

ADHESIVE SEALANT BIOMATERIALS

Clinical Series

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Use of TissuePatchDural™ as an adjunct to sutured closure of the Dura following Craniectomy

Pre-operative status

A 51-year-old female with a history of breast carcinoma in remission diagnosed 1 year prior, presented with a 3 week history of progressive clumsiness in her right hand. Imaging revealed a cystic space occupying lesion in her right cerebellar hemisphere.

Surgical procedure

The patient was positioned prone and the head fixed in pins. A right paramedian occipital incision was made and a craniectomy was performed. The tumour was debulked using image-guidance. Haemostasis was achieved and the preserved dural leaves were apposed with 3-0 Vicryl.

Treatment with TissuePatchdural

A 100×100mm TissuePatchDural™ was used trimming it to shape and size to match the craniectomy defect and was applied as per instructions for use. During placement, the patch rapidly conformed to the contours of the underlying tissues and provided an immediate and effective seal to CSF leakage adjunctively to suture closure. A wound drain was left in for 24 hours.

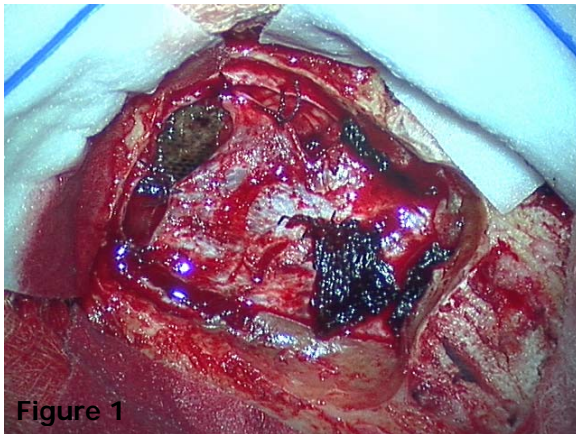


Figure 1

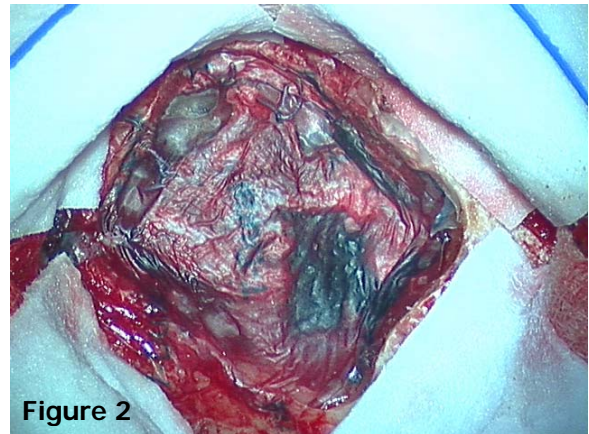


Figure 2

Figure 1 Craniectomy site with demonstrably leaky sutured closure

Figure 2 Adjunctive application of TissuePatchDural results in dry site

Summary

The use of TissuePatchDural™ ensured the water tight closure of the dura. There was no CSF in the drain. Postoperatively the patient recovered well, was discharged without any CSF leak.

Surgeon opinion of TissuePatchDural

TissuePatchDural™ is available on demand, requiring no advance preparation. The product was easy to use, rapidly conforming to the tissue surface and adhering to provide a fluid tight seal within 30 seconds. The product appears to be a very useful adjunct to suture closure of the Dura. This performance characteristic is especially important in the cases we undertake where it is imperative to prevent leakage of chemotherapy drugs.