

## 9.20 The importance of drain size and drain site selection for patients with pneumothorax

D O'Malley<sup>1</sup>, MA Farrell<sup>2</sup>, MP Rogan<sup>1</sup>

<sup>1</sup> *Department of Respiratory Medicine, University Hospital Waterford*

<sup>2</sup> *Department of Radiology, University Hospital Waterford*

**Background:** We investigated chest drain insertion for pneumothorax and subsequent management in our hospital, with reference to the British Thoracic Society (BTS) pleural disease guideline 2010.<sup>1</sup>

**Methods:** We reviewed hospital admissions and respiratory consults to capture patients with chest drains inserted for pneumothorax from January 2022 to February 2023. Subsequent chart review of cases was performed for the 24 patients included.

**Results:** Pneumothorax resolved with initial drain insertion alone in 33% of cases, rising to 54% with the addition of wall suction. Drain size was less than 14Fr in 54%, with resolution in 62%. Larger drains had a 45% resolution rate. Repeat drain siting was required in 33% of all cases, most frequently for a malpositioned drain. In total 71% of our patients had pneumothorax resolution, with 7 patients transferred to a tertiary centre for surgical input.

**Conclusion:** Our review highlights the importance of education in chest drain insertion with reference to the BTS guidelines.

**Keywords:** pneumothorax, education, chest drain

**Conflict of Interest:** *The authors declare that they have no conflict of interest.*

**Corresponding Author:** Donal J O'Malley

MacDuff A, Arnold A, Harvey J Management of spontaneous pneumothorax: British Thoracic Society pleural disease guideline 2010 Thorax 2010;65:ii18-ii31.

---