

# Experiences with TachoSil in microneurosurgery.

Authors: Kivelev J, Gohre F, Niemela M, Hernesniemi J

Publication Date: 2015

## **Abstract:**

**BACKGROUND:** We analyze our experience of using TachoSil (Takeda Austria GmbH: Linz, Austria) in microneurosurgical procedures as a hemostat and also as a sealant to patch dural defects.

**MATERIALS AND METHODS:** Beginning on January 1, 2012, we prospectively analyzed 100 consecutive surgeries where TachoSil was used. The patient group included 58 women (58 %) and 42 men (42 %); the mean age was 52 years (range, 3-85 years). Indications for surgery included removal of the tumor (53 cases; 53 %), clipping of the cerebral arterial aneurysm (31 cases; 31 %), and treatment of other pathologies, including AVM (four cases; 4 %), cavernomas (four cases; 4 %), spinal tumor, and traumatic subdural hematoma. Patients received postoperative care according to local neurosurgical department protocol, including a postoperative CT scan after each craniotomy. Primary assessment of the wound took place during the hospital stay as well as at discharge or transfer to a rehabilitation unit. Mean follow-up time was 4 months (range, 1-12 months).

**RESULTS:** None of the patients developed postoperative hematoma after craniotomy or spinal procedure. At primary assessment during hospital stay, 93 patients (93 %) had had no wound-related problems over the normal course of healing. No case registered any liquor leak from the wound, and none of the patients showed any signs of allergic response related to TachoSil usage. At the last follow-up, 96 patients (96 %) experienced uneventful wound healing, and in four patients (4 %), superficial wound infection was successfully treated with oral antibiotics.

CONCLUSIONS: Our results indicate that TachoSil can serve in neurosurgical practice at no additional risks. TachoSil proved to be an effective hemostat, sealant, and adhesive in either cranial or spinal procedures.