Carotid endarterectomy under local anaesthetic supplemented by an inferior alveolar nerve block

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BACKGROUND

Carotid endarterectomy is being performed frequently under local rather than general anaesthetic utilising either superficial alone or combined superficial and deep cervical plexus block with both techniques being equally effective.^{1,2} Complications related to local anaesthetic vary between 1.6–7.4% depending on the method used and incomplete blocks requiring further local anaesthetic supplementation by the surgeon during carotid endarterectomy are common problem.³ We overcame this difficulty by utilising an additional inferior alveolar nerve block (IANB) in 6 patients with high carotid bifurcations.

TECHNIQUE

The thumb of the non-dominant hand is placed on the coronoid notch and the index finger just anterior to the ear in order to stretch the tissues over the injection site. The syringe is orientated so that the barrel is in the opposite corner of the mouth resting on the premolars. The needle aims towards the

Figure 1 Site of inferior alveolar nerve block.

mucosa lateral to the pterygomandibular raphe but medial to the anterior border of the mandibular ramus about 6–10 mm above the occlusal plane of the maxillary teeth (position of index finger; Fig. 1). The needle is withdrawn slightly once in contact with bone and 1.5–2.0 ml of local anaesthetic (bupivacaine 0.25%) is injected.

DISCUSSION

Various complications have been reported in the literature when performing an IANB and they include failure, intra-arterial injection and nerve injury,^{4,5} none of which occurred in our small series. In our experience, an IANB proves to be a useful adjunct in the management of high carotid bifurcations where additional cranial retraction is required.

References

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Zig-zag incision for complex posterior spine procedures

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BACKGROUND

Wound-related complications are common following complex posterior spine procedures and may result in the need for serial debridements, prolonged drainage and may place the metalwork at risk. Plastic surgeons have long used a zig-zag incision for certain hand surgery¹ and, more recently, the incision has been described for scalp incisions in paediatric neurosurgery.²

Figure 1 Zig-zag incision marked on the skin.

Figure 2 Skin flap is wrapped in a damp swab which is sewn *in situ* to protect and retract the flap.

Figure 3 Postoperative scar.

TECHNIQUE

The proposed incision is marked on the skin (Fig. 1). Angles of 45–60° are used. The incision straddles the deformity such that the points of the zig-zag are away from the most at-risk skin. The vertical length of the incision is not changed.

Full-thickness skin flaps are then raised exploiting the plane above the lumbar fascia. Each skin flap is then wrapped in a damp swab which is sewn *in situ* to protect and retract the flap throughout the procedure (Fig. 2). Exposure of the posterior spine is then performed with paraspinal muscle stripping. The wound is closed with either clips or non-absorbable sutures.

DISCUSSION

This technique has been successfully used in our practice to provide soft tissue coverage of metalwork in patients where satisfactory wound closure is difficult, thus reducing wound complications after complex posterior spine surgery. It allows standard exposure of the spine and produces a cosmetically acceptable scar (Fig. 3). This incision is recommended for cases where there is greater potential for wound breakdown, such as oncology patients, and those with gross deformity or a low body mass index.

References

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Novel traction device for reducing anterior shoulder dislocations using the modified Stimson technique

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BACKGROUND

The Stimson technique is well established for reducing anterior shoulder dislocations.¹ It employs sedation or local anaesthesia to relax the shoulder muscles, and arm traction in shoulder-forward flexion to relocate the shoulder joint. This is usually applied by laying the patient prone with weights strapped to the arm hanging from the bed. With the addition of internal rotation of the scapula, high rates of reduction are achieved.² Traction