

## 8.04 An Audit of the Pleural Fluid Sampling Practice for Unilateral Pleural Effusions in a Teaching Hospital

Jack McCarthy<sup>1</sup>, Niamh Boyle<sup>1</sup>

<sup>1</sup>Wexford General Hospital

**Background:** Unilateral pleural effusions are commonly encountered in clinical practice. Pleural fluid sampling is required to establish a diagnosis. This retrospective review aimed to determine if workup of a pleural effusion was in keeping with best practice BTS guidelines.

**Methods:** HIPE discharge coding was used to identify patients with a primary diagnosis of pleural effusion from July 2022-January 2023. The electronic system was utilised to identify patient demographics and fluid sampling practices. An excel tool was used to enter data.

**Results:** Fluid Sampling was in keeping with BTS guidelines in 20% of effusions between July 2022 and January 2023. 25 patients had Pleural Taps during this period. 40% for pleural effusions and 60% for pneumothoraces. 100% of the audited patients had chest drains inserted. 50% of the patients had post drain insertion complication of pneumothorax.

Pleural microbiology was included in 80%. Pleural cytology was included in 60%. Pleural cell count was included in 50%. Pleural LDH was included in 70%. Pleural protein was included in 70%. Pleural Ph was included in 20%.

**Conclusions:** This audit suggests adherence to BTS guidelines at our institution is suboptimal. While 100% of effusions were sampled, only 20% were adequately sampled. Increased awareness of the recommended sampling as per BTS guidelines is required in order to fully investigate pleural effusions and minimise repeated invasive investigations . To remedy this, we have created a sampling checklist document.

**Disclosures:** There is nothing to disclose

### References:

- 1.Havelock T, Teoh R, Laws D, Gleeson F. Pleural procedures and thoracic ultrasound: British Thoracic Society pleural disease guideline 2010. Thorax. 2010;65(Suppl 2):i61-i76.
2. Hooper C, Lee YCG, Maskell N. Investigation of a unilateral pleural effusion in adults: British Thoracic Society pleural disease guideline 2010. Thorax. 2010;65(Suppl 2):ii4-ii17.