Technical Section

TECHNICAL NOTES AND TIPS

Twist-over: stainless steel suture technique for skin graft applications

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A novel latex-free alternative to a proprietary paper framed dental rubber dam

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Proflavine wool with silk 'tie-overs' is used commonly to secure a skin graft. Our new strategy employs a surgical steel wire suture that can be twisted down to secure the graft without the need for multiple ties. Figure 1A shows the graft over the defect, and Figures 1B and 1C show the steel sutures used as simple loops at the graft edges. Six loops are adequate; they are collected in the centre and twisted (Fig 1D). This offers a much quicker tie-over dressing with evenly distributed downward pressure. Each packet of stainless steel suture includes one curved and two straight needles (Fig 1E). Stainless steel sutures are known to be safe and are used in a number of other contexts. Figure 1F shows the patient at 5 days following surgery.

Figure 1 Use of steel twist-over suture technique in sequence from implementation to end result

BACKGROUND

Current guidance recommends reducing patient and healthcare worker exposure to products containing latex as much as possible¹ yet suitable alternatives to established latex-containing materials are not always readily available. Dentists have used rubber dams (RDs) to isolate teeth from the oral environment for nearly 150 years.² Benefits include moisture control, reduced microbial aerosol and airway protection. A square (150mm x 150mm) of latex rubber is used or proprietary variations thereof. DryDam (Directa, Upplands Väsby, Sweden) is one such variation, used primarily to isolate the anterior dentition. It is held in place by elastic loops stretched behind the patient's ears, frequently avoiding the need for the discomfort of RD clamps or local analgesia. Unable to source a latex-free equivalent, we present a simple chairside adaptation of a non-latex RD (Roeko Flexi Dam®, Coltène, Altstätten, Switzerland).

TECHNIQUE

Take a single sheet of non-latex RD. Use the largest diameter on an Ainsworth rubber dam punch (Marrickville, NSW, Australia) to place a hole in each corner of the RD, approximately 20mm from the upper and lower edges and 10mm from the sides. Using a scalpel or scissors, cut from top to bottom between the punched holes to create ear loops (Fig 1). Apply to the teeth as normal (Fig 2). Preparation and application is straightforward and the modified RD is tolerated well by patients.

Figure 1 Proprietary paper framed rubber dam (left) and our latex-free adaptation (right)

DISCUSSION

This method aids compliance with recent guidance on managing latex allergy within healthcare^{1,3,4} without compromising on operative technique or patient safety. An added benefit is a cost saving of 46% (unit cost £0.76 vs £1.40, based on 25 units of DryDam at £34.90 and 30 units of Flexi Dam® at £22.81).

Figure 2 Adapted latex-free rubber dam in use during root canal treatment

References

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Technical tip for knee arthroscopy

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The arthroscopic visualisation of posterior horn of the medial meniscus can sometimes be a challenge. It is usual to apply a valgus load, using a side post. However, some patients tend to move into internal rotation of the hip, negating the effectiveness of the applied valgus. We describe a simple technique of placing a sandbag under the contralateral buttock to counter this effect. The 15° pelvic tilt thus created places the hip effectively in internal rotation. When a valgus load is applied to the knee, the hip cannot rotate much further, thereby achieving distraction of the medial joint space.

A simple method to optimise graft tailoring in ascending aorta replacement

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BACKGROUND

We describe a simple method to optimise graft tailoring in ascending aorta replacement that can facilitate optimal tailoring and orientation of the implanted graft.

TECHNIQUE

The aneurysmal ascending aorta is carefully excised (Fig 1). A graft is selected of the appropriate length and a diameter matched to the aortic valve annulus or the sinotubular junction at the root outflow. The graft is held in a gentle curve, mimicking the curve of the excised segment of aorta (Fig 2). The graft is cut to the same length as the

Figure 1 Excision of aneurysmal ascending aorta

Figure 2 The graft is held in a gentle curve