

A novel technology: Percutaneous injection of fibrin glue as a treatment for frontal sinus cerebrospinal fluid rhinorrhea.

Authors: Yang L., Wu J., Zhang G., Zhao Z., Fan Z., Wang B.

Publication Date: 2013

Abstract:

In this study, we examined the effectiveness of percutaneous injected fibrin glue as a treatment for frontal sinus cerebrospinal fluid (CSF) rhinorrhea in a series of 4 cases. All 4 patients had fracture in the posterior wall of the frontal sinus. The anterior wall of the frontal sinus was punctured following high-resolution computed tomography imaging. In 3 out of 4 patients with defective skull due to prior frontal craniotomy, direct percutaneous puncture of the frontal sinus was used. Fibrin glue was injected to close the fistula and to seal the rhinorrhea. Surgery procedures lasted for 15-35 minutes (average 27.6 min). Rhinorrhea was stopped in all patients after the surgery, with no recurrence at a 10-month follow-up visit. In 1 case, the glue was expelled by coughing at 2 days after the surgery but was completely stopped with no recurrence after a second attempt. One patient with no recurrence at a 10-month follow-up died of tumor relapse at 12 months. In summary, fibrin glue could be used as a novel treatment for frontal sinus CSF rhinorrhea. Copyright © 2013 by Mutaz B. Habal, MD.