
Vivostat[®] Fibrin Sealant in Neurosurgery

Cerebrospinal Fluid (CSF) leakage is a frequent complication in Neurosurgery and “dead spaces” increases the risk of infections. Vivostat[®] autologous fibrin sealant provides a safe and efficient way to contain CSF and fill “dead space”

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Managing cerebrospinal fluid (CSF) leakages pro-actively with e.g. fibrin sealant can help reduce complications and contain the total cost of the treatment

Vivostat® Fibrin Sealant is an autologous fibrin that helps minimize CSF leakages. Furthermore, it acts as a “filler” in “dead space” thereby minimizing the risk of infections. Vivostat® Fibrin Sealant has excellent bio-physical properties. Comparative tests stress the superior elasticity and adhesion of Vivostat® Fibrin Sealant¹ and the autologous nature of Vivostat® efficiently eliminates the risk of bovine or human borne contaminants. Unlike most other fibrin sealants no thrombin is added to Vivostat® Fibrin Sealant. This is beneficiary as it has been shown that thrombin may have a negative effect on cell proliferation².

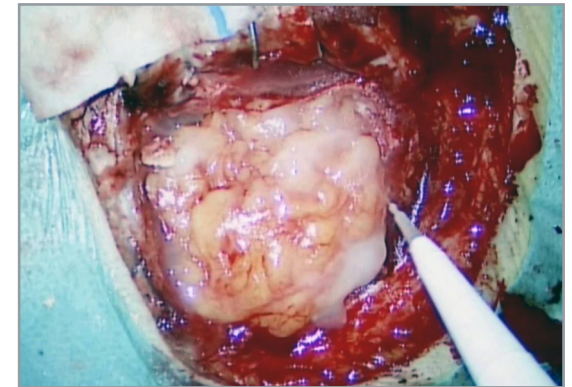
Dr. Peter Siesjø, Division of Neurosurgery, Lund University Hospital, Sweden explains the effect of Vivostat® Fibrin Sealant: “At Lund University Hospital we have been able to reduce the incidence of CSF leakages substantially by using Vivostat® Fibrin Sealant, further, we have been able to reduce the frequency of infections.”

Vivostat® Fibrin Sealant can be used for a number of different procedures.

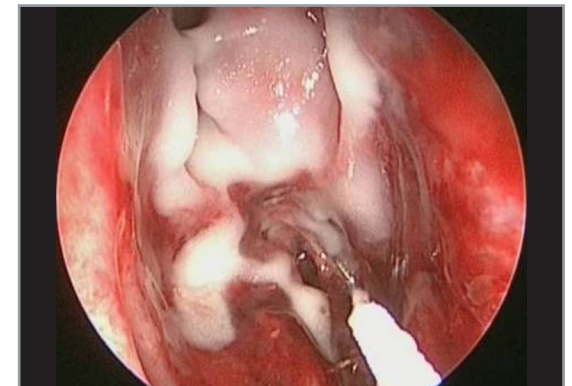
- Dural closure
- Repair of dural defects
- Spinal fusions
- Tumor resections
- Filler in “dead spaces”

The unique Vivostat® application technology ensures that Vivostat® Fibrin Sealant polymerizes immediately upon application. Furthermore, it offers the surgeon different spray modes, e.g. “No Air” that allows application with low impact on tissue and vital organs/nerves in the skull. A comparative study supports the low impact on the tissue and further stresses that Vivostat® can be applied with extreme accuracy³.

Vivostat® Fibrin Sealant can be used intermittently throughout the entire procedure without experiencing the blockage that is common in conventional fibrin sealant systems and it is possible to perform applications endoscopically.



Vivostat® Fibrin Sealant and fat tissue used for dural closure and to fill “dead space” in open skull base surgery



Vivostat® Fibrin Sealant used for fixing the fascia lata at the anterior skull base

1) Comparative kinetics of polymerisation of three fibrin sealants and influence on timing of tissue adhesion · Kjaergard H K et al. · Thrombosis Research 2000; 98: 221-228

2) High Thrombine concentrations in Fibrin Sealants induce apoptosis in human keratinocytes · Gugerell A et al. · Journal of Biomedical Material Research 2012; 100(5):1239-47

3) The Vivostat® application system: A comparison with conventional fibrin sealant application systems · Dodd R A, Cornwell R et al. · Technology and Health Care 2002; 10: 401-411