

Hendrix et al. assessed the risk for **olfactory dysfunction** following surgical treatment of **unruptured cerebral aneurysm** via the **supraorbital minicraniotomy**. A **retrospective review** of patients with electively treated **cerebral aneurysms** who underwent perioperative assessment of **olfactory function** using a **sniffin' sticks odor identification** test between January 2015 and January 2016 was performed. A subgroup of patients without a history of **subarachnoid hemorrhage**, without prior **intracranial aneurysm treatment**, and confirmed **olfactory function** underwent supraorbital keyhole craniotomy for **aneurysm clipping**. Microscopic and endoscopic **videos** were reviewed for this subgroup. Sixty-four patients who underwent **elective aneurysm treatment** either via surgical **clipping** or **endovascular aneurysm occlusion** were identified. Prior to treatment, 4/64 (6.3%) demonstrated bilateral **anosmia**. Collectively, 14 patients (21.9%) met the subgroup criteria of supraorbital keyhole craniotomy for aneurysm clipping. Here, olfactory performance significantly decreased postoperatively on the side of craniotomy (ipsilateral, $P = 0.007$), whereas contralateral and bilateral olfactory function remained unaltered ($P = 0.301$ and $P = 0.582$, respectively). Consequently, 4/14 patients (28.6%) demonstrated **ipsilateral anosmia** 3 months after surgery. One patient (1/14, 7.1%) also experienced **contralateral anosmia** resulting in bilateral anosmia. Intraoperative visualization of the **olfactory tract** and surgical maneuvers do not facilitate the prediction of olfactory outcomes. The supraorbital keyhole craniotomy harbors a specific risk for unilateral olfactory deterioration. Lack of perioperative olfactory assessment likely results in underestimation of the risk for olfactory decline. Despite uneventful surgery, prediction of postoperative **olfactory function** and dysfunction remain challenging ¹⁾

¹⁾

Hendrix P, Fischer G, Krug J, Linnebach AC, Simgen A, Griessenauer CJ, Burkhardt BW, Oertel J. Olfactory dysfunction in patients undergoing supraorbital keyhole craniotomy for clipping of unruptured aneurysms. Clin Anat. 2020 Mar;33(2):316-323. doi: 10.1002/ca.23529. Epub 2019 Dec 14. PMID: 31769083.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**



Permanent link:

https://neurosurgerywiki.com/wiki/doku.php?id=sniffin_sticks

Last update: **2024/06/07 02:50**