Prevention of subdural fluid collections following transcortical

intraventricular and/or paraventricular procedures by using fibrin

adhesive.

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Abstract:

OBJECT: Subdural fluid collections following transcortical intraventricular and/or paraventricular

neurosurgical procedures for tumors are common and can be difficult to treat. The authors

prospectively studied the efficacy of a fibrin adhesive (Tisseel) in closing cortical and ependymal

defects following intraventricular and/or paraventricular lesion resection and in preventing the

development of subdural fluid collections.

METHODS: Twenty-five patients who underwent 29 transcortical approaches for the resection of

intraventricular and/or paraventricular lesions were studied. No patient developed a symptomatic

subdural fluid collection and no new seizure or progression of a preexisting seizure disorder was

encountered during a median follow-up time of 29 months (range 1-57 months). The incidence of

preoperative hydrocephalus was 72% and four (22%) of these patients required postoperative shunt

placement.

CONCLUSIONS: The use of a fibrin adhesive to seal cortical and ependymal defects after

transcortical procedures appears to prevent the development of subdural fluid collections.