# 482. How to improve lung cancer care

## 4670

Time to diagnostic procedures and treatment in outpatients diagnosed of lung cancer (LC) included in our rapid diagnose protocol (RPD)

M. Isabel Andrade, Tamara Gutierrez, Amaia Iridoy, Jose Antonio Cascante, Pilar Cebollero, V. Manuel Eguia, J. Javier Hueto. Pneumology B Department, Complejo Hospitalario de Navarra, Pamplona, Navarra, Spain

**Aim:** To determine the time to diagnose procedures and treatment in outpatients diagnosed of LC in Navarra (Spain) included in a RDP.

Method: Retrospective analysis of outpatients diagnosed of LC in our RDP from January 2006 to October 2010. The reference date was the day they were sent to our service. We analyzed time to CT, to bronchoscopy, to endobronchial ultrasound transbronchial needle aspiration (RT-EBUS), to transparietal fine needle aspiration (TFNA) and to Positron emission Tomography (PET), time to treatment and the hospitalization average.

**Results:** 70 patients were diagnosed of LC in our RDP; 80% were men, the mean age was 63.9; 68.5% were remitted from primary care (PC). The mean time to

## Wednesday, September 28th 2011

the last diagnostic procedure was 22,5 days from PC and 16,4 from first visit in our RDP (RDPfv). The table reflects time from PC\*(or other remission service) or RDPfv to each procedure.

Table 1

	Patients	Mean	
PC*-RDPfv	70	6	
RDPfv-CT	70	6.8	
RDPfv- Bronch.	51	9.7	
RDPfv-TFNA	20	19.4	
RDPfv-2TFNA	4	22.2	
RDPfv-3TFNA	1	21	
RDPfv-PET	33	17.4	
RDPfv-EBUS	9	19.7	

We use PET since 2006 and EBUS since October 2008. 75% of patients didn't need hospitalization. The mean days, when needed, was 3.1 (1-8). Patients required surgical treatment in 22,8%, oncologic in 68.5% and Palliative Care as first choice in 8,5%. Globally, time from PC\* to treatment was 37,4 days (5-103) and from RDPfv to treatment was 31,4days (0-90).

**Conclussions:** With our RDP we have achieved a lower time delay to diagnosis and treatment (no difference between kind of treatment) of LC comparing with most of the existing recommendations.

We haven't need hospitalization in most cases and the mean of days was low.

#### 4671

# Self reporting of symptoms and delays in patients presenting to a rapid access lung cancer clinic (RALCC)

Mateen Uzbeck, Colm Geraghty, Eleanor Dunican, Seamus Linnane, Ross Morgan. Respiratory Medicine, Beaumont Hospital, Dublin, Ireland

**Introduction:** The RALCC at our hospital is aimed at expediting the diagnosis of suspected thoracic malignancies.

**Methods:** A self-reported questionnaire to consecutive patients on their first visit. Patient's perception of why they were attending, symptoms, duration before seeking medical attention, time to referral and risks for lung cancer recorded.

Results: 154 patients, 81 male, 73 female, mean age 63 years (21-86). GP's made most referrals 87% and 68% perceived abnormal radiology as reason for attendance. Majority were symptomatic 88.6% with 57% reporting ≥3 symptoms. Cough was most common presenting symptom 61%, fatigue 52%, dyspnoea 45%, chest infection 45%, chest pain 40%, weight loss 32% and haemoptysis 25%. Haemoptysis had the least delay in presenting to a health care provider (mean 30 days, range 2-120) whereas for cough, dyspnoea and chest pain mean dealy was 4.5 months. Average delay in seeking medical attention and referral to RALLC was 14 weeks. 72% were current or ex-smokers and 21% reported at least one first degree relative with lung cancer.

Conclusions: significant delays exist between symptom onset and presentation to a health care provider and depends on symptom type. The bulk of the delay was before patients sought medical attention but there was still a sizeable delay between presentation and referral toRALCC. One in 5 patients had a first degree relative with lung cancer indicating that this may have been a factor in the decision to refer. Our study highlights the need for increased public awareness regarding the presenting symptoms of lung cancer and there exists the opportunity to reduce delays in diagnosis resulting in better outcomes.

## 4672

# Managing patient pathways to achieve lung cancer waiting time targets: Mixed method study $\,$

Hugh Ip<sup>1</sup>, Tarik Amer, Michael Dangoor, Affan Zamir, Darryl Gibbings-Isaac, Ranjeev Kochhar, Timothy Heymann<sup>2</sup>. <sup>1</sup>General Medicine, Guy's and St Thomas' Trust, London, United Kingdom; <sup>2</sup>Health Management, Imperial College Business School, London, United Kingdom

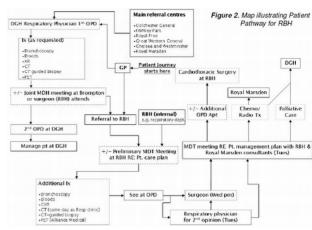
**Background:** England's NHS introduced a 62-day target, from referral to treatment, to make lung cancer patient pathways more efficient. This study aims to understand pathway delays that lead to breaches of the target when patients need care in both secondary and tertiary setting so more than one institution is involved. **Methods:** Mixed method cross case analysis. Qualitative methods include pathway mapping and semi-structured interviews. Quantitative analysis of patient pathway times from cancer services records.

Setting: Two tertiary referral hospitals in London

Participants: Database records of 53 patients were analysed. 19 sets of patient notes were used for pathway mapping. 17 doctors, 4 nurses, 8 managers and administrators were interviewed.

**Results:** The majority of the patient pathway (68.4%) is spent in secondary centres. There is more variability in the processes of secondary centres but tertiary centres do not have perfect processes either.

**Conclusions:** The actions of secondary centres have a greater influence on whether a patient breaches the 62-day target, compared to tertiary centres. Nevertheless variability exists in both, with potential for improvement.



Abstract 4672 - Figure

#### 4673

# Lung cancer multi-disciplinary team (MDT) decisions audit

Brendan Mallia-Milanes<sup>1</sup>, Jenny Graves<sup>2</sup>, Jeffrey Meecham-Jones<sup>2</sup>, SuLyn Leong<sup>3</sup>, Ian Mortimore<sup>3</sup>, Steve O'Hickey<sup>4</sup>, Phillip Ryan<sup>1</sup>. <sup>1</sup>Respiratory Medicine, Hereford County Hospital, Hereford, United Kingdom; <sup>2</sup>Thoracic Medicine Department, Gloucester Royal Hospital, Gloucester, United Kingdom; <sup>3</sup>Respiratory Medicine, Cheltenham General Hospital, Cheltenham, United Kingdom; <sup>4</sup>Respiratory Medicine, Worcester Royal Hospital, Worcester, United Kingdom

Background: Lung cancer resection and survival rates in the UK vary; the reasons for this are unclear.

Aims: To compare lung cancer MDT decision outcomes in 4 hospitals in one cancer network.

**Methods:** Each lung cancer MDT randomly selected 5 of their MDT cases and submitted them to the other MDTs for assessment. MDT decision outcomes for each case, including each MDT's own previously discussed MDT cases were collated. Mean percentage agreement of MDT outcomes was calculated for TNM staging and referrals for PET scan, curative surgery, radical radiotherapy and palliative chemotherapy.

Results: 3 hospital MDTs discussed 15 cases as well as having previously discussed their own 5 cases. 1 hospital submitted their 5 previously discussed cases but failed to discuss the other cases submitted to them. There were 17 non-small cell lung cancer cases, 2 indeterminate cases and 1 small cell lung cancer case. The number of cases referred for curative surgery varied between 6 to 7 cases per MDT. Percentage agreement was 83% for T staging, 91% for N staging, 98% for M Staging, 87% for referral for PET scan, 98% for curative surgery referral, 95% for radical radiotherapy referral and 93% for palliative chemotherapy referral.

Discussion: There was good agreement for staging and very high agreement for treatment referral. In this pilot study the high agreement for potentially curative treatment does not support the view that some MDTs are not referring patients for potentially curative treatment. As numbers are small we propose this issue be addressed by a national web-based quality assurance programme where each MDT assesses and reports sample cases each month and is given formative feedback.

## 4674

# Histological typing of lung cancer in bioptically obtained specimens under the aspect of therapeutical approaches – A multi-center study

Annette Fisseler-Eckhoff<sup>1</sup>, Rica Zinsky<sup>1</sup>, Florian Laenger<sup>2</sup>, Phillip Schnabel<sup>3</sup>, Iver Petersen<sup>4</sup>, Klaus Junker<sup>5</sup>. <sup>1</sup>Dr. Horst-Schmidt Kliniken, Institute of Pathology and Cytology, Wiesbaden, Germany; <sup>2</sup>Medizinische Hochschule Hannover, Institute of Pathology, Hannover, Germany; <sup>3</sup>Universitaetsklinikum Heidelberg, Institute of Pathology, Heidelberg, Germany; <sup>4</sup>Universitaetsklinikum Jena, Institute of Pathology, Jena, Germany; <sup>5</sup>Klinikum Bremen Mitte, Institute of Pathology, Bremen, Germany

The insufficiency of classifing lung cancer as SCLC or NSCLC clinical arose with the approval of the antifolate pemetrexed, which has a lower antitumorous effectivity in Squamous Cell Carcinoma. Often only biopsy specimens are available to exclude a squamous differentiation before chemotherapy decision.

The restrictive nature of subtyping lung cancer in biopsies demanded a skilled and experienced pathologist. This interlaboratory comparison should discover the accordance of subtyping of lung cancer biopsies evaluated in 5 different pathological institutes in germany. Is it possible to improve the accuracy histological typing by additional immunhistochemistry (IHC) panel?

60 biopsy specimens with Hematoxylin-eosin (HE) stain and immunhistological stained slides of at least Ck7, Ck5/6, p63, TTF1 were assembled and analysed from the pathologists. An estimation of predominantly-non-squamous yes/no and the histological subtype was done after examination the HE slide and again after the examination of the IHC. These two results were compared.

All 60 cases were analysed by all 5 participants. In average the agreement of

## Wednesday, September 28th 2011

predominantly-non-squamous with inspecting the HE slide was 50% and arose after IHC to 87%. The accordance of histological subtype arose from 58% after HE slide to 88% after IHC.

Histological subtyping of lung cancer biopsies can be done reliably with the help of an immunhistochemical panel of CK5/6, CK7, TTF1 and p63. Thus, we recommend the use of IHC to ensure diagnosis of lung cancer biopsies especially for patients coming into consideration for pemetrexed chemotherapy.

### 4675

## The lung cancer patient in the emergency department

Anne Pascale Meert, Julie Gorham, Thierry Berghmans, Jean Paul Sculier.

Thoracic Oncology and Intensive Care, Institut Jules Bordet, Brussels, Belgium

Introduction: – Currently, there are very few data in the literature on the causes of emergency department consultation for lung cancer patients, leading us to review the records of patients with lung cancer who presented at the emergency room of our cancer institute in order to determine the importance of emergencies and the main causes.

**Methods:** – We conducted a retrospective study including all patients with lung cancer consulting at the emergency department over a three years period (1st January 2008 and 31st December 2010).

Results: – Among 6575 consultations, 548 (8.3%) were selected, corresponding to 269 patients with lung cancer (out of 626 patients with lung cancer treated in our institution during the same period). Their main characteristics were: men/women 169/100, median age 61 years, non small cell lung cancer/small cell lung cancer 234/35, stage I/II/III/IV 7/3/42/217. The main reasons of consultation were respiratory symptoms (22.3%), fever (19.9%), pain (16.3%) and digestive symptoms (13.5%). Symptoms were due directly to cancer in 32.3%, to a cancer complication in 14.4% and to anticancer treatment in 20.3% of the cases.

The majority of the consultations lead to hospital admission: 54.5% were admitted in normal ward and 8.2% in the Intensive Care Unit. Median duration of hospitalisation was 9 days. Over the 344 hospitalisations, 61 deaths occurred (17.7%).

**Conclusion:** — Our study shows that lung cancer patients represent only 8% of the patients consulting in the emergency department. About half of the lung cancer patients have at least one consultation in emergency during their disease mainly for pain and respiratory problems.

### 4676

# Relapse after radical surgery for non-small cell lung cancer 2005-2009 – A retrospective quality management analysis

Niels-Chr. G. Hansen, Anja Ør Knudsen. Department of Respiratory Medicine, Odense University Hospital, Odense, Denmark

National guidelines for post-therapy lung cancer care are about to be introduced in Denmark. At our hospital, "usual care" after radical surgery for non-small cell lung cancer (NSCLC) has previously been to suggest the patient to have a chest x-ray once a year. To prepare improved post-therapy care we have made a retrospective analysis of the 986 consecutive patients from the primary uptake area reported by our diagnostic unit to the Danish Lung Cancer Registry in the 5-year period 2005-2009. Of the 792 patients with NSCLC 227 (28.7%) were treated with curative intent. Out of these 153 (19.2% of all with NSCLC) had intended radical resection of the primary tumor and if needed chemotherapy, radiotherapy, and/or resection of a single secondary tumor to assure a radical primary treatment. Median age for the 75 women and 78 men was 66 years (range 37 to 85 years). Clinical stages I, II, IIIa, and IIIB+IV were found in 122, 19, 5, and 7 patients. Two patients died at day 14 and day 31 after surgery. Among the 151 remaining patients, we have until February 22, 2011 recorded a relapse in 62 patients and a new lung cancer in three patients. In one patient, the cancer was found at post mortem examination, in 48 patients clinical symptoms lead to the diagnosis while a scheduled control by chest x-ray, CT, PET-CT, bronchoscopy, or blood tests lead to the diagnosis in 16 cases. Twenty-eight patients (18.5%) had a relapse within one year from surgery. Median time to relapse after a scheduled test was 288 days against 478 days in patients diagnosed after symptoms. Scheduled post-therapy control for all NSCLC patients may considerably shorten the time to detection of a relapse.