Results

• One hundred pts were identified.
• An average of 14 patients were treated per year with a trend for increasing numbers; 23 were treated in 2007. As expected these patients were elderly and more frail than those from surgical series and from the CHART trial.
• Median age: 74 yrs (45-86); 76% ≥ 70 yrs. PS >2: 37%. Weight loss >5%: 21%. No confirmed histology: 29%. Median tumour size: 3cm (1.1 to 6.4), 5% ≥ 6cm.
• 98% were Stage I. 61% had FDG PET-CT staging.
• 5yr OS for 2001-3 cohort poor, but 2004-2007 cohort had better 2yr OS.
• on multivariate analysis, weight loss had significantly worse outcome, but tumour size did not. In the PET staged cohort: 2yr OS 51% and 5yr OS 18%, compared to CT Staged (30% and 3%).

Background

• Stage I/II Non-Small Cell Lung Cancer (NSCLC) is potentially curable with surgery. However, many patients are unable to have surgery due to medical co-morbidities. Radical radiotherapy (RT) is an option. The regimes include CHART (Continuous Hyperfractionated Accelerated Radiotherapy), 55Gy/20#/4weeks or 64Gy/32#/6.5 weeks.
• Stereotactic Body Radiotherapy (SABR) is now being offered to selected patients in the UK with higher cure rates 5yr OS (42% versus 20%).
• A previous audit of patients treated in Northern Ireland (NI) from 2001 to 2003 inclusive, demonstrated good 2-yr overall survival (OS) (improved from the audit period 1986-1992) and lower pneumonitis compared to literature standards.
• We wanted to re-audit the cohort of patients and compare to a national standard.

Aims

• Re-audit 2001-2003 dataset to assess the 5-yr OS
• To assess the annual rate of delivery of radical lung radiotherapy for early stage NSCLC
• Determine 2-yr OS from 2004-2007 dataset
• Estimate number of patients suitable for SABR in NI per year

Standard

• 2 yr & 5 yr OS compared with the CHART trial.
• Overall Survival in CHART: 2 yr 30% and 5 yr 20%

Methodology

• Retrospective chart review of patients identified from the lung cancer database (2004 to 2007) and from the previous audit (2001 to 2003) was performed.
• Patient and tumour characteristics, as well as treatment outcomes, were extracted from the existing database and from electronic chart review. Included were all patients receiving radical RT for stage I & II lung cancer.
• Kaplan Meier was used to estimate overall survival and Cox proportional hazards model for multivariate analysis.

References: