

The fixed combination of collagen with components of fibrin adhesive

- A new hemostyptic agent in skull base procedures.

Authors: Nistor R.F., Chiari F.M., Maier H., Hehl K.

Publication Date: 1997

Abstract:

CSF leak is till one of the major sources of morbidity after extensive skull base procedures. Of the various standard closure techniques of traumatic or iatrogenic dural defects, none provides a really watertight, persistent closure. Even the supplementary use of fluid fibrin glue did not substantially improve the rate postoperative CSF leaks. The application of a collagen sheet covered with a fixed layer of solid components of a fibrin tissue glue (TachoComb) overcomes the major drawbacks of dual sealing in skull base surgery. The dural defects of 58 patients undergoing extensive skull base procedures were sealed with this new hemostyptic agent. The series includes 44 patients undergoing primary surgery, 6 patients with traumatic or iatrogenic tears of venous sinuses, and 8 patients with postoperative leaks after previous skull base surgery, none of the patients had postoperative CSF leakage or venous rebleeding. One patients developed a delayed pneumatocephalus. All cases of patient CSF fistulas were resolved without any adjuvant therapy. Preliminary experience shows that the good sealing and hemostyptic performance of this new agent will considerably reduce the risk of postoperative CSF leak and infection after skull base procedures.