

Sellar floor reconstruction after transsphenoidal surgery using fibrin glue without grafting or implants: technical note.

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Abstract:

Background: Different techniques have already been described for reconstructing the sellar floor after transsphenoidal (TS) procedures. This paper reports on the use of fibrin glue alone without grafting or the use of implants in the reconstruction of the sellar floor after TS. Methods: Five hundred sixty-seven patients who submitted to TS for pituitary and sellar region tumors were studied. No intraoperative cerebrospinal fluid (CSF) leak occurred in 503 patients (group 1); in the remaining 64 patients (group 2), intraoperative CSF leak was noted. In group 1 patients, closure of the sellar floor consisted of packing the surgical bed with hemostatic material only. When CSF leak was noted, the surgical bed was covered with a layer of hemostatic material and the intrasellar space was filled up with fibrin glue. An additional layer of hemostatic material was added at the topography of the preexisting sellar floor, and a second amount of fibrin glue was applied over it. At the end of surgery, a continuous lumbar CSF drainage system was installed in group 2 patients and kept for 5 days. Prophylactic antibiotics were administered during this period. Results: We did not observe delayed CSF leak, meningitis, or visual loss in group 1 patients. In group 2, 2 patients presented with complications: 1 patient got meningitis but no overt CSF leak, and the other disclosed a delayed postoperative leak treated by reoperation. Discussion: Our results showed that closure of the sellar floor with hemostatic material and fibrin glue without grafting or the use of implants is a safe and efficient method to prevent postoperative complications after TS. Generally speaking, there is no need for grafting or the use of implants at the end of TS. © 2006 Elsevier Inc. All rights reserved.