

Conclusions: These results lead to presumption that the downregulation of CK8/18 expression in NSCLC could play a significant role on the disordered proliferation of tumour cells during neoplastic progression, while the expression of CK19 might be not influential during the progression of the tumour. However, the prognostic significance of CK8/18 expression is required to keep further speculation.

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POSTER

The Risk of Lifelong DNA Damage Caused by Lung Cancer Among Rural Male Smokers Who Begin at Teenage

E. Odias¹. ¹ SmokeFree Foundation, Tobacco/Cancer Control, Abuja, Nigeria

Background: It is an established fact that tobacco is the major risk factor for lung cancer incidence. However, it affects more people in developing countries resulting to DNA damage.

Goals: To examine the effect of smoking on lung cancer risk and entire DNA damage in a relative large number of rural men, many of whom are poor and started smoking as teenagers.

Methods: We followed 50,232 men, ages 25 to 50 years, through a community-based tobacco control outreach program with questionnaires both in English and the local language to the North western and North eastern Nigerian Cohort Study in 2002/2003, through December 2007. We estimated relative risk (RR) of lung cancer associated with different measures of smoking initiation, duration, and intensity adjusting for confounding variables. We conducted analyses on the entire study population, among men who had smoked for at least 15 years, among non drinkers, and separately for each geo-political zone.

Results: Altogether, 10,240 men were diagnosed with lung cancer. Compared with never smokers, men who smoked for at least 15 years and who smoked 10 cigarettes or more daily had a higher RR. In contrast, men who had smoked for at least 15 years, but started after their 19th birthday, did not experience an increased lung cancer risk. The increased RR associated with smoking was observed among nondrinkers of alcohol, men with and without a family history of lung cancer in both geo-political zones in Nigeria.

Conclusion: Our results support the notion that men who start smoking as teenagers and continue to smoke for at least 15 years may increase their lung cancer risk with dramatic and lifelong DNA damage. Tobacco killed one hundred million people in the 20th century, if nothing urgent is done to reduce tobacco use, it will kill 1 billion people this 21st century. There is need for countries who are already parties to the Framework Convention on Tobacco Control-FCTC to domesticate the laws in their respective countries.

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POSTER

Does the Timing of Additional Chemotherapy Affect the Outcome of Radical Surgery for Malignant Epithelioid Mesothelioma?

E.M. von Meyenfeldt¹, A. Khosravi¹, V. Brown², S. Ahmed², A. Nakas¹, D.A. Waller¹. ¹ Glenfield Hospital, Department of Thoracic Surgery, Leicester. ² Leicester Royal Infirmary, Department of Oncology, Leicester, United Kingdom

Background: There is lack of evidence regarding the optimal timing of chemotherapy as part of multimodality treatment for malignant pleural mesothelioma (MPM). We aimed to examine whether timing of additional chemotherapy affects oncological outcome of radical surgery for MPM.

Material and Methods: From a prospective database we identified 154 patients with complete follow-up, referred from 40 hospitals, who underwent radical surgery as part of multi-modality treatment for epithelioid MPM in our centre in 11 years. No clear protocol existed for additional chemotherapy and the indication to start was left to the oncologist of the referring centre.

Chemotherapy	N	Survival [months] (excl 30 d mort)	Median FU [mo]	Median age [y]	% Male	% Stage III/IV	% EPP
Pre-operative	40	25 mo [15.4–34.6] (1 × 30 d mort)	20	59	83%	80%	70%
Early (<90d)	19	23 mo [19.9–26.1]	14	59	79%	79%	37%
Delayed	26	26 mo [14.2–37.8]	24	57	89%	76%	42%
None	69	14 mo [9.4–19.7] (7 × 30 d mort)	10	60	84%	89%	65%
Chemo vs no chemo p		0.011	NS	NS	NS	NS	0.02

Results: Out of 154 patients, 129 were Male, median age was 59 [14–75], 91 had extra pleural pneumonectomy (EPP) and 63 had lung sparing pleurectomy decortication (LSPD). The majority of the patients had stage IMIG III (58%) and IV (22%) disease.

40 Patients received preoperative chemotherapy, 19 early (<90d) and 26 delayed; 69 did not receive any chemotherapy. 85% Received platinum based therapy, in 50% in combination with Pemetrexed. Thirty-day mortality

was 5.2%. Median follow up was 18 months [range 1–93]. Group characteristics are shown in the table. EPP represented the majority in the pre-operative and in the no-chemotherapy groups. LSPD patients received post-operative chemotherapy more often. Other characteristics did not differ significantly.

Significant survival benefit was found for patients who received additional chemotherapy compared to surgery alone (p=0.011). Timing of this chemotherapy did not seem to influence this outcome (p=0.16).

Out of 114 patients who did not receive pre-operative chemotherapy, only 45 (39%) have received chemotherapy post-operatively. A poor post-operative performance state or local treatment preferences in the referring centres are possible explanations for this finding.

Conclusions: Receiving chemotherapy is of significant influence on survival after surgery for MPM. Timing of this chemotherapy does not seem to affect the results. Administering chemotherapy pre-operatively might help to achieve a higher rate of completed chemotherapy courses.

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POSTER

Gemcitabine and Cisplatin Followed by Concurrent Gemcitabine and Radiotherapy or Sequential Radiotherapy Alone in Unresectable Stage III Non-small Cell Lung Cancer (NSCLC)

G.S.M.A. Kerner¹, L.F.A. van Dulleman¹, E.M. Wiegman², A.H.D. van der Leest², J. Widder², J.F. Ubbels², T.J.N. Hiltermann¹, H.J.M. Groen¹. ¹UMCG, Department of Pulmonary Diseases, Groningen, ²UMCG, Department of Radiotherapy, Groningen, The Netherlands

Background: Gemcitabine is a radiosensitizer. It has been used to a limited extent in combination with radiotherapy in stage III NSCLC due to toxicity from full-dose gemcitabine with radiotherapy and due to high radiation volumes. A phase I study led to an optimal combination threshold (van Putten et al, Clin Cancer Res, 9:2003). The aim is to evaluate the outcome of concurrent and sequential chemoradiotherapy.

Methods: Patients with unresectable stage III NSCLC and a performance status WHO of 0–2 were selected. Concurrent chemoradiotherapy consisted of 2 cycles of gemcitabine 1125 mg/m² on day 1 and 8 and cisplatin 80 mg/m² on day 1 of each 21-day cycle followed by weekly gemcitabine 300 mg/m² during 5 weeks of thoracic radiation (60 Gy). When the radiation field was considered too large or patients were too fragile, patients received sequential chemotherapy which consisted of 2–4 cycles of the same chemotherapy followed by 5 weeks of thoracic radiation alone (60 Gy).

Results: Between March 1999 and August 2008 283 consecutive patients were treated, 135 patients received concurrent chemoradiation and 148 received sequential chemoradiation. For the concurrent group median age was 63 (range 35–86); male/female ratio was 73%/27%; WHO performance status 0/1/2/missing was 46%/51%/3%. Median progression-free survival (PFS) was 13 months (95% CI, 10–16) and median overall survival was 23 months (95% CI, 17–29). For the sequential group median PFS was 11 months (95% CI, 8–14) and median overall survival was 16 months (95% CI, 13–19).

Conclusion: Concurrent chemoradiotherapy with gemcitabine as radiosensitizer gives comparable results as reported for high-dose chemoradiotherapy regimens. Nearly half of patients were not fit enough to be treated with concurrent chemoradiotherapy schedules.

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POSTER

Where Do We Stand in the Multidisciplinary Approach to Non-small Cell Lung Cancer (NSCLC) – a Retrospective Single Institution Experience From Rural India

M.S. Tiwana¹, H.N. Lee¹, M. Gupta¹, S. Kumar², S.K. Verma³, S. Saini². ¹Cancer Research Institute Himalayan Institute Hospital Trust (HIHT) University, Radiation Oncology, Dehradun, ²Cancer Research Institute Himalayan Institute Hospital Trust (HIHT) University, Surgical Oncology, Dehradun, ³Cancer Research Institute Himalayan Institute Hospital Trust (HIHT) University, Medical Oncology, Dehradun, India

Background: Lung cancer is the leading cause of cancer-related death in men and women in the world. Numerous validated prognostic factors have been established which relate to survival outcomes in non small cell lung (NSCLC) cancer. However, in regions with limited resources there are other factors besides conventional ones which prognosticate the treatment. To better understand the demographic profile, treatment parameters and tumour response in such constrained environment like ours, we conducted this retrospective study.

Materials & Methods: From June 2009 through April 2011, 73 diagnosed NSCLC patients were included in this study. The patient, tumour-related and treatment related factors were analyzed. Median overall survival (OS), Kaplan–Meier survival plots, T-test, Cox Proportional Hazards models were