

Delayed postoperative cerebrospinal fluid leaks are uncommon and largely unstudied complications. In a study, London et al. aimed to identify their etiology and understand the efficacy of various reconstruction strategies.

A retrospective chart analysis of 1017 endonasal skull base surgeries performed by a single neurosurgeon was completed identifying delayed CSF leaks (occurring >1 week after surgery).

Seventeen cases of early (1-2 weeks after surgery) or delayed (>2 weeks after surgery) postoperative CSF leak were identified. The most common reconstruction during the initial surgery consisted of an inlay or gasket seal collagen matrix (82.4% of patients) with an onlay pedicled flap (76.5% of patients). Presenting symptoms of delayed CSF leak included rhinorrhea (82.4%), headache (41.2%), and meningitis (23.5%). The most common causes included flap dehiscence (17.6%); provoking events such as emesis, sneezing, or fall (17.6%); flap necrosis (11.8%); flap displacement (11.8%); and inadequate apposition of the flap, that is, folded flap (11.8%). Reconstructive techniques of the delayed CSF leak included fortification of the initial reconstruction with free fat grafts (29.4% of patients), combined collagen matrix with a fat graft (23.5% of patients), repositioning of the previous flap (11.8% of patients), and repair with a new flap (11.8% of patients). CSF diversion (spinal/ventricular drain or shunt) was used in 17.6% of patients.

This study identifies the most common etiologic factors leading to a delayed CSF leak and its initial symptoms. Furthermore, it serves as the foundation for a reconstructive algorithm based on reinforcement of the initial repair with free abdominal fat graft with or without collagen matrix ¹⁾.

¹⁾

London NR Jr, Mohyeldin A, Montaser AS, Tanjararak K, Prevedello DM, Otto BA, Carrau RL. Contributing factors for delayed postoperative cerebrospinal fluid leaks and suggested treatment algorithm. Int Forum Allergy Rhinol. 2020 May 3. doi: 10.1002/alr.22544. [Epub ahead of print] PubMed PMID: 32362077.

From:

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



Permanent link:

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

Last update: 2025/04/29 20:19