INCIDENTAL DETECTION OF EARLY STAGE NON-SMALL CELL LUNG CANCER – TIME TO IMPLEMENT SCREENING?

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Introduction Early detection is the key to survival in non-small cell lung cancer (NSCLC) where surgical resection can be undertaken. However, stage I and II disease combined account for only 25–30% of patients presenting with lung cancer. Although, clinical pathways from primary care exist to facilitate expeditious management of patients, the role of other referral pathways to diagnosis of surgically treatable lung cancers is not known.

Methods Patients suitable for surgical resection for curative intent for primary lung cancer were identified between 2007 and 2011 at this institution. Patients diagnosed ‘incidentally’ on radiology were compared to those detected through the standard ‘two week’ wait target referral system. Specific data on demographics, diagnostics utilised, pathological stage, and lung cancer mortality were recorded.

Results Eighty-four patients were treated with surgical resection for non-small cell cancer. The ‘two-week’ wait referrals accounted for one quarter (n = 21; 95% CI 17–35%) of the all the referrals, whilst 61% (n = 51; 95% CI 50–70%) of patients were found to have lung cancer detected incidentally through investigations performed by other specialties in the hospital. The presentation of patients to hospital with cancer related symptoms whether they had operable disease or not, had significantly higher lung cancer specific mortality (p = 0.02; see figure).

Conclusion We demonstrate that patients who have cancer-related symptoms have a worse outlook. Whilst asymptomatic patients diagnosed by chance have better prospects for cure by surgical resection, thus highlighting the promise of CT screening for lung cancer in patients with high risk factors.
diagnosis, synchronous pathology, referral timelines and reasons for delays.

Results

- 108 patients had a PET-CT for investigation of thoracic malignancy.
- 29 incidental findings were found in 28 patients (28/108; 26%); see chart 1.
- 20 patients (20/108; 19%) required further investigation/referral for their synchronous pathology.
- 22 of these 28 patients were ultimately diagnosed and treated for thoracic malignancy.
- Referral to treatment was delayed in 8 patients (8/108; 7%), but only in 1 (1/108; 1%) as a direct result of management for their synchronous pathology.

Conclusions A high number of patients undergoing PET-CT have synchronous pathology. Compared with previous UK data we found a higher rate of synchronous pathology. This may reflect a higher burden of disease in the North East of England.

Synchronous findings have a limited impact on referral to treatment pathways. However, they can result in more investigations and trips to hospital, which may have a psychological impact on patients already going through a stressful life event. Perhaps this should be highlighted at time of decision to perform PET-CT.

**P74 FOLLOW-UP OF LUNG CANCER PATIENTS POST SURGERY**

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Rationale Over 50% of patients undergoing surgery for lung cancer die from recurrence or a second episode of lung cancer within 5 yrs. There is little evidence based guidelines regarding the follow-up of post surgical resection. Most follow up with physical examination and plain radiographs. Few recommend follow up with CTs. Within Mid Yorkshire NHS trust, patients are followed up post-operatively for 5 years. In the initial 2 years CTs are performed at 3, 12 and 24 months and chest radiographs at 3 to 6 monthly intervals for 5 years. The aim of this study was to assess the benefits of cross sectional imaging.

Methods A retrospective analysis was conducted of 109 patients undergoing surgery for lung cancer within Mid Yorkshire NHS hospital trust between 2009 and 2012.

Results 109 patients were included in total (42% female). Types of surgery were lobectomy (80%), wedge resection (10%) and pneumonectomy (10%). Recurrence occurred in 37% of patients (85% pulmonary).

60% of recurrences were adenocarcinomas and 33% squamous cell carcinomas. The majority of patients were asymptomatic (78%). Dyspnoea was the most frequent symptom (19%). The most commonly staged tumour was IB (pT2A 53%, pN0 50%).

53% of recurrences were identified at the 3 month post-operative CT, 8% at 6 months, 28% at 12 months and 3% at 24 months. Chest radiographs identified recurrence at 6 (3%), 9 (3%) 18 (3%) and 21 months (3%). Total mortality within the recurrence group was 25%.

54% of patients had treatment with curative intent (surgery: 23% radiotherapy; 18% chemotherapy; 8% chemoradiotherapy 5%). 23% received palliative treatment, chemotherapy/radiotherapy.

Conclusions There are substantial benefits of imaging in identifying recurrences in cancer patients. The post-operative CT imaging at 3 and 12 months is advantageous as they identified 53% and 28% of the recurrences respectively. However, the benefit of regular chest radiographs and surveillance CT at 24 months is questionable as they were less effective.

**REFERENCE**


**P75 PROGNOSTIC IMPLICATIONS OF THE MODIFIED GLASGOW PROGNOSTIC SCORE IN EARLY STAGE NON-SMALL CELL LUNG CANCER**

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Introduction and objectives Up to 50% of patients treated radically for non-small cell lung cancer (NSCLC) subsequently present with metastatic disease. This is despite rigorous case selection and the use of adjuvant therapies based on clinical and/or surgical staging. A simple, objective biomarker that identified patients at higher risk of recurrence might facilitate more effective multi-modality radical treatment.

Since inflammation-based biomarkers offer robust prognostication in metastatic NSCLC, we hypothesised that the modified Glasgow Prognostic Score (mGPS), Neutrophil:Lymphocyte Ratio (NLR) and/or Platelet:Lymphocyte Ratio (PLR), measured prior to radical treatment would have utility in this regard.

Methods Utilising a radiology database, we retrospectively identified all patients with Stage I-IIa NSCLC who underwent