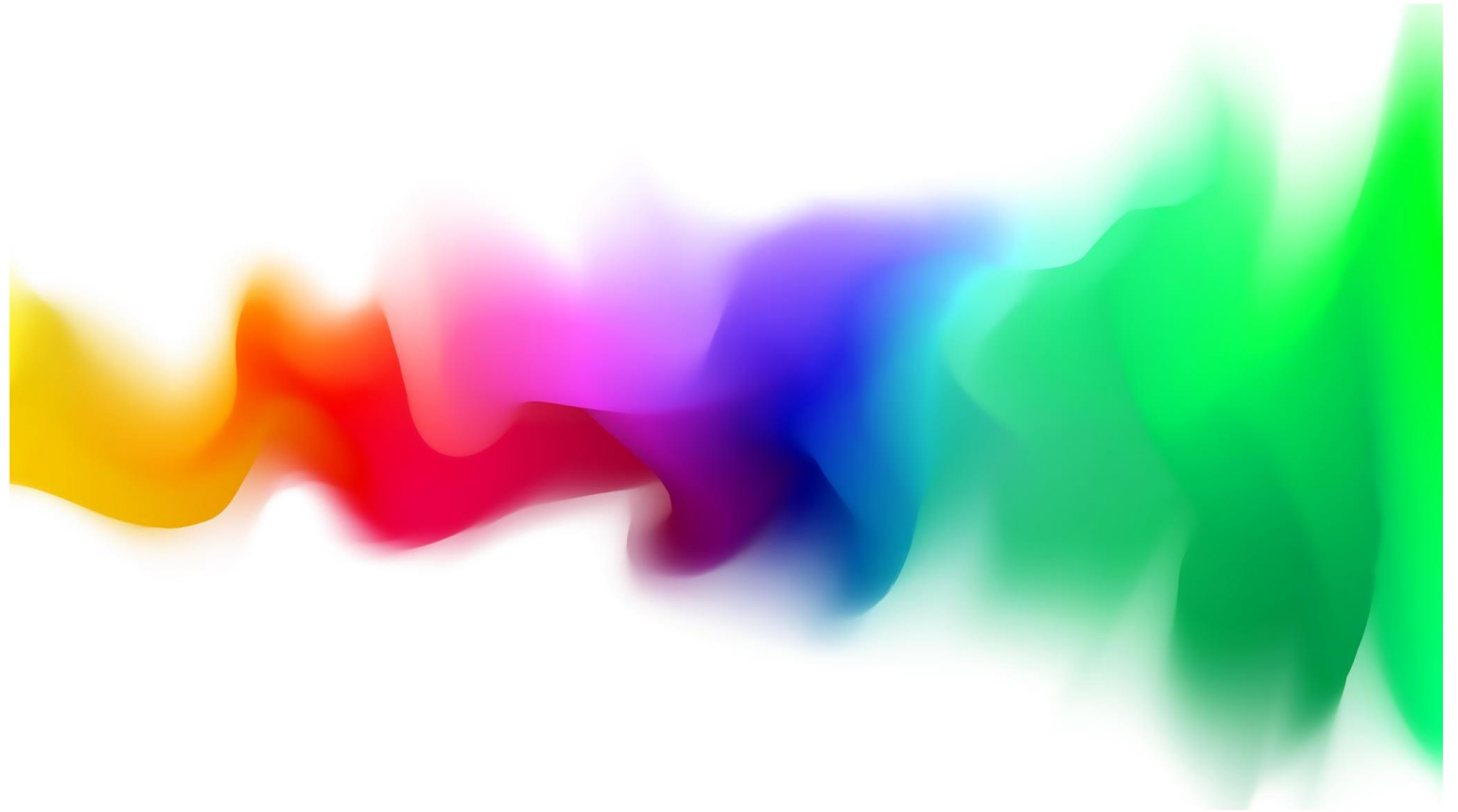


# Approach ing patients with smell disorders

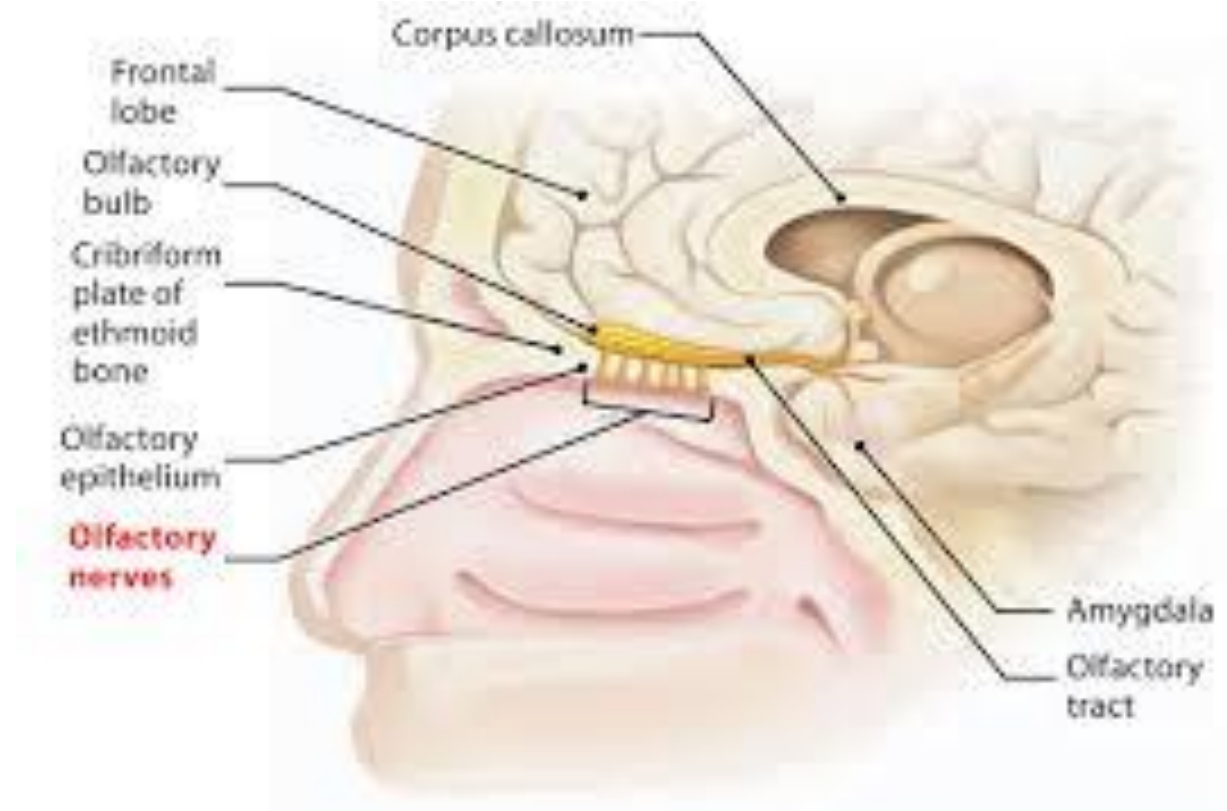
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Dr. lubna khreesha  
Otolaryngology  
Special surgery

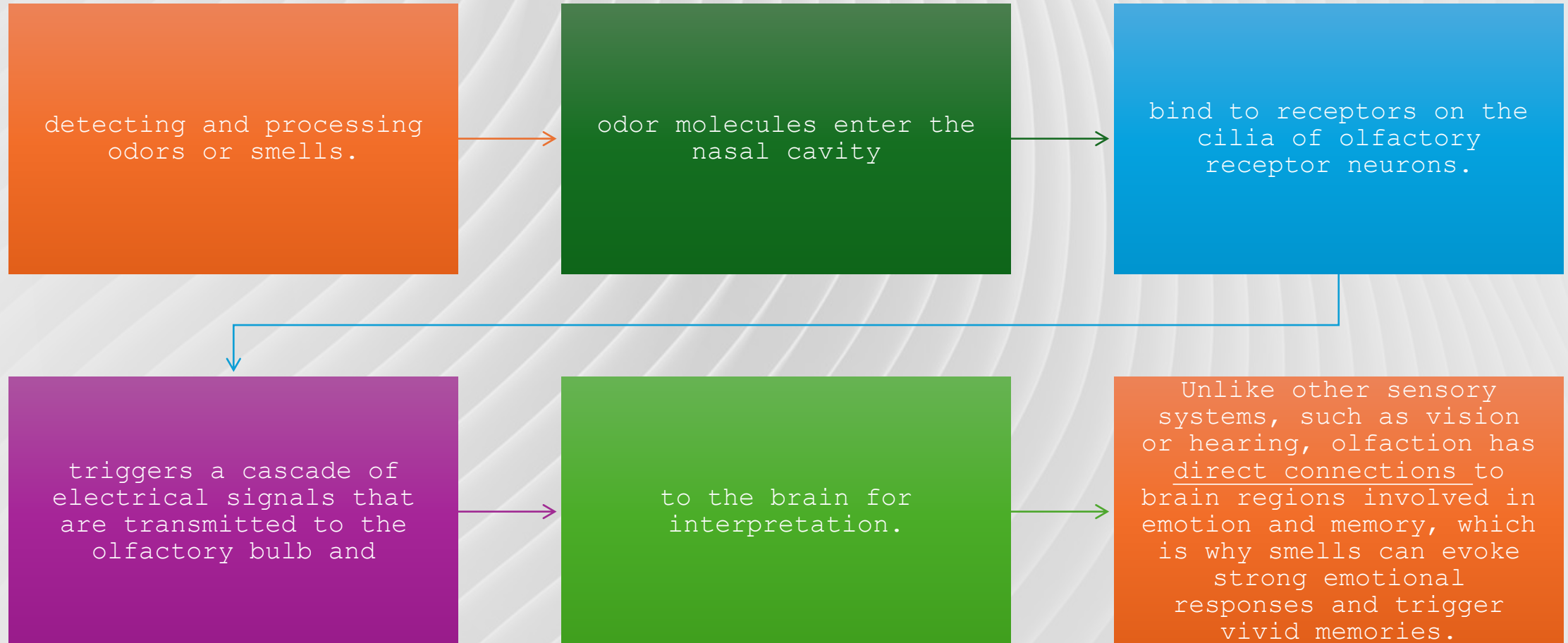


# Anatomy of the Olfactory System:

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# Function of the Olfactory System:



# Clinical Importance:

Disorders of the olfactory system can have significant impacts on a person's quality of life.

Loss of smell can affect the ability to detect danger (e.g., spoiled food, gas leaks)

can lead to changes in appetite, mood, and social interactions.

diagnosing and treating olfactory disorders is crucial.

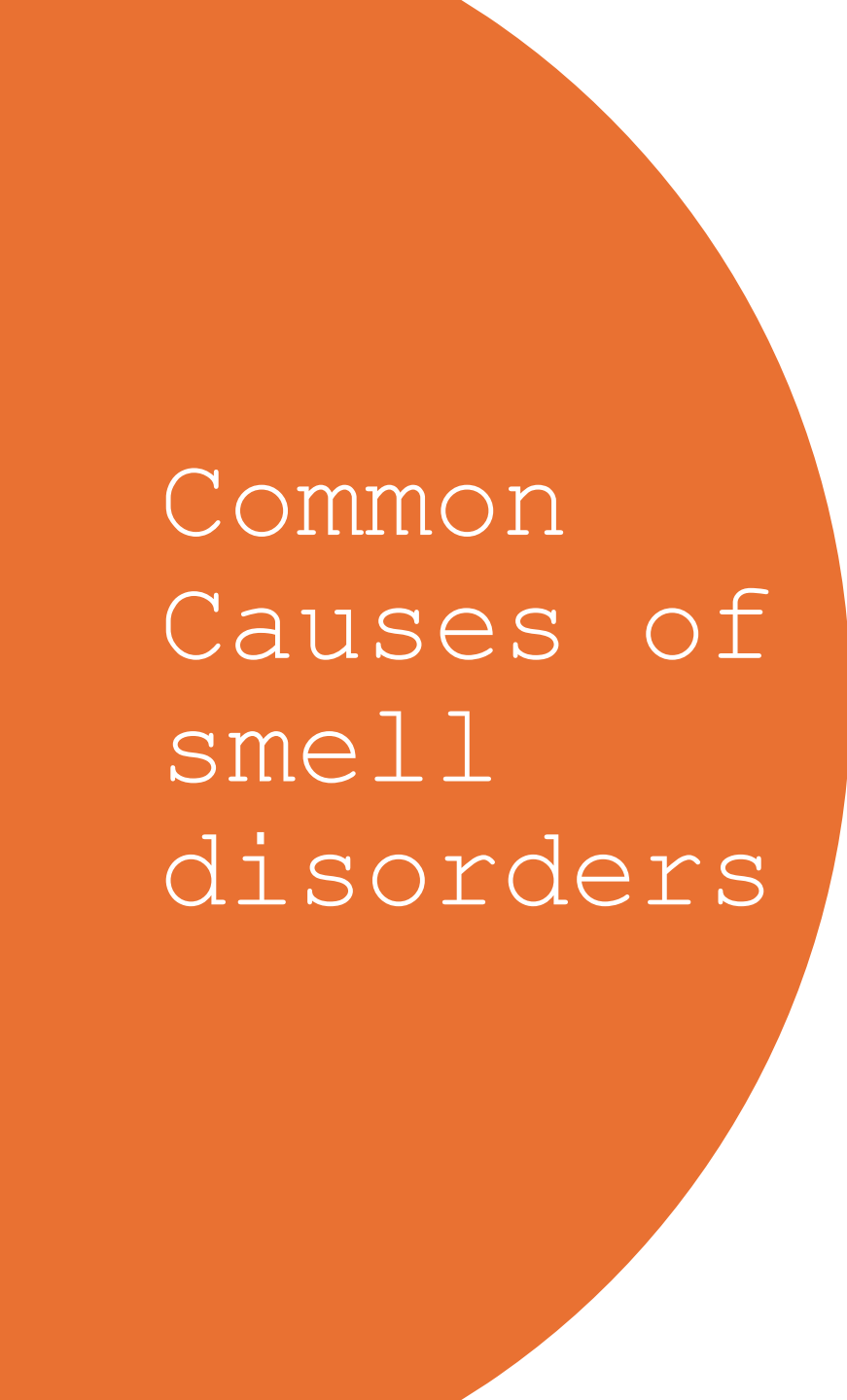





# Types of Smell disorders

- **1. Anosmia:** complete loss of the sense of smell.
- **2. Hyposmia:** partial loss of the sense of smell
- **3. Parosmia:** distortion of the sense of smell where odors are perceived differently than they are. Usually unpleasant or strange smells from otherwise normal stimuli.
- **4. Phantosmia:** perceiving odors that aren't present.  
This condition can be associated with neurological disorders, migraines, or nasal infections.
- **5. Ageusia:** loss of taste sensation.

Olfaction plays a significant role in the perception of flavors

A large orange circle on the left side of the slide, partially cut off by the edge.

# Common Causes of smell disorders

- . Upper Respiratory Tract Infections
  - . Head Trauma
  - . Rhinoinusitis
  - . Aaina
  - . Neurological Conditions (e.g., Parkinson's, Alzheimer's)
  - . Medications
  - . Rarely can be congenital
- 
- A blue dashed line graphic in the bottom right corner, consisting of several curved segments.

# Clinical approach

- History
- Physical examination
- Nasal endoscopy
- Olfactory testing
- Imaging
- Lab investigation
- Refer to a specialist
- **Patient Counseling and Management:**



# Importance of History Taking

- Establishing Onset and Duration of Symptoms
- Identifying Triggers or Aggravating Factors
- Assessing Associated Symptoms (e.g., Nasal Congestion, Headache)
- Reviewing Medical and Medication History



# History Taking Approach

- Introduction and Establishing Rapport
- Chief Complaint: "Tell me about your concerns regarding your sense of smell."
- Presenting Complaint: "When did you first notice a change in your sense of smell?"
- Duration and Progression: "Has your condition worsened or improved over time?"
- Aggravating or Alleviating Factors: "Are there any specific triggers that worsen your symptoms?"
- Associated Symptoms: "Do you experience any nasal congestion, headaches, or other symptoms along with the loss of smell?"
- Medical History: "Have you experienced any recent illnesses or injuries?"
- Medication History: "Are you currently taking any medications? Have you recently started or stopped any medications?"

# Red Flags in History Taking

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- Sudden Onset of Symptoms
- Severe Head Trauma
- Associated Neurological Symptoms
- Recent Changes in Medications



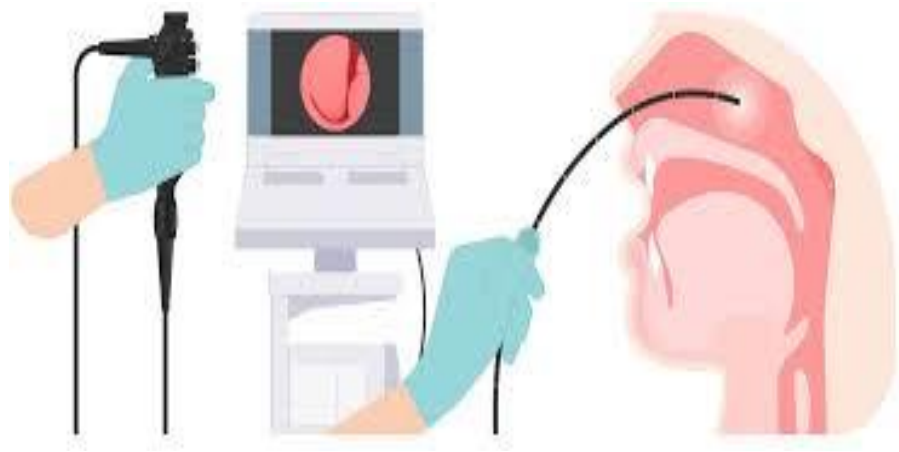
# Physical Examination:

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- Perform a thorough nasal examination to assess for signs of inflammation, nasal polyps, septal deviation, or other structural abnormalities.
- Evaluate the cranial nerves, particularly cranial nerve I (olfactory nerve), for any deficits.
- Check for signs of sinusitis, such as facial tenderness, swelling, or purulent nasal discharge.



# Nasal Endoscopy:



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Perform nasal endoscopy to visualize the nasal cavity, nasal septum, turbinates, and olfactory cleft.

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Nasal endoscopy can help identify nasal polyps, mucosal abnormalities, or other lesions obstructing the olfactory pathway.

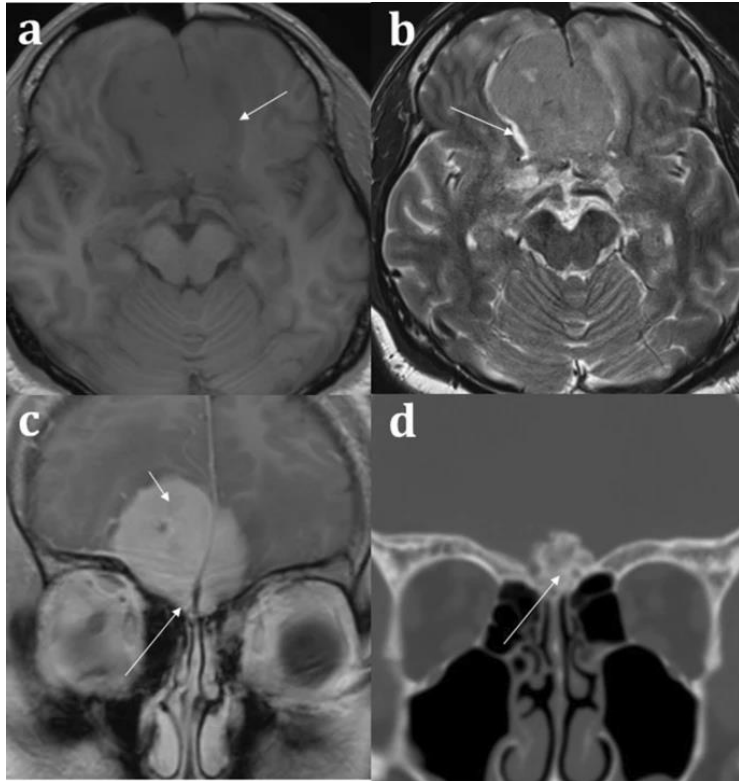
# Olfactory Testing:



Conduct olfactory testing using validated methods such as the University of Pennsylvania Smell Identification Test (UPSIT) or Sniffin' Sticks test.

Olfactory testing can help quantify the degree of olfactory dysfunction and monitor changes over time.

# Imaging Studies:



Consider imaging studies such as magnetic resonance imaging (MRI) or computed tomography (CT) scans of the brain and sinuses if indicated.

Imaging may be helpful in identifying structural abnormalities, tumors, or other pathologies affecting the olfactory system.



## Laboratory Investigations:

Order laboratory tests as appropriate to evaluate for underlying systemic conditions or metabolic disorders associated with smell disorders.

- Blood tests for thyroid function, vitamin deficiencies, autoimmune diseases, and infectious etiologies may be warranted.

## Referral to Specialists:

. Consider referral to otolaryngologists (ENT specialists) for further evaluation and management, especially in cases of refractory smell disorders or suspected structural abnormalities.

- Collaboration with neurologists, allergists, or other specialists may be necessary depending on the underlying etiology.

# Patient Counseling and Management:

01

Provide counseling to patients regarding the nature of their smell disorder, prognosis, and available

02

Manage underlying conditions contributing to smell disorders, such as treating sinusitis,

03

Consider olfactory rehabilitation techniques, including olfactory training and sensory

04

Educate patients on safety measures to mitigate the risks associated with loss of smell, such as

# Long-term Follow-up:



Schedule regular follow-up appointments to monitor the patient's symptoms, olfactory function, and response to treatment.



Adjust management strategies as needed based on the patient's progress and evolving clinical course.



Impact on Quality of Life:  
Dietary changes, safety concerns, emotional effects



Prognosis: Recovery potential, chronicity of anosmia

# Case Presentation: Smell Disorder

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- **Patient Information:**

- Name: X
- Age: 45 years
- Gender: Male
- Occupation: Teacher
- Chief Complaint: Loss of smell

- **History:** Mr. X presents with a complaint of gradual loss of smell over the past six months. He reports no significant nasal congestion or discharge but does note occasional mild headaches. He denies any recent upper respiratory infections or head trauma. Past medical history is unremarkable, with no known chronic illnesses or surgeries. He is a nonsmoker and consumes alcohol socially. There is no family history of smell disorders or relevant medical conditions.

# Physical Examination:

1

Nasal Examination:  
Bilateral patent  
nasal passages with  
no evidence of nasal  
polyps or  
inflammation.

2

Neurological  
Examination: No focal  
neurological  
deficits. Cranial  
nerve examination is  
otherwise normal.



# Diagnostic Evaluation:

- Olfactory Testing: Administered University of Pennsylvania Smell Identification Test (UPSIT), revealing significantly reduced olfactory function.
- Nasal Endoscopy: Normal nasal cavity without any structural abnormalities or masses.
- Imaging: MRI of the head and sinuses shows no evidence of intracranial pathology or sinonasal abnormalities.
- Laboratory Tests: Complete blood count, basic metabolic panel, and inflammatory markers are within normal limits.

# Diagnosis:

- Type of Smell Disorder: Anosmia (complete loss of smell).
- Underlying Etiology: Idiopathic, as there is no identifiable sinonasal pathology, neurological condition, or systemic disease.

## Management:

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**Symptomatic Management:** Educate the patient on olfactory training exercises to potentially improve olfactory function. Advise on safety precautions, such as relying on visual cues for food safety and detecting gas leaks.



**Follow-up:** Schedule a follow-up visit in three months to assess response to olfactory training and monitor for any progression of symptoms.

## Patient Education:

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Discuss the chronic nature of anosmia and the possibility of gradual improvement with olfactory training.



Emphasize the importance of safety measures in the absence of smell, such as using gas detectors and checking expiration dates on food products.

# Documentation:

- Documented the history, examination findings, diagnostic test results, diagnosis, management plan, and patient education in the medical record for reference and continuity of care.
- NOT WRITTEN NOT DONE

Thank you

