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Survival was significantly shorter in AA (3 [2.4–8.1] months) than for FT (6 [6.6–14.2] months) and NFT (10 [8.4–16.4] months), p = 0.01, ANOVA.

Results in the three groups are confirmed graphically using Kaplan-Meier survival analysis (Fig.1)

Conclusions We have shown that patients admitted acutely with malignant mesothelioma have a worse performance status and shorter survival than patients referred to clinic either via the FT two week rule or NFT. No survival benefit was seen for FT, perhaps because they were more advanced at presentation, as has been shown for patients with lung cancer.

## REFERENCES

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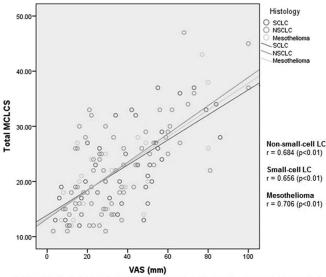
## P58 THE CHARACTERISATION AND SUBJECTIVE ASSESSMENT OF COUGH IN LUNG CANCER AND MESOTHELIOMA: THE "CLAIM" STUDY

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## 10.1136/thoraxjnl-2013-204457.208

**Introduction** Lung cancer (LC) and mesothelioma (M) are usually terminal, with poor 5-year survival. Therefore, symptom control is crucial. Cough is a significant problem with physical, psychological and social consequences. It has a broad aetiology and its physiological mechanisms remain unclear. Methods for its assessment are unreliable and available treatments are limited; the absence of valid quantification of cough prevalence and impact hinders the development of novel therapies. CLAIM evaluates the impact and prevalence of cough in LC and M using validated assessment tools.

Methods Consecutive outpatients attending two cancer centres over a 5 week period completed the Manchester Cough in Lung Cancer Scale (MCLCS) and a cough severity visual analogue scale (VAS). Demographic and clinical data were collected.



Abstract P58 Figure 1. Correlation between VAS score and MCLCS score in lung cancer and mesothelioma.

**Results** Patients were of advanced age (LC mean 66years, M mean 71years), predominately male (LC 54.9%, M 75.0%), with advanced disease (advanced non-small-cell LC 80.5%, extensive small-cell LC 71.4%). Those on treatment largely received palliative treatment (LC 89.7%, M 100%). The majority of patients were performance status  $\geq 2$  (LC 51.7%, M 60%). Cough was reported by 58% of LC patients (n = 224) and 43% of M patients (n = 60); painful cough was reported by 23% and 18%, respectively. LC and M patients felt their cough warranted treatment in 53% and 40% of cases. Cough was associated with breathlessness (LC 61.9%, M 63.6%), disrupted sleep (LC 47.8%, M 52.4%) and interrupted conversations (LC 64.6%, M 59.1%). There were moderate-strong correlations between MCLCS and VAS scores in all patient groups [non-small-cell (r = 0.68), small-cell LC (r = 0.66) and mesothelioma (r = 0.71), all p < 0.01].

**Conclusions** This is the first study comparing the prevalence and impact of cough in LC and M using validated cough-specific assessment tools, in a clinically representative population. Cough is common in these cancers and has marked effects on quality of life. In the absence of evidence-based treatments, it represents an unmet clinical need. The high prevalence of cough in M is counterintuitive, in view of the tumour location. The MCLCS and VAS correlations suggest these are complementary tools which perform reliably in these disease groups.

# P59 THE CHARACTERISATION OF COUGH IN LUNG CANCER

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**Introduction** Cough in lung cancer (LC) is a distressing symptom with a significant impact on quality of life (QoL), and no effective therapies. Little data is available defining the proportion of LC patients affected by cough or its impact. This study determines the prevalence and characteristics of cough in LC using validated assessment tools, including the new LC-specific impact scale: Manchester Cough in Lung Cancer Scale (MCLCS).

Patients and methods Consecutive patients attending a singlecentre LC outpatient oncology clinic were enrolled over a 5week period. Every patient was asked "do you have a cough?" Patients who answered yes had their cough assessed using a cough severity Visual Analogue Scale (VAS) and the MCLCS. Clinical and demographic data were collected.

**Result** A total of 224 patients were enrolled; 55% male; 10% never smoked; 31% small cell lung cancer (SCLC) and 52% had a performance status (PS) of 2–3. The cough prevalence was 58%; 53% felt their cough warranted treatment and 23% reported painful cough. Mean MCLCS 22.7 (8.1  $\pm$  SD, range 0–50: 50 = worst cough QoL) and VAS scores were 36mm (21.3  $\pm$  SD). Painful coughs scored higher on the VAS and MCLCS (mean VAS 45.7mm vs.33.3, p = 0.034, mean MCLCS 28.0 vs. 19.6 p≤0.005). Coughs warranting treatment also scored higher on the VAS and MCLCS (mean VAS 45.47.2 vs. 23.8 p≤0.005, mean MCLCS 25.4 vs. 17.1, p≤0.005 respectively). Cough prevalence was higher in patients off anti-cancer therapy (63% vs. 50%, p = 0.048). Cough had a greater impact on mean MCLCS scores in poor PS patients (p ≤0.0005).

Conclusion This is the first study to assess the prevalence of cough in a large clinical cohort of outpatients with LC and to characterise cough using validated assessment tools. Cough was most severe coughs and had greatest impact on quality of life in

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patients who described their cough as painful or warranting treatment. The MCLCS and VAS are simple cough assessment tools that can be readily used in research and clinical practice to better evaluate cough and facilitate the development of effective cough therapies.

## P60 INVESTIGATIONS IN SUSPECTED LUNG CANCER: PATIENTS' PERSPECTIVE

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**Background** NICE recommend choosing "investigations that give the most information about diagnosis and staging with the least risk to the patient" when diagnosing and treating lung cancer. Patient experience data was collected in order to review our service and also as anecdotally it was felt that some investigations were better tolerated than others.

Methods Patients were identified following the weekly MDT; 127 consecutive adults who had undergone either EBUS, EUS, Bronchoscopy, FNA of a neck node or pleural aspiration were sent an anonymous, patient satisfaction questionnaire, 87 responded (69%). Simple questions regarding the practicalities of arranging the test were asked and participants were also required to rate their experience on a scale from1 (very poor) to 10 (excellent). Similarly they were asked to score various aspects of the investigations like pain and discomfort on a 10 point scale and the scores were compared between the investigations.

**Results** All respondents felt they had received an adequate explanation of the test including the indication and risks. The highest rated investigation (on a 1 to 10 scale) was an US guided FNA of a neck node. See Table 1.

The most 'uncomfortable' procedure was an EUS; this was also the endoscopic procedure that was most likely to be fully remembered. Less than 10% of patients undergoing a bronchoscopic procedure reported that they had full recall of the test.

When asked whether they would have the procedure again if advised, no patient said they would never have the test again.

The worst thing about the investigations was either cough or pain whilst the requirement to stay in one position was commented on by a significant number of patients undergoing a radiologically guided procedure.

**Conclusions** No one test appeared significantly more tolerable than any other but EUS seem to be the most uncomfortable test. This information will help the team to present clinical equipoise when recommending investigations.

## Abstract P60 Table 1.

Investigation	No of patients	Mean Service Rating (range)		
EBUS	23	9.56 (8 to 10)		
Bronchoscopy	25	9.64 (6 to 10)		
CT guided lung biopsy	22	9.00 (5 to 10)		
EUS	3	8.33 (8 to 9)		
FNA	7	9.71 (8 to 10)		
Pleural aspiration	7	9.14 (8 to 10)		

P61 FACTORS INFLUENCING IMPROVED LUNG CANCER RESECTION RATES 2006–2012; A SINGLE CENTRE CASE COHORT STUDY <sup>1</sup>S Selvaraj, <sup>2</sup>P Rajesh, <sup>2</sup>B Naidu, <sup>2</sup>M Kalkat, <sup>1</sup>IS Woolhouse; <sup>1</sup>University Hospitals Birmingham NHS Trust - Queen Elizabeth Hospital, Birmingham, United Kingdom; <sup>2</sup>Heart of England NHS Trust - Birmingham Heartlands Hospital, Birmingham, United Kingdom

10.1136/thoraxjnl-2013-204457.211

**Background** Surgical resection rates for lung cancer have increased steadily over the last decade. There are a number of possible explanations for this increase which include: earlier presentation, earlier detection and an increase capacity and/or willingness for thoracic surgeons to operate. The aim of this study is to identify which of these factors are associated with the increase in surgical resection seen at our institution, in particular, whether the increased use of CT scanning across all areas of medicine, e.g. cardiac CT, has impacted on the rate of incidentally detected operable lung cancers.

Methods We used data submitted to the national lung cancer audit (excluding Mesothelioma) to identify changes in performance status (PS), lung function and stage at presentation from 2006 to 2012. We then performed a retrospective case note analysis of patients who received surgery to identify the proportion of surgical cases in whom the lung cancer had been detected incidentally i.e. on imaging not performed to investigate suspected lung cancer. Statistical comparisons were performed using chi-squared and ANOVA tests.

**Results** Mean age was 71 years and did not change across the study period. The remaining results are summarised in the table. Surgical resection rates increased significantly during the study period but there was no change in performance status or lung function at presentation. There was a significant increase in the proportion of patients presenting with early stage disease however the proportion of operable lung cancers detected incidentally did not change during the study period.

**Conclusion** The increase in surgical resection rates seen at our institution appears to relate to a stage shift at presentation. Although incidentally detected lung cancers make up a significant proportion of operable lung cancers, this does not account for the stage shift. An alternative explanation is the impact of the national awareness and early diagnosis campaign (formally launched in 2008) prompting patients to present earlier and GPs to refer sooner.

#### Abstract P61 Table 1.

	2006	2007	2008	2009	2010	2011	2012	p value
Lung cancers (n)	189	214	221	237	191	245	255	
PS 0–1	59%	51%	54%	53%	49%	52%	54%	ns
Mean FEV1% pred	73	74	71	70	71	75	78	ns
stage I-II	16%	18%	17%	18%	21%	28%	27%	0.001
surgery	10%	11%	11%	13%	17%	20%	18%	0.006
Incidental	53%	38%	50%	40%	38%	32%	39%	ns

## P62 THOROPLASTIC RECONSTRUCTION FOLLOWING CHEST WALL RESECTION

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*Background* Reconstructive procedures following chest wall resection continue to improve. This study reviews our experience of chest wall reconstruction with multidisciplinary approach.

*Methods* We conducted a retrospective review of 25 patients who underwent chest wall reconstruction in our department between September 2006 and April 2013.