Vivostat: An autologous fibrin sealant as useful adjunct in

endoscopic transnasal CSF-leak repair.

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Abstract:

The benefit of fibrin glue for reduction of postoperative CSF-leaks after endoscopic skull base

surgery is not clearly evident in literature. However, its use is supposed to be beneficial in fixing

grafting material. As of today there is no specific data available for otolaryngological procedures. A

retrospective data analysis at a tertiary care referral center on 73 patients treated endoscopically

transnasally for CSF-leaks at the ENT-department Graz between 2009 and 2012 was performed.

Primary closure rate between conventional fibrin glue and autologous fibrin glue were analyzed. The

Vivostat system was used in 33 CSF-leak closures and in 40 cases conventional fibrin glue was

used. Comparing the two methods the primary closure rate using the autologous Vivostat system

was 75.8 and 85.0 % with conventional fibrin glue. The secondary closure the rates were 90.9 %

with Vivostat 92.5 % with conventional fibrin glue. The Vivosat system is a useful adjunct in

endoscopic CSF-leak closure. Its advantages over conventional fibrin glue are its application system

for fixation of grafting material particularly in underlay techniques. Despite this advantage it cannot

replace grafting material or is a substitute for proper endoscopic closure which is reflected by the

closure rates.

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