

## REFERENCE

1 Pleural procedures and thoracic ultrasound: BTS guideline 2010.

### P6 SIGNIFICANCE OF MINIMAL PLEURAL EFFUSION IN NON-SMALL CELL LUNG CANCER

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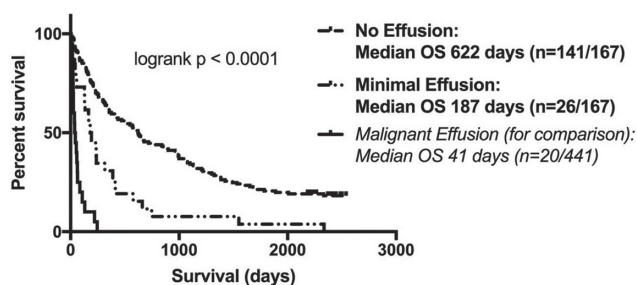
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**Introduction and objectives** Recent publications report a significant survival disadvantage associated with minimal pleural effusion (MiniPE) at presentation of non-small cell lung cancer (NSCLC). MiniPE is defined when an effusion is too small for thoracentesis or where aspiration cytology is negative. Occult pleural metastases (OPM), indirect pathophysiology or comorbidity may cause MiniPE, but staging beyond thoracentesis is rarely performed. Assumption of OPM and therapeutic nihilism may contribute to poor outcomes. We assessed the prognostic impact of MiniPE in potentially radically-treatable NSCLC (Stage I-IIIa), oncologists' attitudes to treatment planning and the final treatment delivered.

**Methods** Electronic records and baseline imaging were reviewed retrospectively in 441 consecutive diagnoses of NSCLC made over 6 months in 2009. Stage I-IIIa patients were dichotomized into: No effusion and MiniPE. Malignant effusion (Stage IV) cases were recorded for comparison. The impact of effusion status on overall survival (OS) was estimated using Kaplan-Meier methodology. The probable cause of MiniPE was assessed indirectly using follow-up imaging/records. 3 Clinical Oncologists were surveyed for theoretical treatment plans in 8 randomly-selected MiniPE Stage I-IIIa cases based on anonymised imaging and history. These 24 plans were compared to the treatment delivered in MiniPE patients.

**Results** 103/441 (23%) patients had MiniPE. 167/441 (38%) were Stage I-IIIa; 26/167 (16%) of these had MiniPE. OS based on effusion status (Stage I-IIIa) is shown in Figure 1. 28/103 (17%) MiniPE patients survived <30 days and had limited post-diagnosis imaging. These were excluded from probable cause analyses. Of the remaining 75/103, 20 (27%) had radiological evidence of progressive pleural malignancy. Radical treatment was delivered in 4/26 (15%) Stage I-IIIa MiniPE cases but advocated in 17/24 (71%) theoretical plans, which showed significant inconsistencies.

**Conclusions** These retrospective data confirm the negative prognostic impact of MiniPE and suggest the prevalence of OPM is at least 27% in Stage I-IIIa NSCLC. This is likely an underestimate given our limited data in poor prognosis patients. Radical treatment was rarely delivered despite aggressive treatment plans. A prospective study utilising thoracoscopic staging could define the true prevalence of OPM in MiniPE. Objective staging might improve decision-making, radical treatment rates and OS in this context.



Abstract P6 Figure 1 Stage I-IIIa NSCLC Survival by Effusion Status

### P7 CLINICIANS' PERSPECTIVES OF HEALTH RELATED QUALITY OF LIFE AND PRIORITIES IN DECIDING MANAGEMENT FOR MALIGNANT PLEURAL EFFUSION

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**Introduction** Malignant pleural effusion (MPE) management has dramatically changed in the last decade with the increasing use of indwelling pleural catheters (IPC) and thoracoscopy. Although treatment is aimed at improving health related quality of life (HRQOL), data on outcomes are limited, with management guided by clinician perspectives and experiences.

**Aims** We sought clinician perspectives of HRQOL for patients with MPE and its impact on decision making worldwide. We present the UK data.

**Methods** We invited all respiratory doctors in the UK to complete an online survey advertised in the British Thoracic Society newsletter and by e-mail. Responses to questions with ranked options were assigned consecutive integers with lower values indicating a more favoured or higher prioritised response. Responses to best answer questions are presented as frequencies and percentages.

**Results** 121 UK-based doctors (104 consultants, 1 associate specialist, 16 respiratory registrars) completed the survey.

Factors determining HRQOL (rank 1-9): shortness of breath and chest pain (mean rank 1.48) and functional status (mean rank 2.57) were ranked the most important. Social set up – mean rank 5.16, depression/anxiety – mean rank 5.22, tumour type and stage – mean rank 5.78, distance to travel for medical care – mean rank 5.86, age – mean rank 6.59, financial difficulties from treatment – mean rank 8.27.

Factors in the decision to offer intervention for MPE (rank 1-6): breathlessness ranked highest (mean rank 1.83) followed by the risk of significant harm from procedure vs chance of benefit (mean rank 2.73).

Perspectives on which interventions most improve HRQOL are presented in Figure 1.