Glue

Sealing incisions with sutures and staples is the gold-standard of wound closure; however, biological glues have challenged this technique. While neurosurgical wounds, particularly those made in the dura, are less dynamic and under less fluid pressure than those of the pulmonary and cardiovascular system, biological glues that increase the reliability and resilience of these closures would significantly reduce morbidity from postoperative cerebrospinal fluid leak. Currently, the only Food and Drug Administration(FDA) approved dural sealant is DuraSeal (Integra, Waltham, Massachusetts), a polyethylene glycol hydrogel, which has both cranial and spinal formulations, and has been demonstrated to be safe and effective [1].

Fibrin glue

Fibrin glue

1)
Cosgrove GR, Delashaw JB, Grotenhuis JA, Tew JM, Van Loveren H, Spetzler RF, Payner T, Rosseau G, Shaffrey ME, Hopkins LN, Byrne R, Norbash A. Safety and efficacy of a novel polyethylene glycol hydrogel sealant for watertight dural repair. J Neurosurg. 2007 Jan;106(1):52-8. PubMed PMID: 17236487.