

## GELFOAM

Gelfoam is widely used in [spine surgery](#) and its complication is rare. Gelfoam has been used to control the bleeding and prevent scar adhesion when used after laminectomy as an effective interposing membrane



However, it has the potential to compress the adjacent structure and change to the hard epidural fibrosis, which may be overlooked <sup>1)</sup>.

Gelfoam as part of the Cerebrospinal fluid fistula repair is contraindicated <sup>2)</sup>.

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Gelatin-doxorubicin sticks (GDSs) were created by passively loading precut gelatin foam strips ([Gelfoam](#)) with doxorubicin solution. The dried GDSs were inserted into the needle track through the sheath during the needle biopsy and eventually self-absorbed.

Bai et al. showed that this procedure prevented iatrogenic tumor seeding during needle biopsies in two subcutaneous tumor models. In an alternative application, using GDSs in intracranial brain tumor implantation avoided the outgrowth of tumor from the rodent brain, which could otherwise potentially fuse the tumor with the meninges and distort the results in therapeutic studies in rodent brain tumor models <sup>3)</sup>.

<sup>1)</sup>

Yang JC, Kim TW, Park KH. Gelfoam-induced Swallowing Difficulty after Anterior Cervical Spine Surgery. Korean J Spine. 2013 Jun;10(2):94-6. doi: 10.14245/kjs.2013.10.2.94. Epub 2013 Jun 30. PubMed PMID: 24757468; PubMed Central PMCID: PMC3941718.

<sup>2)</sup>

Epstein NE. Medicolegal Corner: When minimally invasive thoracic surgery leads to paraplegia. Surg Neurol Int. 2014 Apr 16;5(Suppl 3):S55-8. doi: 10.4103/2152-7806.130667. eCollection 2014. PubMed PMID: 24843811; PubMed Central PMCID: PMC4023002.

<sup>3)</sup>

Bai RY, Staedtke V, Xia X, Riggins GJ. Prevention of tumor seeding during needle biopsy by chemotherapeutic-releasing gelatin sticks. Oncotarget. 2017 Feb 16. doi: 10.18632/oncotarget.15427. [Epub ahead of print] PubMed PMID: 28412733.

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