

to undertake the tests but 5 (5%) were not. 92 participants (74%) were current drivers and 84 (91%) read the DVLA leaflet. Only 10 of these (12%) thought they might have a disorder that could impact on their driving abilities although 38 (45%) were concerned they might not be allowed to drive in future. However, only 4 (5%) were discouraged to undertake the tests because of this. Overall, most patients (80%) found these leaflets informative and easy to understand.

Conclusions These leaflets appear to improve patients' understanding of OSAHS and its implications, particularly regarding driving. Although they can engender concern and anxiety among some, the majority of patients felt motivated to undertake the tests. Improving the level of patient education and awareness through such leaflets may positively influence their involvement in overall management, potentially improving compliance and outcomes in the long term.

Thinking outside the lung: improving the safety of pleural procedures

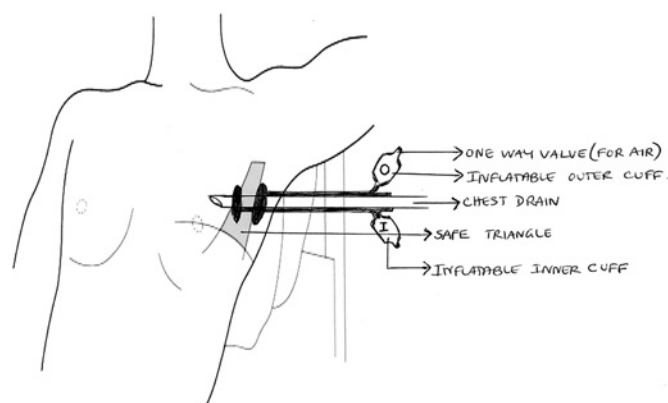
P29 SECURING AN INTERCOSTAL CHEST DRAIN WITHOUT SUTURES

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S Kesavan, G D Angelini. *Bristol Heart Institute/University of Bristol, Bristol, UK*

Introduction and Objectives Securing an intercostal chest drain with sutures after insertion is an important step. Purse string sutures should not be used as it converts a linear incision to a circular, unsightly scar, during the healing process. Two mattress sutures are used—the first suture is to assist the latter closure of the wound after drain removal and the second a stay suture, to secure the drain. In an emergency situation and in the paediatric population, the technique is cumbersome. A novel chest drain is described where the chest drain is secured without sutures.

Method The novel idea involves securing a chest drain without sutures, with the help of two inflatable balloons (cuffs). An inner (I) and an outer (O) inflatable cuff, with a one way valve to inject air, prevents the chest drain from dislodgement. The risk of infection will be lower as the two inflatable cuffs and the intercostal muscles around the chest drain will provide a perfect fit. The chest drain is removed after deflating the balloons (cuffs) at the end of inspiration. Small gauge chest drains do not require a suture and the linear incision can be closed by suture strips, after removal of the chest drain. The novel chest drain is especially useful in patients with pneumothorax and in the paediatric population, providing a snug, secure and a stable position of the chest drain.



Abstract P29 Figure 1

Conclusion The above chest drain provides a suture less method to secure an intercostal chest drain. It is especially useful in an emergency situation (tension pneumothorax) and in the paediatric population.

REFERENCE

1. Laws D, Neville E, Duffy J. BTS guidelines for the insertion of a chest drain. *Thorax* 2003;**58**:ii53–9.

P30 WHAT DIFFERENCE DOES BEDSIDE ULTRASOUND GUIDANCE MAKE TO PLEURAL FLUID ASPIRATION AND DRAINAGE IN A DISTRICT GENERAL HOSPITAL SETTING?

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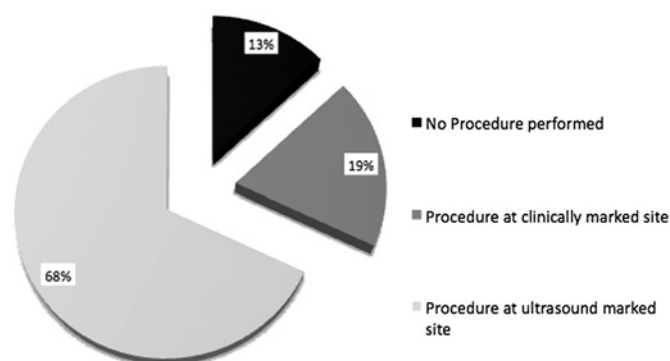
¹O J Bintcliffe, ²H Al-Najjar, ¹R K Sinha. ¹Yeovil District Hospital, Yeovil, UK; ²Royal United Hospital Bath, Bath, UK

Background British Thoracic Society guidelines strongly recommend thoracic ultrasound prior to all pleural procedures for pleural fluid. Previous studies have shown lower rates of failure and pneumothorax following the use of chest ultrasonography prior to pleural procedures.

Aim We have set out to identify, in a district general hospital environment, the effect of pleural ultrasound on selection of sites for pleural procedures, the change in operator's confidence associated with those procedures and the reasons for changes in site selection.

Methods 47 patients with suspected pleural effusions had an aspiration or drainage site marked based on clinical findings, chest radiography and CT scan. Sites were then marked after bedside thoracic ultrasound examination by a member of the respiratory team (Level 1 competence). The level of confidence associated with obtaining fluid safely was assessed both before and after ultrasound on a visual analogue scale. The distance between sites marked before and after ultrasound and whether the procedure performed was the same as originally planned were also recorded.

Results Following thoracic ultrasound no procedure was considered safe in 13% (6/47). A procedure was carried out in 87% (41/47). In 78% of these (32/41), the preferred site was changed after ultrasound. The reasons were greater fluid depth in 69% (22/32), an anticipated greater yield during therapeutic aspiration in 16% (5/32) and the initial site not being safe in 16% (5/32). Sites marked prior to ultrasound were considered unsafe in 23% (11/47) due to risk of pneumothorax in 15% (7/47) or the clinically marked site being below the diaphragm in 9% (4/47). Bedside chest ultrasound increased the confidence associated with pleural procedures. The confidence after ultrasound of the performed procedure was increased by 1.09 (95% CI 0.85–1.34) on the 5-point visual analogue scale.



Abstract P30 Figure 1 Changes to intended procedure after thoracic ultrasound.