# Prevention of postoperative subdural fluid collections following transcortical transventricular approach.

Authors: Jung T.-Y., Jung S., Jin S.-G., Jin Y.-H., Kim I.-Y., Kang S.-S., Kim S.-H.

Publication Date: 2007

## Abstract:

Background: Subdural fluid collections appear in about 39% of patients after the removal of intra- and paraventricular tumors. This extracerebral fluid collection requires surgical intervention when progressive fluid accumulation takes place. The authors retrospectively and prospectively studied the efficacy of gelfoam and fibrin adhesive in closing cortical and ependymal defects after intraventricular and/or paraventricular lesion resection to prevent the development of SFCs. Methods: From 1999 to 2004, we used gelfoam and fibrin adhesive on the cortical and ependymal defects of 28 patients who underwent the resection of intraventricular and/or paraventricular lesions via the transcortical approach associated with the communicated ventricle. We investigated the percentage of symptomatic and asymptomatic SFC. Results: The patients median age was 59.5 years (range, 30-76 years), and the male/female ratio was 16:12. A frontal approach was performed in 18 patients, an occipital approach in 2, a parietal approach in 4, and a temporal approach in 4. The incidence of SFCs was 7% (2 patients). Of the 2 patients with SFCs, 1 required temporary drainage. The other patient was asymptomatic, and the SFCs were spontaneously absorbed 2 months later. Conclusions: The use of gelfoam and fibrin adhesive to seal cortical and ependymal defects after a transcortical procedure might be a viable method of preventing the development of SFC. 