

Abstract P66 Figure 1

CT scans. The majority of departments scanned the entire lung (62%), 20% used limited slices and 20% used a combination as part of follow up. Only 15% of departments used lung nodule volume measurements routinely, with a further 20% having access on request.

Conclusions There is significant variation both in the way patient's are followed-up as well as the methods of scanning deployed. Some trusts have developed streamlined pathways to monitor patients, without using valuable clinic slots. The chest physician is very much reliant on the organisation and expertise of their radiology department, with a significant majority not having access to low dose CT or lung nodule volumes. It is a crucially important area that requires continued improvement, both in achieving earlier cancer detection, balanced against the need for limiting the radiation dose.

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OUTCOME OF A PRAGMATIC PROTOCOL FOR CT LUNG NODULE SURVEILLANCE IN A UK DISTRICT GENERAL HOSPITAL

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Introduction and objectives The appropriate way to follow-up indeterminate pulmonary nodules found incidentally on CT scanning has caused clinicians and radiologists in the UK some concern. Guidelines developed by the Fleischner Society in 2005 were based on studies outside of the UK. Our hospital developed local guidance for lung nodule surveillance prior to the publication of Fleischner guidelines which were designed to be pragmatic and easy to follow. We present the results of our experience.

Methods Outcomes of patients undergoing the local lung nodule surveillance programme in our hospital from 2004 to 2011 were analysed. Eligibility criteria included initial lung nodules 5–10mm diameter; previous or current smokers; aged 45–75 years old with good performance status. Those with 5 or more nodules

more than 5mm diameter, benign calcification, or patients already under follow up, e.g. oncology patients, were excluded. A stamp was placed in the notes and on CT request forms to record and remind clinicians of the criteria. In accordance to our protocol CT scans were performed at 6, 18 and 30 months from the index scan.

Results 107 patients were followed up but only 63 patients fulfilled the initial inclusion criteria. This shows that despite a pragmatic protocol, clinicians will often interpret it differently when faced with an individual. The commonest reason was nodule size over 10mm. Of those eligible, the outcomes were recorded as to whether nodule confirmed as cancer (positive), nodule size reduced or unchanged over 30 months (negative), surveillance cut short as a clinical decision and those still under surveillance.

Of the 63 patients, 2 were found to have lung cancer (see Figure 1). Of those patients who were not eligible, but still underwent the surveillance programme, 6 were found to have cancer. These were not eligible because nodule size was over 10mm.

Conclusions Our study shows that a simple protocol is helpful to clinicians, but will be adapted according to the clinicians' belief. In our study 3% of nodules 5–10mm were early cancers. Nodules over 10mm, which were bigger than our criteria but followed up within this protocol, were more likely to be cancerous (14%).

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DO PATIENTS PROGRESS WHILST UNDERGOING DIAGNOSIS AND STAGING FOR LUNG CANCER: A RETROSPECTIVE AUDIT?

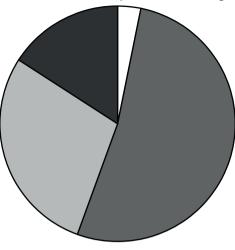
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Background In the last 10 years, the survival rate in lung cancer in the UK has improved, but remains lower than some counterpart

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Outcomes of patients on Lung Nodule surveillance



■ Negative finding
■ Surveillance cut short
■ Currently on surveillance

☐ Positive finding

Abstract P68 Figure 1

European countries. The cancer waiting time initiative aimed to speed up the process from presentation to treatment to improve outcomes. All tumour sites follow a similar process with no distinction by tumour site. There is no published UK data on whether patients with lung cancer progress either symptomatically or by imaging whilst undergoing the diagnostic pathway.

Methods Two medical students at a University teaching hospital audited records of patients first seen in 2010 with lung cancer. Data regarding history, stage, histological diagnosis and performance status (PS) recorded at MDT were collected. In addition the recommended treatment plan from the MDT and the final treatment delivered were extracted from the Somerset Cancer Register (SCR) and case records. Only patients with non-small cell (NSCLC) or small cell (SCLC) lung cancer who underwent active anti-cancer treatment were included (n=70).

A subgroup of 45 patients with CT scans at diagnosis and prior to treatment commencement were identified for radiological analysis of progressive disease (PD) defined by a change in TNM staging or growth on RECIST 1.1 criteria. All data was analysed using SPSS software (non-parametric Wilcoxon's/Chi squared tests).

Results Baseline characteristics are below. Median referral-to-treatment interval was 72 days (range 0–281). The interval between diagnosis and treatment varied dependent on stage and symptoms at presentation.

13 patients experienced a decline in PS (p=0.012). 8 patients (17.4%) had radiological PD; of those, 2 patients stage migrated. There was a positive association between PD and deterioration in PS (p=0.015), late stage disease at presentation (p=0.037) and poor PS at presentation (p=0.024). Late-stage disease (p=0.003) and presence of radiological PD (p=0.005) were associated with shortened survival. No patients with PD had a change in treatment.

Conclusions Patients with advanced lung cancer and poorer PS at presentation tend to progress rapidly. Further work should be carried out to determine predictive characteristics of those patients likely to progress whilst undergoing diagnostic work-up to ensure appropriate stratification.

Abstract P69 Table 1

| Patient characteristics | Baseline frequency N (%) |
|--------------------------|--------------------------|
| Gender | |
| Male | 40 (57.1) |
| Female | 30 (42.9) |
| Age range, y | |
| < 59 | 15 (21.4) |
| 60 - 69 | 21 (30) |
| >70 | 34 (48.6) |
| PS at presentation | |
| 0 | 5 (7.1) |
| 1 | 46 (65.7) |
| 2 | 11 (15.7) |
| 3 | 8 (11.4) |
| Number of co-morbidities | |
| 0 | 46 (65.7) |
| 1 | 21 (30) |
| 2 | 3 (4.3) |
| Histology | |
| Adenocarcinoma | 28 (40) |
| Squamous cell | 19 (27.1) |
| NSCLC NOS | 12 (17.1) |
| Small cell (SCLC) | 11 (15.7) |
| TNM | |
| IA, IB | 10 (14.3) |
| IIA, IIB | 3 (4.3) |
| IIIA, IIIB | 22 (31.4) |
| IV | 24 (34.3) |

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