

Introduction Smoking is a risk factor for postoperative pulmonary complications (PPCs) following curative-intent surgery for lung cancer. Risk modification is via smoking cessation; the role that electronic cigarettes (e-cigarettes) have in preoperative tobacco replacement is a debated topic.

Aims Investigate the impact of smoking on postoperative outcome including long-term survival. Assess current smoking habits and attitudes towards preoperative smoking cessation, with emphasis on e-cigarette use.

Methods A prospective observational study was carried out on all patients following curative-intent lung cancer resection in a regional thoracic centre over 4 years. Preoperative smoking status was self-reported by all patients. PPCs were assessed daily in hospital using the Melbourne group scale.¹ Other data included patient demographics, hospital length of stay (LOS), intensive treatment unit (ITU) admission and mortality data. To assess smoking habits, a questionnaire was given to 105 patients attending the preoperative assessment unit.

Results Of 460 patients, 24% were current smokers, 12% ex-smokers 6 weeks duration, and 11% never smoked Compared to never smokers, current smokers had significantly longer hospital LOS in days (9, CI 7–11 vs. 6, CI 4–8; $p < 0.001$), higher frequency of PPCs (22% vs 2%, $p = 0.001$) and ITU admissions (14% vs. 0%; $p < 0.005$). Compared to never smokers, the trend was for reduced survival in current smokers from 1–3 years, but the survival lines converged after this (median follow-up 30 vs. 31 months; $p = 0.31$). The questionnaire found 24/105 patients were smokers, of these 80% patients had previously tried to quit but only 38% had been specifically approached by health-care professionals about smoking cessation. When asked if they would consider stopping smoking immediately if supplied an e-cigarette, 54% said yes.

Conclusions Preoperatively, 1 in 4 patients continue to smoke; the majority have attempted to quit and failed. Current smokers have higher postoperative morbidity with no significant survival difference within our follow-up period. Current methods of preoperative smoking cessation in this population are ineffective; patients appear willing to use e-cigarettes. Further research in this field is urgently needed.

REFERENCE

¹ Agostini P, et al. *Thorax* 2010;**65**:815–18

P165 RESULTS OF THE NORTHUMBRIA DIRECT ACCESS CXR PROJECT

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Northumbria Healthcare (NHCT) traditionally had a low number of patients presenting with early stage lung cancer leading to low resection rates. In addition a high number of patients presented through the emergency route rather than through target clinics.

A local initiative was developed to try to improve the local presentation and diagnosis rates. The Northumbria initiative utilised primary care education, a social marketing project and a direct access CXR project which ran for 12 months.

The assessment criteria for direct access CXR were based on NICE guidance and patients meeting these criteria could self-present for a CXR.

- Is the patient over 50
- Has the patient had a chest x-ray in the last 3/52
- Has the patient developed a new and persistent cough for more than 3/52
- Has the patient had persistent chest pain for more than 3/52
- Has the patient had blood in their phlegm

Results Over 12 months 768 CXR examinations were carried out. 751 people presented a cough, 192 with chest pain and 33 with haemoptysis.

18 CT's were requested due to a suspicious CXR and 52 people had a follow up CXR. 19 of these 70 were reviewed in a chest clinic.

4 lung cancers were detected, 2 of which were early stage and the patients had radical treatment. 5 pulmonary nodules were identified, for which interval follow-up was planned.

Conclusion The Northumbria Walk-in project proved successful in terms of delivering a campaign message to the local population. The trust communications team won a regional award for the best "low budget" campaign for this project.

The detection rate for lung cancer was not higher than one would expect from performing CXR's on a population of similar age with a smoking history and on current evidence did not provide evidence for continuing the walk in CXR programme.

However, over the 2 years while this project was being developed and awareness of cancer was targeted there was a 6% rise in the rate of early stage lung cancer locally suggesting that the combined awareness raising approach both locally and nationally has had some effect on presentation rate.

P166 THE FREQUENCY OF CHEST RADIOGRAPHS PRIOR TO THE ONSET OF LUNG CANCER SYMPTOMS

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Introduction Previous data has shown wide variation in the frequency of CXRs requested by GPs that is not explained by case mix factors. The relationship between threshold for CXR request and lung cancer characteristics at diagnosis is unknown.

Aim To analyse the frequency of CXRs prior to the development of lung cancer symptoms according to stage at presentation.

Method Retrospective review of an electronic database of lung cancer patients, excluding small cell, from 2010–2013. The dates of all CXRs in the three years before the first appointment with the lung cancer team were recorded. The frequency of CXRs was compared using Mann-Whitney U test with normal approximation.

Results 1750 patients were included. 589 had early stage disease (I/II) and 1161 had late stage disease (III/IV). The frequency of CXRs from 36 to 6 months prior to diagnosis is shown in Figure 1 according to stage at diagnosis. Patients subsequently diagnosed with early stage cancer had significantly more CXRs performed during this period compared to late stage patients (1.70 vs 0.92, $p < 0.001$).