Olfactory dysfunction

- The role of Staphylococcus aureus in the occurrence and development of chronic rhinosinusitis with nasal polyps
- Exposure of Zinc-induced Parkinson's disease-like non-motor and motor symptoms in relation to oxidative/nitrosative stress mediated neurodegeneration in the brain of Drosophila melanogaster
- Intra-nasal Disodium Orthophosphate Is Beneficial in Improving Olfactory Dysfunction Post COVID-19
- Orphan G Protein-Coupled Receptors: A Novel Research Frontier in Autism and Associated Disorders
- Advances in the study of mechanisms underlying olfactory dysfunction in obstructive sleep apnea:a narrative review
- Age-dependent Transcriptional and Circuit Alterations in the brain Underlie Post-Anesthesia Neurobehavioral Dysfunction
- Viral Etiologies and Histopathological Features of Olfactory Dysfunction: A Systematic Review
- The olfactory epithelium: a critical gateway for pathological tau propagation and a target for mitigating tauopathy in the central nervous system

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Olfactory impairment (OI), or the diminished ability to smell, has been increasingly recognized as a significant predictor of mortality in older adults. This association persists even after accounting for factors such as age, cognitive function, depression, and comorbidities.

Key Findings

Independent Predictor of Mortality: Studies have demonstrated that OI is a strong, independent predictor of mortality. For instance, a study published in PLOS ONE found that older adults with anosmia (complete loss of smell) had over three times the odds of death compared to those with normal olfactory function, even after adjusting for various health factors.

Association with Neurodegenerative Diseases: OI is often an early symptom of neurodegenerative diseases such as Alzheimer's and Parkinson's. A study in Frontiers in Public Health reported that OI was associated with a 43% higher risk of death over ten years, with the association being even stronger in individuals with neurodegenerative diseases.

Link to Frailty and Aging: OI has been linked to frailty and the aging process. Research suggests that olfactory dysfunction may reflect broader physiological decline, including reduced cellular regeneration and increased vulnerability to environmental hazards .

Impact on Nutrition and Safety: Impaired olfaction can lead to decreased appetite and poor nutrition, as well as an inability to detect hazardous situations like gas leaks or spoiled food. These factors can contribute to increased mortality risk .

Clinical Implications

Given these findings, assessing olfactory function in older adults could serve as a valuable tool for identifying individuals at higher risk of mortality. Objective smell tests may help in the early detection of underlying health issues, allowing for timely interventions.

Epidemiology

Olfactory dysfunction (OD), defined as the reduced or distorted ability to smell during sniffing (orthonasal olfaction) or eating (retronasal olfaction), is often reported in mild or even asymptomatic cases; in a study from Italy, 64% of 202 mildly symptomatic patients reported impaired olfaction.

Anosmia after anterior communicating artery aneurysm surgery

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