REFERENCE

1. Nagra A, McGinnity PM, Davis N, et al. 2015. Implementing transition: ready steady go. *Arch Dis Child Educ Pract Ed* 2015;**0**:1–8.

P123 DON'T FORGET YOUR PE KIT – IMPROVING THROMBOLYSIS DECISION MAKING IN A DISTRICT GENERAL HOSPITAL (DGH)

J Ayling-Smith, E Grant, H Cranch, E Kealaher, S Eccles, C Williams. *Royal Glamorgan Hospital, Llantrisant, UK*

10.1136/thorax-2021-BTSabstracts.232

Introduction Multiple patients with massive/submassive pulmonary emboli (PE) were admitted in a short timeframe to a DGH. Inconsistency in management was noted, prompting discussion surrounding thrombolysis decisions.

Methods All PE-related admissions to the Cardiac Monitoring Unit (CMU) between 2016–2020 were reviewed. Thrombolysis decision, relevant test results and outcomes were recorded and their concordance to local and national recommendations and guidelines were analysed.

Junior doctors were surveyed. Confidence in PE management was assessed, they were asked to select the appropriate management option for 5 clinical scenarios and if a 'bundle' would aid decision-making.

Results 57 patients were admitted over 4 years. 14 had a massive PE and 33 patients had a submassive PE. Of these, 12 (85.7%) and 17 (51.5%) were thrombolysed respectively. Departmental echocardiograms were organised within 24 hours in 74% and follow-up echocardiograms performed in 54%. The pooled mortality at 1 year was 21% with no significant difference between those thrombolysed and those not.

The survey, to which 22 junior doctors responded, demonstrated that 73% described themselves as 'very' or 'fairly' confident in managing massive/submassive PE. There was disparity in case management with the polar options of 'thrombolysis' and 'subcutaneous anticoagulation' being chosen at least once in each scenario.

All respondents supported a bundle. A consent form, information sheet and decision-making flowchart were created with stakeholder input and published locally.

Conclusion We show mostly guideline-concordant practice with the exception of echocardiogram follow up. Variability in opinion amongst juniors, despite perceived confidence, was observed. Bundle creation with respondent and consultant input standardises management and prompts escalation to seniors early to negate overconfidence in complex situations.

P124 IMPROVING SAFE SEDATION PRACTICES IN BRONCHOSCOPY AT A DISTRICT GENERAL HOSPITAL

AE Leadbetter, RG Beckett, CL Marchand, SC Sturney. *Royal United Hospital, Bath, UK*

10.1136/thorax-2021-BTSabstracts.233

Introduction Procedural sedation and analgesia (PSA) practice varies, with minimal standardisation in bronchoscopy. The British Thoracic Society published Quality Standards in 2014 to ensure high standards of care for all patients undergoing bronchoscopy.

Aims

- Identify areas for improvement in PSA
- Increase PSA awareness amongst bronchoscopists
- Improve use of safe recommended doses of sedation agents
- Improve clarity of documentation

Methodology We performed a retrospective review of 113 bronchoscopy and 59 endobronchial ultrasound (EBUS) reports (September 2019–September 2020). May 2020 was excluded due to COVID19.

Three interventions were implemented:

1. Virtual local departmental teaching to raise awareness of safe PSA.
2. Implementation of a bronchoscopy-suite poster detailing local anaesthetic (LA) dose conversions.

Abstract P124 Figure 1 Correct documentation of LA agents

3. Introduction of specific LA fields on our online bronchoscopy reporting system.

Bronchoscopy and EBUS reports were re-audited following each intervention (total 19 cases).

Results Maximum recommended dose of midazolam in ≥ 70 yrs (3.5mg), was exceeded in 19% of EBUS cases and 5% of bronchoscopy cases pre-intervention. Following virtual teaching, 0% exceeded maximum recommended dose.

Maximum recommended dose of fentanyl (50mcg) was exceeded in 22% of EBUS and 4% of bronchoscopy cases pre-intervention. Following virtual teaching, maximum dose was exceeded in 1.6% of EBUS and 0% of bronchoscopies.

Pre-interventions, 1% and 2% lidocaine use was correctly documented in 17% of procedures and instillagel use was correctly documented in 33% of procedures. Following poster implementation, 1% lidocaine use was correctly documented in 75% of procedures, 2% lidocaine use was correctly documented in 88% of procedures and instillagel use was correctly documented in 60% of procedures. Following LA-field implementation, 1% lidocaine use was correctly documented in 91% of procedures, 2% lidocaine use was correctly documented in 91% of procedures, and instillagel use was correctly documented in 66% of procedures. (figure 1)

Conclusions Virtual teaching for bronchoscopists increased awareness of safe PSA, thus reducing previously exceeded recommended doses of sedatives. Implementation of a bronchoscopy suite poster, and specific recording fields for LA, has improved documentation practices. Methods introduced continue to be used in our trust's bronchoscopy suite.

REFERENCE

1. BTS Quality Standards for Diagnostic Flexible Bronchoscopy in Adults (2014) [https://www.brit\[1\]thoracic.org.uk/document-library/clinical-information/bronchoscopy/bts-quality-standards-for-flexible\[1\]bronchoscopy-2014](https://www.brit[1]thoracic.org.uk/document-library/clinical-information/bronchoscopy/bts-quality-standards-for-flexible[1]bronchoscopy-2014)

P125 AUDIT OF COMPLICATIONS OF PERCUTANEOUS CT GUIDED LUNG BIOPSIES CARRIED OUT AT ROYAL ALEXANDRA HOSPITAL AND INVERCLYDE ROYAL HOSPITAL IN 2019 AND 2020

AD Pilkington. University of Glasgow, Glasgow, UK

10.1136/thorax-2021-BTSabstracts.234

Background Percutaneous CT guided lung biopsy (PCLB) is used for histological diagnosis of pulmonary disease and is preferred to surgical biopsy due to its fewer complications.

The British Thoracic Society (BTS) recommend that operators audit their practise to calculate complication rates to inform patients about risks. Complication rates should be similar to, or lower than those from the national survey: pneumothorax (20.5% of biopsies), pneumothorax requiring chest drain (3.1%), haemoptysis (5.3%), and death (0.15%).

Aims This audit aims to calculate whether the complication rates of percutaneous CT guided lung biopsy were acceptable when compared to the aforementioned BTS guidelines.

It also aims to ascertain what risk factors there may be for developing a more severe pneumothorax as a consequence of the procedure.

Methods 153 patients had a PCLB at Royal Alexandra and Inverclyde Royal Hospitals. Their biopsy reports and follow up chest X-rays were reviewed for evidence of haemoptysis, pneumothorax, air embolus, or death. Their immediate

discharge letters were used to view their hospital stay lengths and to see which patients needed a chest drain inserted during their stay.

Each patient's lesion diameter and the distance that the biopsy needle travelled through the chest wall to reach the lesion were measured.

Complication rates were calculated and compared with the quoted rates. Potential risk factors for a severe pneumothorax were assessed.

Results Pneumothorax rate was 21.6%.

Pneumothorax requiring a chest drain rate was 7.2%.

Haemoptysis rate was 10.5%.

No deaths were reported as a consequence of the procedure.

Patients that developed a pneumothorax requiring a chest drain were on average 4 years older. They had an average 0.6cm greater distance travelled by the needle to the lesion and were 0.4 cm smaller in diameter.

Conclusions Complication rates were acceptable when compared to BTS guidelines.

Older age, smaller lesions, and lesions further from pleura are risk factors for a serious pneumothorax.

P126 AMBULATORY PNEUMOTHORAX WITH THE PLEURAL VENT IN A DGH IN THE NORTH EAST OF ENGLAND

K Jackson, A Aujayeb. Northumbria HealthCare NHS Foundation Trust, Newcastle, UK

10.1136/thorax-2021-BTSabstracts.235

Introduction Ambulatory pneumothorax management saves inpatient days and is feasible with the Rocket pleural vent (PV) at the expense of higher rate of complications in primary spontaneous pneumothorax (PSP) (RAMPP study¹). The HiS-Pec study² in secondary spontaneous pneumothorax (SSP) showed that PV was probably dangerous. We have a local service with strict inclusion criteria (WHO PS 0–2, ambulant patients) using the PV.

Methods We retrospectively analysed all pneumothoraces managed with a PV from March 2018-April 2021.

Results 50 patients were identified. Table 1 shows the characteristics of 32 patients with PSP and 16 patients with SSP managed with the PV. The other 2 patients were iatrogenic

Abstract P126 Table 1

	PSP	SSP
Number	32	16
Mean age (years)	30.9	61.5
Mean number of days PV in situ	5.9	4.5
Current tobacco smokers	17	1
Current marijuana smokers	11	0
Ex-smokers	0	15
Never smokers	14	0
Number with Respiratory comorbidity	2	16
<i>Description of comorbidity</i>		
Previous pneumothorax	2	2
COPD	0	12
Asbestosis	0	1
Non specific fibrotic lung disease	0	1
Lung cancer	0	1
Rheumatoid lung disease	0	1