infusion set is detached from the infusion tubing and is connected to a syringe filled with 50 ml of saline. This is then connected to the main drainage channel of the Foley catheter, and saline is instilled into the empty bladder. The connector is then clamped using a rubber-shod hemostat. The empty syringe is then removed leaving behind the connector attached to the Foley catheter. The intravenous set tubing is next connected to the connector and held vertically above the symphysis. Once the hemostat is released, the saline flows out of the catheter drainage tubing and reaches a height (in cm of saline) corresponding to the IAP (Fig. 1).

DISCUSSION

Popular techniques of measuring the IAP require a three-way connector stopcock and a manometer or pressure transducer¹ and have a reported risk of sustaining needle-stick injury.^{2,3} Another technique uses the patient's own urine and the urinary drainage bag tubing as a fluid column manometer.⁴ However, accumulation of 50 ml urine in the urinary drainage bag tubing is time consuming, inaccurate and interferes with monitoring of the urine output especially in oliguric patients with increased IAP.⁴ Our technique allows a low-cost and simple estimation of IAP that can be repeated, but does not interfere with urine output monitoring.

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Using video-assisted thorascoscopy (VATS) to aid the anterior mediastinotomy approach to mediastinal masses

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BACKGROUND

An anterior mediastinotomy is performed through a transverse incision in the second intercostal space (ICS). It allows biopsy of

Figure 1 Chest computed tomography showing enlarged lymph node adjacent to the aortic arch in the aortopulmonary window.

mediastinal tumours or enlarged lymph nodes, in particular nodes found in the aortopulmonary window (APW; Figs 1 and 2 [insert]). Video-assisted thorascoscopy (VATS) 'keyhole' procedures have dramatically changed thoracic surgical practice. Its role in biopsying mediastinal masses and nodes is well recognised but not universally practised as many surgeons prefer the standard open approaches.¹

TECHNIQUE

The 'hybrid' approach requires double-lumen endotracheal intubation allowing for single lung ventilation and collapse of the

Figure 2 Illustration showing position of patient, incision site and placement of VATS, with insert showing vascular structures and target lymph nodes.

left lung. The patient is positioned supine with a sandbag under the left shoulder to tip the patient to the right. A 4–5 cm transverse incision is made anteriorly at the second ICS. A second 1-cm incision is made in the fourth ICS lateral to pectoralis major. The VATS camera is positioned to allow for a clear view of the APW (Fig. 2). The surgeon can safely identify and biopsy nodes with the aid of the monitor by passing long instruments through the mediastinotomy incision. At the end of the procedure, the access port can be used to place a chest drain.

DISCUSSION

This simple modification of a standard approach to mediastinal biopsy allows for a smaller anterior incision; gives the surgeon an improved view for safe and accurate biopsy and the opportunity to develop thoracoscopic skills.

Reference

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TECHNICAL TIPS

Level determination in anterior cervical fusion

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In cervical fusion, accurate and safe level determination is essential. The AP disc diameter is measured from lateral radiographs.

Figure 1 A contoured hypodermic needle.

Following a standard anterior approach, a contoured hypodermic needle (Fig. 1) is placed within the defective disc. The contouring is performed in a manner such that distance 'A' does not exceed the measured AP distance. The second contour (B), prevents excessive passage of the needle by abutting anteriorly on the disc. Level is then confirmed fluoroscopically. This technique permits level identification, guides depth of iliac crest harvest and ensures the posterior longitudinal ligament is not breached, thereby protecting the cervical cord.

Use of a Yankauer sucker as a temporary soft tissue protector and drill stop in surgical procedures

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Figure 1 Plastic Yankauer sucker.

Figure 2