

# ADHESIVE SEALANT BIOMATERIALS

Clinical Series

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## Use of TissuePatchDural™ to repair a Posterior semicircular canal perilymph fistula

### Preoperative Status

A 48 year old lady presented with symptoms of pressure induced vertigo from an iatrogenic left inner ear posterior semicircular canal perilymph fistula. The posterior semicircular canal had previously been opened surgically and plugged with bone dust to prevent otolith movement in the treatment of severe benign paroxysmal positional vertigo. The fistula resulted from the bone dust plug used to occlude the semi-circular canal coming loose, creating a defect in the bony wall of the canal.

### Surgical procedure using TissuePatchDural™

This was repaired via a postauricular transmastoid approach. The repair was carried out with a layer of bone dust as in the primary surgery, followed by a layer of temporalis fascia and then a layer of TissuePatchDural™ (Figure 1). The TissuePatchDural™ securely anchored the temporalis fascia graft whilst it became adherent to the underlying bone graft, preventing it loosening.

### Follow Up

At follow up complete resolution of pressure-induced vertigo from the perilymph fistula was noted with no relapse of symptoms at last follow up 7 months after surgery. No hearing loss or worsening of balance was noted.



**Figure 1** Application of TissuePatchDural™ over temporalis fascia-covered perilymph fistula in mastoid cavity

### Summary

The important learning points are firstly that this is a new indication for TissuePatchDural™, and secondly it showed no signs of ototoxicity when applied to an opened labyrinth.