Olfactory function

The olfactory system provides numerous functions to humans, influencing ingestive behavior, awareness of environmental hazards, and social communication. Approximately ⅕ of the general population exhibits an impaired sense of smell.

After transsphenoidal pituitary adenoma resection patients have reduced olfactory function and quality of life.

Mu et al. aimed to evaluate the effects of nasal irrigation on the nasal-related quality of life in patients undergoing transsphenoidal pituitary adenoma resection. Patients undergoing transsphenoidal resection of pituitary adenomas in a tertiary hospital in China were included. The patients were randomly divided into a control group and a nasal irrigation group according to the random sequence generated by the SPSS22.0 software. The 22-item sino-nasal outcome test (SNOT-22) was used to evaluate the nasal-related quality of life; lower SNOT-22 scores indicate a higher quality of life. The Toyota and Takagi (T&T) olfactometer test was used to evaluate the olfactory function of patients. Results: A total of 82 patients were finally included. The SNOT-22 scores of both groups after surgery were significantly higher than those before surgery ($p < .05$). The total SNOT-22 score of nasal irrigation group at one month (23.45 ± 3.72 vs. 27.48 ± 4.07) and three months (15.83 ± 2.86 vs. 21.82 ± 3.36) after surgery was lower than that in the control group ($p < .05$). There was no significant difference in olfactory function between the two groups at one month and three months after surgery ($p > .05$). The nasal mucosal score in the nasal irrigation group was significantly improved compared with the control group at one month and three months after surgery ($p < .05$). Conclusion: Nasal irrigation is associated with improved quality of life in patients undergoing transsphenoidal pituitary adenoma resection compared with the control group [1].

1)
Mu A, Ni Z, Ma C. Nasal Irrigation Improves the Nasal Related Quality of Life in Patients Undergoing Transsphenoidal Resection of Pituitary Adenoma. Biol Res Nurs. 2023 Dec 11:10998004231221548. doi: 10.1177/10998004231221548. Epub ahead of print. PMID: 38079151.