

Floseal

- [Management of Major Arterial Injuries: A Critical Complication of Endoscopic Endonasal Surgery](#)
- [Evaluating the Efficacy and Safety of Hemofence \(Thrombin Cross-Linked Sodium Hyaluronate Gel Matrix\) in Hemostasis for Intractable Exudative Bleeding in Spinal Surgery: A Multicenter, Randomized, Phase III Clinical Trial](#)
- [Haemostatic efficacy and inflammatory response of a novel beta-chitin patch in a cerebral small vessel injury model - A pilot study](#)
- [Use of FLOSEAL as a scaffold and its impact on induced neural stem cell phenotype, persistence, and efficacy](#)
- [Efficacy and Safety of Novel Beta-Chitin Patches as Haemostat in Rat Vascular and Neurosurgical Model](#)
- [Gelatin-thrombin Hemostatic Matrix-related Cyst Formation after Cerebral Hematoma Evacuation: A Report of Two Cases](#)
- [MRI appearance of adjunct surgical material used in spine surgery](#)
- [Efficacy and Safety of a Thrombin-Containing Collagen-Based Hemostatic Agent in Spinal Surgery: A Randomized Clinical Trial](#)

[Gelatin thrombin matrix sealant](#) (Floseal).

Flowable agents such as Floseal® (F) are often reserved as adjuncts to non-flowable agents (i.e., Gelatin sponges [G] and thrombin [T]) when bleeding is not sufficiently controlled. Based on their perceived positive impact it is postulated that flowable agents alone may result in better clinical and resource utilization outcomes.

The use of flowable hemostatic agents alone may result in better clinical and possibly economic outcomes in spine surgery ¹⁾.

It has been used for hemostasis in various operations ^{2) 3) 4)}.

Application of the topical matrix sealant at the end of [Anterior cervical discectomy and fusion](#) (ACDF) can significantly reduce the amount of [postoperative hemorrhage](#) ⁵⁾.

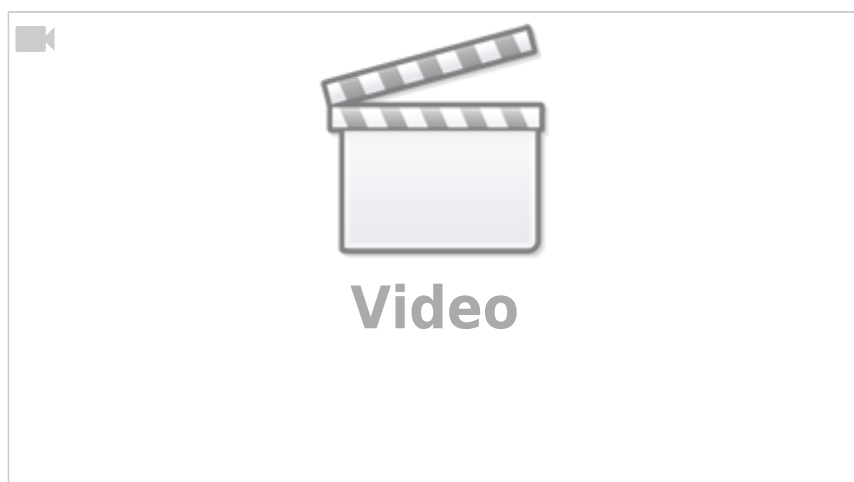
Thromboembolic events

Association with thrombin and thromboembolic events in patients undergoing tumor resection has been suggested. A study evaluates the relationship between flowable hemostatic matrix and deep vein thrombosis in a large cohort of patients treated for brain tumor removal. The authors conducted a retrospective, multicenter, clinical review of all craniotomies for tumor removal performed between 2013 and 2014. Patients were classified in three groups: group I (flowable gelatin hemostatic matrix with thrombin), group II (gelatin hemostatic without thrombin), and group III (classical hemostatic). A total of 932 patients were selected: tumor pathology included 441 gliomas, 296 meningiomas, and 195 metastases. Thromboembolic events were identified in 4.7% of patients in which gelatin matrix

with thrombin was applied, in 8.4% of patients with gelatin matrix without thrombin, and in 3.6% of cases with classical methods of hemostasis. Patients with venous thromboembolism had an increased proportion of high-grade gliomas (7.2%). Patients receiving a greater dose than 10 ml gelatin hemostatic had a higher rate of thromboembolic events. Intracranial hematoma requiring reintervention occurred in 19 cases: 4.5% of cases of group III, while reoperation was performed in 1.3 and 1.6% of patients in which gelatin matrix with or without thrombin was applied. Gelatin matrix hemostat is an efficacious tool for neurosurgeons in cases of difficult intraoperative bleeding during cranial tumor surgery. This study may help to identify those patients at high risk for developing thromboembolism and to treat them accordingly ⁶⁾.

Videos

Application of FLOSEAL Hemostatic Matrix in a Frontal MAV procedure



1)

Ramirez MG, Deutsch H, Khanna N, Cheatem D, Yang D, Kuntze E. Floseal only versus in combination in spine surgery: a comparative, retrospective hospital database evaluation of clinical and healthcare resource outcomes. *Hosp Pract* (1995). 2018 Jul 9. doi: 10.1080/21548331.2018.1498279. [Epub ahead of print] PubMed PMID: 29986148.

2)

Oz MC, Cosgrove DM, 3rd, Badduke BR, et al. Controlled clinical trial of a novel hemostatic agent in cardiac surgery: the Fusion Matrix Study Group. *Ann Thorac Surg*. 2000;69:1376-1382.

3)

Krishnan S, Conner TM, Leslie R, Stemkowski S, Shander A. Choice of hemostatic agent and hospital length of stay in cardiovascular surgery. *Semin Cardiothorac Vasc Anesth*. 2009;13:225-230.

4)

Gazzeri R, Galarza M, Alfier A. Safety biocompatibility of gelatin hemostatic matrix (Floseal and Surgiflo) in neurosurgical procedures. *Surg Technol Int*. 2012;22:49-54.

5)

Li QY, Lee O, Han HS, Kim GU, Lee CK, Kang SS, Lee MH, Cho HG, Kim HJ, Yeom JS. Efficacy of a Topical Gelatin-Thrombin Matrix Sealant in Reducing Postoperative Drainage Following Anterior Cervical Discectomy and Fusion. *Asian Spine J*. 2015 Dec;9(6):909-15. doi: 10.4184/asj.2015.9.6.909. Epub 2015 Dec 8. PubMed PMID: 26713124; PubMed Central PMCID: PMC4686397.

6)

Gazzeri R, Galarza M, Conti C, De Bonis C. Incidence of thromboembolic events after use of gelatin-thrombin-based hemostatic matrix during intracranial tumor surgery. *Neurosurg Rev*. 2018 Jan;41(1):303-310. doi: 10.1007/s10143-017-0856-6. Epub 2017 Apr 24. PubMed PMID: 28439721.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

<https://neurosurgerywiki.com/wiki/doku.php?id=floreal>

Last update: **2024/09/18 06:49**

