DISCUSSION

The merits of this technique include the size of bone harvested (allowing the scutum to be dissected to improve access to disease in the epitympanum if required) and the quality of the bone allows easy sculpting. Furthermore, the bone is unlikely to harbour disease as it is remote to it. Care should be taken to avoid trauma to the sigmoid sinus. We would recommend this simple and quick method of harvesting tissue to close attic defects.

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The twisted double loop mattress suture

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BACKGROUND

The ideal interrupted stitch offers wound edge eversion and high strength, low tension apposition.¹ In 2012 Rees and Sommerlad described an adaptation of the loop mattress technique that incorporates a twisted loop to prevent loop necrosis.² We have recently described a double loop mattress stitch that is significantly stronger than the loop mattress method in muscle and cartilage.³ It also significantly reduces tissue tension while maintaining wound edge apposition and eversion. In this technical note, we describe the twisted double loop mattress technique and advocate its use in friable tissues to pre-empt the complication of loop necrosis.

TECHNIQUE

The twisted double loop mattress stitch is constructed as illustrated in Figure 1. The first loop is generated by passing the leading strand through the near and far wound edges, and then the far and near

Figure 1 Twisted double loop mattress technique: Loops are formed by combining two horizontal mattress stitches (A and B). The first loop is twisted 180° clockwise while the second loop is twisted 180° anticlockwise (C). The leading and trailing strands cross the wound again to pass through their respective loops before being securely tied (D).

wound edges. The second loop is made by passing the leading strand from near to far wound edges. The first loop is twisted 180° and the trailing strand passed through. The second loop is then also twisted 180° and the leading strand passed through. The stitch is tied after passing through the twisted loops.

DISCUSSION

The mechanical advantage of its intrinsic pulley arrangement gives the double loop mattress technique its favourable properties. We have previously demonstrated its superior strength and low tissue tension by comparison with the loop mattress suture.³ We have found the twisted double loop mattress method to be a particularly faithful stay stitch for many types of flap surgery and in cleft palate repair.

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