

DAFTAR PUSTAKA

- Abdelalim AA, Mohamady AA, Elsayed RA, Elawady MA, Ghallab AF. Corticosteroid nasal spray for recovery of smell sensation in COVID-19 patients: A randomized controlled trial. *Am J Otolaryngol.* 2021;42(2):102884. doi:10.1016/j.amjoto.2020.102884
- Ahmed, A., Abdelaal, A. and Abdelhamid, R. (2021) 'Corticosteroid nasal spray for recovery of smell sensation in COVID-19 patients: A randomized controlled trial', *Am J Otolaryngol.*, 42(2)(January).
- Al Aïn, S., Poupon, D., Hétu, S., Mercier, N., Steffener, J., Frasnelli, J., (2019). Smell training improves olfactory function and alters brain structure. *NeuroImage* 189, 45–54.
<https://doi.org/10.1016/j.neuroimage.2019.01.008>
- Ali, R., Zgair, A. and Al-ani, R. M. (2021) 'Effect of nasal corticosteroid in the treatment of anosmia due to COVID-19: A randomised double-blind placebo-controlled study', *American Journal of Otolaryngology–Head and Neck Medicine and Surgery*. doi: 10.1016/j.amjoto.2021.103033.
- Altundag, A. et al. (2015) 'Modified OT in patients with postinfectious olfactory loss', *Laryngoscope*, 125(8), pp. 1763–1766. doi: 10.1002/lary.25245.

- Bérubé, S., Demers, C., Bussière, N., Cloutier, F., Pek, V., Chen, A., Bolduc-Bégin, J., Frasnelli, J., (2023). Olfactory Training Impacts Olfactory Dysfunction Induced by COVID-19: A Pilot Study. ORL 85, 57–66. <https://doi.org/10.1159/000528188>
- Boesveldt, S. et al. (2017) 'Anosmia-A clinical review', *Chemical Senses*, 42(7), pp. 513–523. doi: 10.1093/chemse/bjx025.
- Bratt M, Moen KG, Nordgård S, Helvik AS, Skandsen T. Treatment of posttraumatic olfactory dysfunction with corticosteroids and olfactory training. *Acta Otolaryngol*. 2020;140(9):761-767. doi:10.1080/00016489.2020.1767301
- Cho, Seok Hyun. (2014). Clinical Diagnosis and Treatment of Olfactory Dysfunction. *Hanyang Medical Reviews*. 34. 107. 10.7599/hmr.2014.34.3.107.
- Desiato, V.M., Levy, D.A., Byun, Y.J., Nguyen, S.A., Soler, Z.M., Schlosser, R.J., (2021). The Prevalence of Olfactory Dysfunction in the General Population: A Systematic Review and Meta-analysis. *Am J Rhinol & Allergy* 35, 195–205. <https://doi.org/10.1177/1945892420946254>
- Despopoulos, A. and Silbernagl, S. (2003) *Color Atlas of Physiology*. Thieme (Color Atlas of Physiology). Available at: <https://books.google.co.id/books?id=vKHjwQEACAAJ>.

Disorders and Potential Treatment Strategies', *Current Otorhinolaryngology Reports*, 4(2), pp. 115–121. doi: 10.1007/s40136016-0113-5.

Dong, J., et al (2017). The Prevalence of Anosmia and Associated Factors Among U.S. Black and White Older Adults. *J Gerontol A Biol Sci Med Sci* 72, 1080–1086. <https://doi.org/10.1093/gerona/glx081>

Doty, R. L. and Mishra, A. (2001) 'Olfaction and its alteration by nasal obstruction, rhinitis, and rhinosinusitis', *Laryngoscope*, 111(3), pp. 409–423. doi: 10.1097/00005537-200103000-00008.

Doty RL. Olfactory dysfunction in COVID-19: pathology and long-term implications for brain health. *Trends Mol Med.* 2022;28(9):781-794. doi:10.1016/j.molmed.2022.06.005

Eibenstein, A. et al. (2005) 'Olfactory screening test: experience in 102 Italian subjects.', *Acta otorhinolaryngologica Italica : organo ufficiale della Società italiana di otorinolaringologia e chirurgia cervico-facciale*, 25(1), pp. 18–22.

Finney, L.J., et al (2021). Inhaled corticosteroids downregulate the SARS-CoV-2 receptor ACE2 in COPD through suppression of type I interferon. *J Allergy Clin Immunol* 147, 510-519.e5.
<https://doi.org/10.1016/j.jaci.2020.09.034>

Fleiner, F., Lau, L., Göktas, Ö., (2012). Active olfactory training for the treatment of smelling disorders. *Ear Nose Throat J* 91, 198–203, 215.
<https://doi.org/10.1177/014556131209100508>

Fokkens, W.J., et al, (2020). European Position Paper on Rhinosinusitis and Nasal Polyps 2020. *Rhin* 0, 1–464. <https://doi.org/10.4193/Rhin20.600>

Gellrich, J., Han, P., Manesse, C., Betz, A., Junghanns, A., Raue, C., Schriever, V.A., Hummel, T., (2018). Brain volume changes in hyposmic patients before and after olfactory training: Brain Volume Changes in Hyposmic Patients. *The Laryngoscope* 128, 1531–1536. <https://doi.org/10.1002/lary.27045>

Goncalves, S. and Goldstein, B. J. (2016) ‘Pathophysiology of Olfactory Guilemany, J. M. et al. (2009) ‘Persistent allergic rhinitis has a Moderate impact on the sense of smell, depending on both nasal congestion and inflammation’, *Laryngoscope*, 119(2), pp. 233–238. doi: 10.1002/lary.20075.

Han, P., Musch, M., Abolmaali, N., Hummel, T., (2021). Improved Odor Identification Ability and Increased Regional Gray Matter Volume After Olfactory Training in Patients With Idiopathic Olfactory Loss. *i-Perception* 12, 204166952110058. <https://doi.org/10.1177/20416695211005811>
Heilmann, S., Huettenbrink, K. B. and Hummel, T. (2004) ‘Local and systemic administration of corticosteroids in the treatment of olfactory loss’, *American Journal of Rhinology*, 18(1), pp. 29–33. doi: 10.1177/194589240401800107.

Howell J, Costanzo RM, Reiter ER. Head trauma and olfactory function. *World J Otorhinolaryngol Head Neck Surg*. 2018;4(1):39-45. Published 2018 Mar 14. doi:10.1016/j.wjorl.2018.02.001

Hopkins C, Alanin M, Philpott C, et al. Management of new onset loss of sense of smell during the COVID-19 pandemic - BRS Consensus Guidelines. *Clin Otolaryngol*. 2021;46(1):16-22. doi:10.1111/coa.13636

Hosseini, K., Zare-Sadeghi, A., Sadigh-Eteghad, S., Mirsalehi, M., Khezerloo, D., (2020). Effects of olfactory training on resting-state effective connectivity in patients with posttraumatic olfactory dysfunction. *Acta Neurobiol Exp (Wars)* 80, 381–388.

Hosseinpoor, M., Kabiri, M., Rajati Haghi, M., Ghadam Soltani, T., Rezaei, A., Faghfouri, A., Poustchian Gholkhatmi, Z., Bakhshaei, M., (2022). Intranasal Corticosteroid Treatment on Recovery of Long-Term Olfactory Dysfunction Due to COVID-19. *The Laryngoscope* 132, 2209–2216. <https://doi.org/10.1002/lary.30353>

Huang, Z., Huang, S., Cong, H., Li, Z., Li, J., Keller, K.L., Shearer, G.C., Kris-Etherton, P.M., Wu, S., Gao, X., (2017). Smell and Taste Dysfunction Is Associated with Higher Serum Total Cholesterol Concentrations in Chinese Adults. *J Nutr* 147, 1546–1551. <https://doi.org/10.3945/jn.117.250480>

Hummel, T., et al (2017). Position paper on olfactory dysfunction. *Rhin* 54, 1–30. <https://doi.org/10.4193/Rhino16.248>

Hummel, T. et al. (2009) 'Effects of OT in patients with olfactory loss', *Laryngoscope*, 119(3), pp. 496–499. doi: 10.1002/lary.20101.

Hummel, T. and Lötsch, J. (2010) 'Prognostic factors of olfactory dysfunction', *Archives of Otolaryngology - Head and Neck Surgery*, 136(4), pp. 347–351. doi: 10.1001/archoto.2010.27.

Hummel, T. and Welge-Lüessen, A. (2006) 'Assessment of olfactory function', *Advances in Oto-Rhino-Laryngology*, 63, pp. 84–98. doi: 10.1159/000093752.

Hummel, T. and Welge-Lüßen, A. (2006) *Taste and Smell: An Update*. Basel: KARGER.

Huriyati, E. and Nelvia, T. (2014) 'Gangguan Fungsi Penghidu dan Pemeriksaannya', *Jurnal Kesehatan Andalas*, 3(1), pp. 1–7. doi: 10.25077/jka.v3i1.16.

Kasiri H, Rouhani N, Salehifar E, Ghazaeian M, Fallah S. Mometasone furoate nasal spray in the treatment of patients with COVID-19 olfactory dysfunction: A randomized, double blind clinical trial. *Int Immunopharmacol*. 2021;98:107871. doi:10.1016/j.intimp.2021.107871

Kim SW, Park B, Lee TG, Kim JY. *Olfactory Dysfunction in Nasal Bone Fracture*. *Arch Craniofac Surg*. 2017;18(2):92-96. doi:10.7181/acfs.2017.18.2.92

Konstantinidis I, Tsakiropoulou E, Bekiaridou P, Kazantzidou C, Constantinidis J. Use of olfactory training in post-traumatic and postinfectious olfactory dysfunction. *Laryngoscope*. 2013;123(12):E85-E90. doi:10.1002/lary.24390

Lahdji, A. (2017) *Buku Ajar: Sistem Telinga, Hidung dan Tenggorokan Disusun, Jurnal Penjaminan Mutu.* doi: 10.25078/jpm.v3i1.94.

Landis, B. N. et al. (2005) 'Differences between orthonasal and retronasal olfactory functions in patients with loss of the sense of smell', *Archives of Otolaryngology - Head and Neck Surgery*, 131(11), pp. 977–981. doi: 10.1001/archotol.131.11.977.

Leon, E. A., Catalanotto, F. A. and Werning, J. W. (2007) 'Retronasal and orthonasal olfactory ability after laryngectomy', *Archives of Otolaryngology - Head and Neck Surgery*, 133(1), pp. 32–36. doi: 10.1001/archotol.133.1.32.

Liu DT, Pellegrino R, Sabha M, et al. Factors associated with relevant olfactory recovery after olfactory training: a retrospective study including 601 participants. *Rhinology*. (in press). Epub September 9, 2020. 10.4193/Rhin20.262.

Liu, Y.-H., Huang, Z., Vaidya, A., Li, J., Curhan, G.C., Wu, S., Gao, X., (2018). *A longitudinal study of altered taste and smell perception and change in blood pressure*. Nutr Metab Cardiovasc Dis 28, 877–883. <https://doi.org/10.1016/j.numecd.2018.05.002>

Mahmut, M.K., Musch, M., Han, P., Abolmaali, N., Hummel, T., (2020). *The effect of olfactory training on olfactory bulb volumes in patients with idiopathic olfactory loss*. Rhin 0, 0–0. <https://doi.org/10.4193/Rhin20.223>

Matsuyama, S., Kawase, M., Nao, N., Shirato, K., Ujike, M., Kamitani, W., Shimojima, M., Fukushi, S., (2020). The Inhaled Steroid Ciclesonide Blocks SARS-CoV-2 RNA Replication by Targeting the Viral Replication-Transcription Complex in Cultured Cells. *J Virol* 95, e01648-20. <https://doi.org/10.1128/JVI.01648-20>

Miwa, S., Yamamoto, N., Hayashi, K., Takeuchi, A., Igarashi, K., Tsuchiya, H., (2020). Recent Advances and Challenges in the Treatment of Rhabdomyosarcoma. *Cancers* 12, 1758. <https://doi.org/10.3390/cancers12071758>

Negoias, S., Pietsch, K., Hummel, T., (2017). Changes in olfactory bulb volume following lateralized olfactory training. *Brain Imaging Behav* 11, 998–1005. <https://doi.org/10.1007/s11682-016-9567-9>

Nguyen TP, Patel ZM. Budesonide irrigation with olfactory training improves outcomes compared with olfactory training alone in patients with olfactory loss. *Int Forum Allergy Rhinol.* 2018;8(9):977-981.
doi:10.1002/air.22140

Pellegrino, R., Han, P., Reither, N., Hummel, T., (2019). Effectiveness of olfactory training on different severities of posttraumatic loss of smell: Olfactory Training in Traumatic Smell Loss. *The Laryngoscope* 129, 1737–1743. <https://doi.org/10.1002/lary.27832>

Pieniak, M., Oleszkiewicz, A., Avaro, V., Calegari, F., Hummel, T., (2022). Olfactory training – Thirteen years of research reviewed. *Neuroscience & Biobehavioral Reviews* 141, 104853.
<https://doi.org/10.1016/j.neubiorev.2022.104853>

Rashid, R.A., Zgair, A., Al-Ani, R.M., (2021). Effect of nasal corticosteroid in the treatment of anosmia due to COVID-19: A randomised double-blind placebo-controlled study. *Am J Otolaryngol* 42, 103033.
<https://doi.org/10.1016/j.amjoto.2021.103033>

Raviv, J. R. and Kern, R. C. (2006) ‘Chronic rhinosinusitis and olfactory dysfunction’, *Advances in Oto-Rhino-Laryngology*, 63, pp. 108–124. doi:

10.1159/000093757.

Saltagi, A.K., Saltagi, M.Z., Nag, A.K., Wu, A.W., Higgins, T.S., Knisely, A., Ting, J.Y., Illing, E.A., (2021). Diagnosis of Anosmia and Hyposmia: A Systematic Review. *Allergy Rhinol (Providence)* 12, 21526567211026570.
<https://doi.org/10.1177/21526567211026568>

Samuel, I. and Riyanto Wreksoatmodjo, B. (2021) 'Anosmia pada COVID-19', Cermin Dunia Kedokteran, 48(1), pp. 25–30. Available at: <http://103.13.36.125/index.php/CDK/article/view/1260>.

Saussez, S., et al (2021). Short-Term Efficacy and Safety of Oral and Nasal Corticosteroids in COVID-19 Patients with Olfactory Dysfunction: A European Multicenter Study. *Pathogens* 10, 698.
<https://doi.org/10.3390/pathogens10060698>

Shu, C.-H., Hummel, T., Lee, P.-L., Chiu, C.-H., Lin, S.-H., Yuan, B.-C., (2009). The proportion of self-rated olfactory dysfunction does not change across the life span. *Am J Rhinol Allergy* 23, 413–416.
<https://doi.org/10.2500/ajra.2009.23.3343>

Soler, Z. M. et al. (2020) 'A primer on viral-associated olfactory loss in the era of COVID-19', *International Forum of Allergy and Rhinology*, 10(7), pp. 814–820. doi: 10.1002/alr.22578.

'Standard Operating Procedure Topical Nasal Corticosteroid Spray' (2015)
Nurses in Allergy.

Swain, S. (2021) 'Management of olfactory dysfunction in COVID-19 patients: a review', *MGM Journal of Medical Sciences*, 8(3), p. 297. doi: 10.4103/mgmj.mgmj_37_21.

Treat, S. et al. (2020) 'Intranasal kortikosteroids: patient administration angles and impact of education', *Rhinology Online*, 3(3), pp. 160–166. doi: 10.4193/rhinol/20.070.

Tuccori, M. et al. (2011) 'Drug-Induced Taste and Smell Alterations', *Drug Safety*, 34(10), pp. 849–859. doi: 10.2165/11593120-000000000-00000.

Vent, J. et al. (2004) 'Pathology of the olfactory epithelium: Smoking and ethanol exposure', *Laryngoscope*, 114(8), pp. 1383–1388. doi: 10.1097/00005537-200408000-00012.

Whitcroft, K. L. and Hummel, T. (2019) 'Clinical Diagnosis and Current Management Strategies for Olfactory Dysfunction: A Review', *JAMA Otolaryngology - Head and Neck Surgery*, 145(9), pp. 846–853. doi: 10.1001/jamaoto.2019.1728.

Wrobel, B. B. and Leopold, D. A. (2005) 'Olfactory and sensory attributes of the nose', *Otolaryngologic Clinics of North America*, 38(6), pp. 1163–1170. doi: 10.1016/j.otc.2005.07.006.

Yang, J., Pinto, J.M., (2016). The Epidemiology of Olfactory Disorders. Curr Otorhinolaryngol Rep 4, 130–141. <https://doi.org/10.1007/s40136-016-0120-6>

Yaylacı, A., Azak, E., Önal, A., Aktürk, D.R., Karadenizli, A., (2023_). Effects of classical olfactory training in patients with COVID-19-related persistent loss of smell. Eur Arch Otorhinolaryngol 280, 757–763.
<https://doi.org/10.1007/s00405-022-07570w>

Yuan, F. et al. (2021) 'Steroids and OT for Postviral Olfactory Dysfunction: A Systematic Review', *Frontiers in Neuroscience*, 15(August). doi: 10.3389/fnins.2021.708510.