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 The needle is withdrawn slightly once in contact with bone and 1.5–2.0 ml of local anaesthetic (bupivacaine 0.25%) is injected.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