

Equipment Review

Chest drainage trocar catheter— Mallinckrodt (UK) Ltd

Chest drainage is now a routine emergency procedure in patient care to relieve a pneumothorax and/or haemothorax. The drainage tube usually takes one of two forms—either a cannula introduced by use of a trocar or a catheter placed just before closing the chest wall following intrathoracic surgery. The former is the procedure universally adopted in the emergency setting.

Following infiltration with a local anaesthetic agent at the chosen insertion site the skin is incised and with a controlled twisting motion the trocar and catheter are introduced into the pleural space. The trocar is then removed and the system connected to an underwater seal system or a flutter valve system. What is required is a trocar which is comfortable to hold and easy to introduce and a catheter which is comfortable to the patient, does not become easily obstructed, does not 'kink', connects easily to the one way system and is easy to secure to the patient.

The Mallinckrodt trocar catheter professes to have all these desirable qualities. In my hand introduction (in the emergency situation) was more difficult than one would have expected with our currently used catheter. The grip was comfortable (albeit unnecessarily remote from the tip as are all catheters) but the assembly would not easily penetrate the pleura. It is said that more accurate placement is assured by actually visualizing and incising the pleura but this adds time and possible difficulty in an emergency. However this is probably the only way by which this catheter can be easily introduced.

The catheter has excellent thermo-sensitive properties but does not readily 'kink', has multiple smooth eyes to allow good drainage and easy removal, a consistent lumen and a radio-opaque line. It must be remembered that all rival catheters have similar properties. The added suturing rib is of debatable value but the female connection is a distinct advantage if one uses any of the commonly used connecting tubes to the 'one-way' system since most come with a male connector.

In summary the catheter is comparable to other similar products but its difficulty of introduction counts heavily against it. There was no evidence forthcoming to make my department consider changing from our current system to this product.

K. LITTLE

Consultant in Accident and Emergency Medicine
Royal Infirmary, Edinburgh