CASE REPORT

False Aneurysm of the Thyrocervical Trunk: An Unconventional Surgical Approach

J. Abrokwah*, K. N. Shenoy and R. H. Armour

Department of Surgery, Lister Hospital, Stevenage, Hertfordshire, U.K.

Introduction

There have been reports of neurovascular injuries associated with attempted cannulation of the Central Venous System. Central venous cannulation has grown with the need to monitor more accurately, cardiorespiratory parameters in the critically ill. We report an unconventional surgical technique required to deal with a false aneurysm arising from attempted cannulation of the subclavian vein.

Case History

A fit 78-year-old lady was admitted with an inferior myocardial infarct. After receiving Streptokinase 1.5 mU and Heparin 5000 U, cardiac pacing was attempted through a percutaneous right infraclavicular subclavian approach. This was abandoned because of bleeding from the puncture site. The next day the patient developed right Horner’s syndrome and haematoma which became a pulsatile 6 × 8 cm mass, above the right clavicle. False aneurysm of the right thyrocervical trunk was diagnosed by DSA (Fig.1). She was discharged after 13 days.

She was re-admitted 6 months later for surgery. The initial plan to ligate the Thyrocervical trunk by gaining control of the subclavian artery became hazardous because dense adhesions and tissue staining prevented identification of the structures at the root of the neck. A small incision was made in the aneurysm while a finger was pushed through to identify the defect, which was plugged with the same finger. The incision was enlarged, the contents evacuated and washed, revealing a 2 mm defect in the underlying artery which was stitched with interrupted 5/0 prolene. The aneurysm wall was not resected because of danger to important structures.

She made uneventful recovery and was discharged on the 10th postoperative day. At 6 month follow up the lump in the neck had disappeared, with improvement of her Right Horner’s syndrome.

Discussion

Injury of the Thyrocervical trunk has been reported in...
attempted cannulation of internal jugular by Tyden. There was complete severance of the artery which was ligated a few days after the injury. Huddey et al. reported a case of subclavian aneurysm causing dyspnoea and hoarseness, as a complication of central venous cannulation. During repair 3 weeks after the injury they found dense induration which obscured the structures. Postoperatively their patient developed Horner’s syndrome.

We recommend that where the anatomy of the area surrounding a false aneurysm is obscured endangering important structures, the technique described above can be considered. It would be possible to stent the small defect in the vascular wall using a percutaneous technique. However the haematoma would have become organised into an ugly neck lump without improvement of her Horner’s syndrome.

References


Accepted 2 January 1995