

Endoskopowe leczenie płynotoku nosowego

Endoscopic treatment of cerebral rhinorrhea

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Summary

Introduction: The frequency of different factors causing cerebrospinal fluid rhinorrhea (CFR) has lately changed. The incidence of iatrogenic CFR has reached 10% of all cases of CFR, due to an increasing number of endoscopic operations of the sinuses and skull base, while idiopathic CFR is nowadays very rare. The current treatment method for CFR is surgical repair of the fistula. Endoscopic surgery of the anterior skull base has become the standard procedure for the repair of cerebrospinal fluid (CSF) leaks of various origins. The aim of this study was to analyse results of endoscopic surgical technique used in our department for the treatment of CFR. **Material and methods:** Records of 5 patients aged from 46 to 69 (mean 58.2) years treated in the department between April 2004 and March 2006 were analysed retrospectively. 4 individuals had undergone endoscopic sinus surgery for sinus problems which resulted in iatrogenic CSF leak. One patient had idiopathic CFR. 3 fistulas localised in the neighbourhood of the cribriform plate were closed using an „underlay” technique with synthetic dura, and covered with free mucosal grafts from the nasal septum, kept in place by fibrin glue. The fistula in the neighbourhood of the sphenoid sinus posterior wall was closed using an „overlay” technique with surgical, covered with synthetic dura. **Results:** In the 3 patients with cribriform plate fistulas the closure was successful and CFR did not recur during 6 to 9 month's follow-up. In the patient with sphenoid sinus fistula CFR recurred on exertion after 4 months. In one patient with cribriform plate fistula, CFR resolved spontaneously during preparation to surgery. **Conclusions:** Endoscopic closure of the skull base fistula represents a minimally invasive and highly successful procedure. Our experience suggests that the optimal surgical technique in the region of cribriform plate consists in performing an „underlay” procedure with synthetic dura and covering the graft with free mucosal grafts from the nasal septum.