

P122 THE USE OF THORACIC ULTRASOUND IN MANAGEMENT OF PATIENTS WITH PLEURAL DISORDERS

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Introduction Pleural diseases are common reason for referral to respiratory specialists. Thoracic ultrasound has become an important tool for investigation and management of patients with pleural diseases. Thoracic ultrasound allows real-time assessment of the pleural space as well as acquired wide use in guiding pleural procedures. Current British Thoracic Society (BTS) guidelines strongly recommend the use of thoracic ultrasound for the investigation and management of patients with pleural disorders.

Aims To review experience of using thoracic ultrasound by respiratory physicians for investigations and management of patients with pleural disorders.

Methods Retrospective analysis of thoracic ultrasound procedures performed in a tertiary hospital by respiratory physicians.

Results Over a period between July 2008 and July 2012 a total of 680 thoracic ultrasound procedures were performed by respiratory physicians in 388 (153 females) patients, mean (range) age 63.4 (17–97) years. The findings of thoracic ultrasound included: 240 cases of pleural effusion, 38 cases of pleural infection including parapneumonic effusion or empyema, 36 cases of consolidated lung, 24 pneumothoraces, 15 cases of pleural thickening, 6 cases of diaphragmatic abnormalities and 6 cases of other abnormalities such as hydropneumothorax, chylothorax or evidence of pleurodesis were recorded. Moreover in 23 cases no anomalies were noted. The most common underlying causes for pleural effusion included malignancy, cardiac failure and infection. Overall 70 pleural procedures such as intercostal chest drain insertion or thoracocentesis were performed.

Conclusions Thoracic ultrasound performed by respiratory physicians has become a part of routine management of patients with pleural disorders. From our observations the most frequent finding on performing thoracic ultrasound was pleural effusion, however this modality of investigation also enabled identification of other conditions such as consolidated lung or diaphragmatic abnormalities that could on chest radiograph mimic pleural effusion, hence potentially avoiding unnecessary pleural procedures. More importantly thoracic ultrasound was used to guide pleural procedures such as thoracocentesis or intercostal chest drain insertion. Using our findings we recommend the routine use of thoracic ultrasound for the initial investigation and management of patients with pleural disorders as it is a safe, convenient and cost-effective tool.

P123 THE USE OF INDWELLING PLEURAL CATHETERS FOR THE MANAGEMENT OF NON-MALIGNANT RECURRENT PLEURAL EFFUSIONS

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Although indwelling pleural catheters (IPC) are commonly used to allow the outpatient management of malignant pleural effusions, an increasing number of IPCs are being inserted to control effusions caused by non-malignant processes. This is the first UK-based series to analyse the use of IPCs in this setting.

Methods We analysed data from 3 UK hospitals with large pleural services. IPCs inserted between 2007 and June 2012 were identified retrospectively. Information was obtained from hospital records and from patients' primary physicians. Bilateral or non-sequential IPCs in a single patient were treated as separate data points.

Results 30 IPCs were inserted, with a year-on-year rise in the number of drains seen over the analysis period. The mean age of patients was 64 (range 37–92 years). 57% were male. IPCs stayed in place for a median of 95 days (IQR 41–211) before death or removal. 6 patients died with their IPC in situ.

The majority of drains (47%, n=14) were inserted for the management of hepatic hydrothorax of varying aetiology (see table 1). 10 of these patients were given human albumin solution (HAS) intermittently with drainage.

87% of patients began with a drainage frequency of 3 times per week or greater. At final analysis only 37% of patients remained in this group, with 50% overall experiencing a reduction in drainage needs. Drainages were most often performed by community nurses (30%) or family members (30%).

Complications included drain site leak (n=1), equipment failure (n=1), pleural infection (n=2) and skin infection (n=1). IPCs were removed in 54% (n=16), with 6 patients achieving successful pleurodesis. Other reasons for removal included fluid loculation (n=2), or transplant operation (n=3). 83% of patients needed no additional pleural intervention following IPC insertion. In only 1 case did the primary physician feel the insertion of the IPC was not of value.

Conclusions These data suggest the use of IPCs in the non-malignant setting is increasing. Complications were rare and most patients could be managed for extended periods in the community alone. This series would suggest that IPCs are a viable option for the management of recurrent pleural effusions of non-malignant aetiology.

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Abstract P123 Table 1 Summary of the use of IPCs for non-malignant indications

Indication (NB Some patients had multiple contributing pathologies)	Total Cases	Median Number of Procedures Before IPC Placement (Range)	Pleural Infection Post IPC Insertion	Successful Pleurodesis
Hepatic hydrothorax	14	5 (0–8)	1	1/14
Cardiac impairment	4	3 (1–6)	0	2/4
Empyema	3	4 (3–11)	n/a	1/3
Hydropneumothorax	3	3 (2–4)	0	0/3
Chylothorax	3	3 (3–4)	0	1/3
Yellow nail syndrome	2	3 (3)	0	1/2
Undiagnosed effusion	2	2 (2)	1	0/2
Inflammatory pleuritis	1	1 (1)	0	1/1