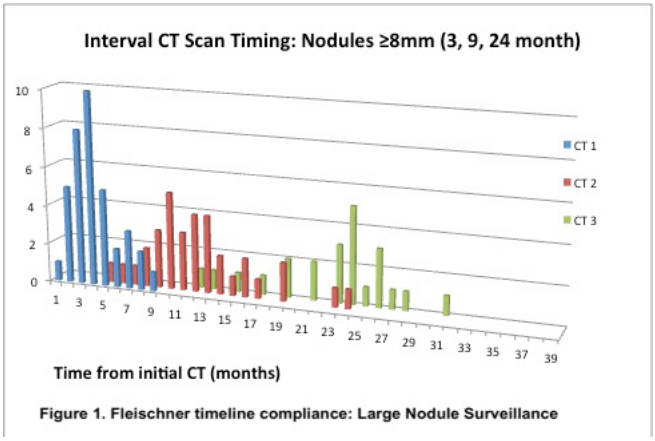

Figure 1. Fleischner timeline compliance: Large Nodule Surveillance

Abstract P195 Figure 1

P196 PERCUTANEOUS ULTRASOUND-GUIDED BIOPSY OF INTRATHORACIC PARIETAL MASSES – A SAFE ALTERNATIVE TO CT-GUIDED BIOPSY?

doi:10.1136/thoraxjnl-2012-202678.257

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Background The current gold standard method for sampling intrathoracic lesions is via a CT-guided approach. However, most parietal-attached intrathoracic lesions can be visualised with ultrasound and sampled.

Aims A prospective audit of consecutive patients with CT-identified intrathoracic parietal-attached lesions, sampled percutaneously by an ultrasound-guided approach, was carried out to assess efficacy and safety. The lung MDT was instrumental in selecting patients.

Materials and Methods Seventeen consecutive patients were audited over a span of 8 months. This cohort included 12 males and 5 females with an age range from 42 to 84 years (median 63 years). The biopsies were performed by 4 skilled investigators assisted by a specialist nurse, using an 18 gauge single-trochar puncture under standard aseptic conditions. A Toshiba Applio ultrasound unit, with Doppler-flow map capabilities was used to avoid vessel puncture. Patients recovered in the radiology department observation ward.

Results Interpretable specimens were obtained in 16 patients. A single patient needed a repeat, successful, US-guided procedure. The median duration for the procedure was 26 minutes, with a median observation time before discharge of a further 40 minutes. Two patients developed small pneumothoraces and one patient suffered minor haemoptysis, none of which required admission.

Conclusion Where applicable, this technique is safe, fast, avoids radiation and may result in fewer complications compared to the CT-guided approach. Fewer personnel are required and CT scanner time is freed for other uses. Moreover, in the hands of an ultrasound-skilled respiratory physician, this method correctly applied would provide an earlier route to diagnosis for the Lung MDT.

P197 OBTAINING A TISSUE DIAGNOSIS IN LUNG CANCER PATIENTS WITH POOR PERFORMANCE STATUS MAY NOT INFLUENCE TREATMENT OR CONFER SURVIVAL BENEFIT

doi:10.1136/thoraxjnl-2012-202678.258

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Introduction Further investigation and treatment following a radiological diagnosis of lung cancer is influenced by the fitness of a patient. A pragmatic approach to investigative procedures is often adopted based on the risks and benefits. Another consideration is whether tissue diagnosis is necessary for anticipated future treatment. Tissue diagnosis is usually deemed essential prior to administration of radical radiotherapy and chemotherapy, but less so for palliative radiotherapy.

Methods All patients with lung cancer diagnosed in North Glasgow in 2009 and 2010 were prospectively recorded in a registry. We subsequently investigated the relationships between WHO performance status (PS) and tissue diagnosis, treatment and survival. Patients were followed up for at least 18 months after entry into the registry.

Results 1190 patients were diagnosed with lung cancer during the study period and clinical details were recorded at a multidisciplinary meeting. PS was recorded in 91%.

Overall, tissue diagnosis was achieved in 76% of patients. Tissue diagnosis was achieved in 98% of patients with PS 0 following diagnostic procedure or surgery (table 1). Nearly 90% of these patients underwent chemotherapy, surgery or radical radiotherapy.

Tissue diagnosis was attempted in 71% and 46% of PS 3 and 4 respectively. Of these patients, treatment was influenced by tissue diagnosis in 15% and 0%. Survival was compared in these patients and there was no difference between patients with a PS of 3 or 4 that had tissue diagnosis attempted and those that did not (median days (interquartile range); PS3: tissue 53 (19–138) vs no tissue 59 (17–156); PS4: 18 (8–36) vs 16 (6–32)).

Conclusions A significant percentage of patients with performance status 3 and 4 undergo diagnostic tests to establish a tissue diagnosis. However, treatment is only influenced by this in a minority of cases. Considering likely future treatment is important when pursuing a tissue diagnosis in these patients. In addition, attempting tissue diagnosis in these patients did not confer any survival benefit.

P198 TEN YEAR FOLLOW UP OF MESOTHELIOMA IN NORTH YORKSHIRE

doi:10.1136/thoraxjnl-2012-202678.259

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All 123 malignant mesothelioma patients in York and North Yorkshire between 2002–2011 were analysed from Cancer Registry and

Abstract P197 Table 1

	0	1	2	3	4	Not recorded
n	132	381	336	186	48	107
Tissue diagnosis attempted, n (%)	126 (96)	355 (93)	300 (89)	132 (71)	22 (46)	59 (55)
Tissue diagnosis achieved*, n (%)	129 (98)	358 (94)	278 (83)	118 (63)	17 (35)	55 (51)
Treatment, n (%)						
Best supportive care	4 (3)	29 (8)	68 (25)	65 (55)	14 (82)	22 (40)
Palliative XRT	11 (9)	82 (23)	91 (33)	36 (31)	3 (18)	17 (31)
Chemotherapy	66 (51)	133 (37)	86 (31)	15 (13)	0 (0)	9 (16)
Surgery or radical XRT	48 (37)	114 (32)	33 (12)	2 (2)	0 (0)	7 (13)

*Some patients had tissue diagnosis following a surgical procedure.

Office for National Statistics data using Kaplan-Meier survival graphs, Pivot tables, multivariate analysis (Cox proportional hazard model) and log rank testing using SPSS v19 and Excel 2010.

Mesothelioma incidence, diluted by a rural hinterland, rose over 10 years from 2 to 16 per million compared with HSE data for overall UK incidence (2006–8) of 62.3 per million (male) and 11.6 per million (female). Annual mesothelioma deaths as a proportion of all deaths rose over 10 years from 0.02 to 0.17%. 87% cases were male, mean age of presentation was 72 years (range 34–95 years), and overall median and 95% Confidence Interval (CI) survival of 8 (5.8–10.2) months.

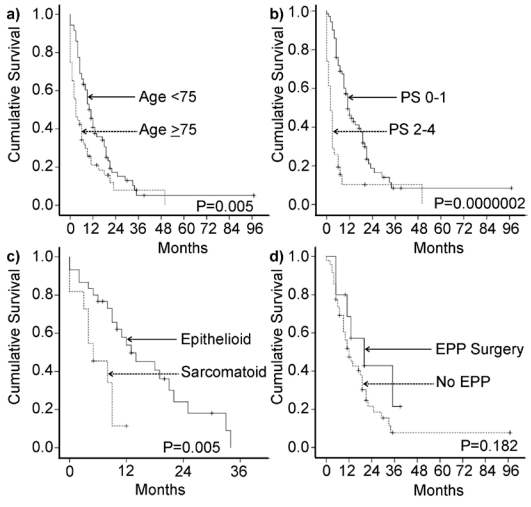
Median (CI) survival was 11 (8.6–13.4) months for patients < 75 years age, greater than for ≥75 years of 3 (0.7-5.3) months (p=0.005). There was a significantly greater survival of patients with performance status (PS) 0 or 1 at 11 (8.2–13.8) months compared to PS 2.3 or 4 at 2, (9–3.1; p=0.0000002) months.

Multivariate analysis, using a Cox proportional hazards regression model showed epithelioid histology subtype predicted longer survival compared to sarcomatoid (Hazard ratio 0.11 (CI 0.02–0.52; p=0.005); see **Fig.1**).

Survival analysis using a log rank test showed no significant difference between median (CI) survival of men 8 (6.0–10.0) months and women 5 (0–11.9; p=0.7) months. Other variables not significantly affecting survival were side of tumour (p=0.9), and diagnosing hospital (p=0.07).

Extrapleural pneumonectomy (EPP) was performed on 10 patients (5 male, PS 0–1, age 34–76 years). Survival for patients receiving EPP was 20.0 (3.3–36.7) months, significantly greater than 7.0 (4.2–9.5) months for all patients (p=0.023). No statistically significant survival benefit for EPP was seen compared with survival of 49 patients matched for age and PS (p=0.182); these findings were confirmed by multivariate analysis.

We conclude that mesothelioma represents an increasing burden and that patient factors, not treatment, govern survival.



Abstract P198 Figure 1

P199 MERSEYSIDE & CHESHIRE CANCER NETWORK (MCCN) AUDIT: SURVIVAL ANALYSIS OF LUNG CANCER PATIENTS WITH A PERFORMANCE STATUS OF 3 (PS3) BASED UPON THE REASON FOR THEIR POOR PERFORMANCE STATUS AND WHETHER OR NOT THEY HAD A TISSUE DIAGNOSIS

doi:10.1136/thoraxjnl-2012-202678.260

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Introduction and Objectives Lung Cancer patients with a PS3 often fall on the boundary between fitness for active oncological treatments and "best supportive care". Some patients with PS3 are deteriorating rapidly because of advanced cancer symptoms and have a very poor prognosis. Others have stable chronic health problems that influence PS.

Aims

- To determine the percentage of patients with PS3 who fall into these subcategories and compare 12 month survival
- To ask whether having a tissue diagnosis in patients with PS3 improves outcome.

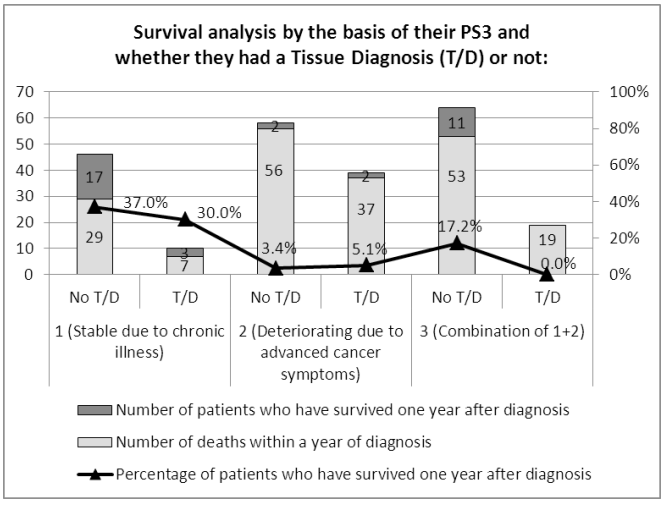
Assigning a PS3 to a patient may influence whether or not a tissue diagnosis is pursued. In some cases this may be because the patient has severe cardiorespiratory disease and a biopsy is unsafe. In other cases, the multidisciplinary team may decide that the patient is not fit to have active oncological treatment so pursuing a biopsy would not alter management, and might even be unethical because of the risk incurred.

Methods All lung cancer units in MCCN were asked to complete a questionnaire for 50 consecutive Lung Cancer patients with PS3 (most were diagnosed in 2010), which was then compared with death data from the North West Cancer Intelligence Service.

Results Survival is generally greater in patients who are given a PS3 because they are stable due to chronic illness (34.5% were alive after 12 months) and poorer in those deteriorating due to advanced cancer symptoms (4.1%) or a combination of the two (13.1%).

In neither patients with PS3 because of ill health, nor patients with PS3 because of advanced cancer symptoms was there a clear survival advantage for patients who had a tissue diagnosis of cancer as opposed to a clinical and radiological diagnosis.

Conclusions Based on this data, there is no explicit survival advantage in pursuing tissue diagnosis in patients with PS3. In our network, those patients with PS3 who are fit for active oncological treatment received it even when it was considered inappropriate to pursue histology. In the future, should targeted therapies become available that can be tolerated in patients with PS3, the case for pursuit of histology will be stronger.



Abstract P199 Figure 1

P200 SIX YEAR EXPERIENCE WITH RIGID BRONCHOSCOPY: COMPLICATIONS, INDICATIONS AND CHANGING REFERRAL PATTERNS

doi:10.1136/thoraxjnl-2012-202678.261

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Introduction and Objectives The objective of this study was to determine the indications and outcomes of the last 500 referrals for