

performed to identify the number of day-case LATs and define the characteristics of the patient population offered this approach.

Results Of 294 LATs booked during this period, 127 (43.2%) were planned as a day-case procedure. 113 day-case LATs went ahead with 7 patients (6.2%) requiring an “unplanned” hospital admission for reasons outlined in Figure 1. Patients planned for day-case LAT tended to be younger (68.1 vs. 72.4 years, $p = 0.12$, unpaired t-test) with fewer co-morbidities and better social support than the general population having this procedure. No patient declined a day-case procedure having been offered one, whilst the process on the day proved acceptable with most patients valuing the opportunity to avoid an overnight hospital stay.

Conclusion With careful case selection day-case LAT can be provided successfully, benefiting patients and clinicians whilst saving bed days and healthcare costs. Centres with the appropriate case mix and experience may wish to develop day-case LAT as part of their service. Future guidelines should acknowledge this need and offer advice on patient selection and logistical requirements.

REFERENCE

1 *Thorax* 2010; 65 Suppl 2:ii54–60

P179 DOES DAY-CASE THORACOSCOPY REDUCE THE NUMBER OF HOSPITAL BED DAYS FOR PATIENTS UNDER INVESTIGATION FOR UNILATERAL PLEURAL EFFUSION?

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Introduction and objectives Medical thoracoscopy is the investigation of choice for diagnosis of exudative pleural effusions where pleural cytology is negative and malignancy is suspected. Over the past 18 months, our centre has offered day-case thoracoscopy to suitable patients, with the aim of reducing elective admissions and overall hospital bed days for patients undergoing this procedure. A review of practice has been performed to evaluate whether day-case thoracoscopy is effective in reducing bed days in this cohort of patients.

Methods Data was retrospectively collected from patients attending our centre for medical thoracoscopy over a 12 month period (Feb 2013 – Feb 2014). Information on the number of bed days required, readmission rates and repeat procedures was reviewed for those attending for day-case thoracoscopy and compared with those electively admitted for overnight stay +/- talc pleurodesis.

Results Of 53 patients undergoing medical thoracoscopy at our centre, 31 patients were electively admitted for thoracoscopy, with an average stay of 3.8 bed days. 23 (74%) of this group underwent talc pleurodesis during their initial admission. 13 (42%) patients required readmission within 6 months, extending their total length of stay in this period to 7.3 bed days. 11 (35%) of these patients required further pleural procedure (s) within 6 months of initial thoracoscopy. 22 patients underwent day-case thoracoscopy (initial stay of 0 bed days). 9 (41%) of these patients required re-admission within 6 months, with an average total length of stay of 3.8 bed days. 11 (50%) of these patients went on to require further pleural procedure (s). For the 22 patients attending for day-case thoracoscopy, the number of bed days saved (number of patients x average length of elective admission) was 83.6 bed days.

Abstract P179 Table 1 Comparison of elective admission for thoracoscopy with day-case thoracoscopy

| Thoracoscopy patients (n = 53) | Elective admissions (n = 31) | Day-case (n = 22) |
|---|------------------------------|-------------------|
| Initial admission bed days (average) | 3.8 | 0 |
| Re-admission within 6 months | 13 (42%) | 9 (41%) |
| Re-admission bed days (average) | 3.5 | 3.8 |
| Total bed days (average) | 7.3 | 3.8 |
| Further pleural procedure (s) within 6 months | 11 (35%) | 11 (50%) |

Conclusions Day-case thoracoscopy reduces the number of hospital bed days in patients under investigation for unilateral pleural effusion and does not lead to increased rates of re-admission for this cohort of patients. Those undergoing day-case thoracoscopy are more likely to require a further pleural procedure, as talc pleurodesis is not performed in this group.

P180 THE IMPORTANCE OF ACCURATE PRE-OPERATIVE BIOPSY IN THE RADICAL MANAGEMENT OF MESOTHELIOMA – DON'T BLAME THE PHYSICIAN JUST KEEP TAKING MORE BITES

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Introduction Histological subtype is an independent prognostic factor in malignant pleural mesothelioma (MPM). Accurate typing is required to offer appropriate therapy, with surgery generally being reserved for epithelioid disease due to the poor survival in biphasic and sarcomatoid MPM. Preoperative tissue can be obtained by a variety of methods which may yield suboptimal specimens.

We aimed to investigate whether the mode of biopsy influenced the accuracy of diagnosis.

Methods We reviewed clinicopathological data from all patients who underwent radical surgery for MPM from 2000–2014, and compared subtyping from biopsies and resection specimens. In addition, a subspecialty expert consultant histopathologist reviewed biopsies from all biphasic cases.

Results In total, 335 patients had available pathological data available.

61(18.2%) showed discordance in subtyping between the diagnostic biopsy and the resection specimen. In 53 patients a poorer prognosis cell type was identified at resection (see Table).

There was poorer survival in the discordant group; median survival 8.2 vs 15.2 month ($p = 0.001$ HR=1.659 95% CI 1.227–2.243).

Discordance was found to be an independent predictor of survival on multivariate analysis (HR 1.653 95% CI 1.207–2.264 $p = 0.002$).

There was no effect of method of pre-operative biopsy on concordance ($p = 0.306$). There was also no difference in the accuracy of the diagnosis if a surgical biopsy was performed versus medical thoracoscopy or a radiologically guided biopsy ($p = 0.768$).

In 26 (18.4%) cases there was discordance between pre-operative biopsy and post-operative histological subtype. In 22 patients a poorer prognosis cell type was identified.

Conclusion These data demonstrate potential inaccuracy of current biopsy practice with accompanying impaired patient

Abstract P180 Table 1

| | Post-operative histology | | | |
|---------------------|--------------------------|----------|-------------|---|
| | Epithelioid | Biphasic | Sarcomatoid | |
| Epithelioid | 243 | 49 | 0 | |
| Biphasic | 4 | 24 | 2 | |
| Pre-op histology | Sarcomatoid | 1 | 3 | 7 |
| | Benign | 1 | 0 | 1 |

outcome. This correlates with our existing knowledge of the heterogeneity of MPM and the difficulty of subtyping from small biopsies. A wide distribution of biopsy sites within the hemithorax is likely to be more significant in obtaining an accurate histological diagnosis than the mode of biopsy itself.

P181 DOES THE DEGREE OF OCCUPATIONAL ASBESTOS EXPOSURE AFFECT THE OUTCOME OF RADICAL SURGERY FOR MALIGNANT PLEURAL MESOTHELIOMA?

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Introduction Malignant Pleural Mesothelioma (MPM) is associated with variable exposure to asbestos and a spectrum of prognosis which may be extended by radical surgery. Proportional mortality ratios have been used in the past to estimate the risk of developing mesothelioma, and more recently specific occupational risk groups have been described.¹

We aimed to determine whether those at highest risk of developing mesothelioma by virtue of working in high exposure occupations also fared worse after radical surgery for mesothelioma.

Methods Case notes were reviewed for all patients undergoing radical surgery for MPM between 1999 and 2014. Prior asbestos exposure had been determined by histories taken by the multi-disciplinary team. Patients were separated into one of 8 groups, using modified versions of the categories proposed by Rake *et al.* in 2009.¹ Comparative outcome was assessed for each group.

Results History of asbestos exposure was available for 262 patients. Thirteen patients were excluded from further analysis having died in hospital.

Of the remaining 249 patients, 84.3% were male, and median age was 62 years (range 14–81 years). The only significant inter-group difference was gender, with more females in the low risk and no exposure groups ($p = 0.021$). However, in our cohort of surgically treated patients, gender had no effect on survival ($p = 0.476$).

There was a significant difference in survival between the low risk group and the high and medium risk groups combined (24.2 vs 14.5 months $p = 0.031$).

Survival was similar between those with known asbestos exposure and those who reported no asbestos exposure; 14.7 vs 15.2 months $p = 0.573$.

Conclusion This is the first study to demonstrate that those patients who worked in occupations at highest risk of developing mesothelioma also have the worst comparative survival from radical surgery. The causation remains a topic for further research. It is also of note that patients with no reported asbestos exposure had an unexpectedly poor survival. The importance of a careful occupational history of asbestos exposure is emphasised.

REFERENCE

- 1 Rake C, Gilham C, Hatch J, Darnton A, Hodgson J, Peto J. Occupational, domestic and environmental mesothelioma risks in the British population: a case-control study. *Br J Cancer*. 2009 Apr 7;100(7):1175–83

P182 APPRAISAL OF AN INDWELLING PLEURAL CATHETER (IPC) SERVICE AT A LARGE ACUTE TRUST

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Introduction Data on indications, outcomes and complications of IPCs from clinical trials has been published.¹ This audit examined differences in practice and outcomes between clinical trials and day-to-day working which may influence the pleural service and provide information to other hospitals considering introducing this service.

Method We retrospectively reviewed patient-related data and outcomes for IPCs inserted at our hospital from February 2011 until December 2013. We compared the findings to secondary outcomes of the IPC arm of the TIME2 trial.¹

Results 102 IPCs were placed into 93 patients: 43 as inpatients; 59 as outpatients. 20 inpatients and 23 outpatients had previous talc pleurodesis.

10 patients had microbiological isolation of pleural fluid throughout a total of 27.3 IPC years; not all were associated with clinical signs of a pleural infection. Only 12 (50%) patients with a C-reactive protein of >200 mg/l had a sample of their pleural fluid sent for culture.

Drain removal occurred in 23% of the inpatient IPCs and 29% of the outpatient compared to 57% in the TIME2 trial.

The median inpatient stay after elective pleurodesis in an outpatient was 1.5 nights in 2011 (range 0–11), 1 night in 2012 (range 0–5) and 0 nights in 2013 (range 0–5).

Abstract P181 Table 1

| Exposure Group (Rake <i>et al.</i>) | Asbestos exposure | n | Median survival | | Risk Group | Median survival | |
|---|--|----|-----------------|-------|-------------|-----------------|-------|
| | | | (months) | p | | (months) | p |
| 1 | Any non-construction high-risk job | 60 | 14.4 | | | | |
| 2 | Carpenter | 34 | 15.8 | | | | |
| 3 | Plumber, electrician, painter or decorator | 17 | 14.0 | | | | |
| 4 | Other construction | 35 | 13.2 | | High Risk | 14.4 | |
| 5 | Any medium-risk industrial job | 21 | 14.8 | | Medium risk | 14.8 | |
| 6 | Any low-risk industrial job | 7 | 32.0 | | | | |
| 7 | Domestic exposure | 12 | 24.2 | | Low risk | 24.2 | |
| 8 | None of the above | 63 | 15.2 | 0.447 | None | 15.2 | 0.167 |