

surgical thrombectomy and repair may be necessary. In such cases, the placement of the fistulotomy requires careful consideration. The site, length and orientation of the incision in relation to the anatomy of the offending lesion and the amount of redundancy in the outflow vein determine the options available for revision. These techniques may be more expeditious than traditional patch repair, particularly where vein suitable for patching is not available without performing additional dissection.

## References

- Long B, Brichart N, Lermusiaux P *et al.* Management of perianastomotic stenosis of direct wrist autogenous radial-cephalic arteriovenous accesses for dialysis. *J Vasc Surg* 2011; **53**: 108–114.
- Tessitore N, Mansueto G, Lipari G *et al.* Endovascular versus surgical preemptive repair of forearm arteriovenous fistula juxta-anastomotic stenosis: analysis of data collected prospectively from 1999 to 2004. *Clin J Am Soc Nephrol* 2006; 1: 448–454.
- Ramanathan AK, Roake J. Yarl vein flap fistuloplasties for juxta-anastomotic stenoses. Ann R Coll Surg Engl 2011; 93: 170.

# Direct transpectoral approach for level III axillary lymph node clearance

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## BACKGROUND

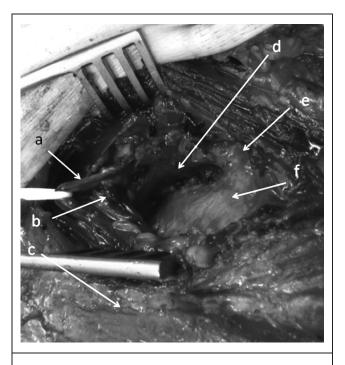
In breast cancer patients with apical axillary involvement, level III clearance is necessary.<sup>1,2</sup> Access and visualisation is important if injury to neurovascular structures in the area is to be avoided. Exposure can be suboptimal in obese patients, those with extensive tumour involvement and those undergoing reoperation for level III recurrence. We report a surgical approach that facilitates safe clearance of level III lymph nodes.

### TECHNIQUE

Access to level III is achieved through a muscle splitting transverse incision on the pectoralis major, centred on the point where the axillary vein crosses the first rib. This is located 5cm lateral and 1cm superior to the suprasternal notch. The pectoralis minor can be retracted laterally and the neurovascular bundle to the pectoralis major can be dissected out of the surrounding fat and retracted in a silastic sling (Fig 1). This alternative approach provides excellent visualisation of level III with the corresponding portion of the axillary vein, its tributaries and the descending brachial plexus branches, allowing safe dissection of the apical axillary fat pad from the surrounding structures (Fig 1).

## DISCUSSION

We recommend this approach for patients undergoing a mastectomy since the muscle splitting incision can be performed without the need for a separate skin incision. We believe it is ideal for patients with level III recurrence as it allows the surgeon to access level III without having to go through previously operated levels I and II, thereby minimising the risk of nerve or vessel injury during dissection.



**Figure 1** Direct transpectoral approach for level III axillary lymph node clearance. a = thoracoacromial vein + artery (pectoral branch); b = medial edge of pectoralis minor; c = pectoralis major; d = axillary vein; e = Halsted's ligament; f = first rib

## References

- Surgical guidelines for the management of breast cancer. EurJ Surg Oncol 2009; 35 Suppl 1: 1–22.
- Glynn RW, Williams L, Dixon JM. A further survey of surgical management of the axilla in UK breast cancer patients. *Ann R Coll Surg Engl* 2010; 92: 506–511.

# A new non-surgical technique for management of high condylar neck fractures

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## BACKGROUND

A closed reduction technique is described, which offers an alternative to arch bars and avoids dental impressions.

## TECHNIQUE

A closed reduction technique for a condylar fracture (Fig 1) may be carried out using orthodontic brackets, stainless steel archwires and elastics. A rigid 0.018" stainless steel archwire is customised to the



Figure 1 Dental panoramic tomography showing left condylar neck and coronoid fracture



**Figure 2** Orthodontic appliance with immediately placed stainless steel archwires contoured to the labial aspects of the teeth and resting passively, allowing immediate placement of intermaxillary elastics

upper and lower dental arches at the chairside. The archwire is used as a guide to bracket placement. Wire bends are placed as required to ensure the archwire lies passively against the teeth. Self-ligating brackets for molar teeth are used, thereby allowing passive placement of the archwire. Kobayashi hooks are placed around the premolar teeth to allow immediate placement of intermaxillary elastics (Fig 2). The patient should be instructed to wear elastics full time for one week to correct any mandibular displacement and to gradually reduce elastic wear over a six-week period.

#### DISCUSSION

This type of fracture would commonly be treated with placement of arch bars, perhaps requiring general anaesthesia. However, limited mouth opening and discomfort can make impressions and arch bar placement difficult. Direct bonding of brackets and immediate placement of stainless steel archwires and intermaxillary elastics avoids the need for general anaesthesia and dental impressions. As opposed to initial placement of brackets on selected teeth and risking overeruption when placing intermaxillary elastics,<sup>1</sup> this technique involves immediate placement of stainless steel archwires contoured to the labial aspects of the teeth, resting passively and not causing unwanted tooth