Survival Outcomes for Pre-operative chemotherapy for Squamous Cell Carcinoma of the Oesophagus.

Survival Outcomes for Pre-operative chemotherapy for Squamous Cell Carcinoma of the Oesophagus.

Authors:
Eileen Parkes¹,², Catherine Davidson¹,², Man Yue Siu¹, Ray Kennedy³, Richard Turkington¹,²

Institutions:
1. Cancer Centre, Belfast City Hospital, Lisburn Road, Belfast, N. Ireland.
2. Centre for Cancer Research and Cell Biology, Queen’s University Belfast, Lisburn Road, Belfast, N. Ireland.
3. Department of Upper Gastrointestinal Surgery, Belfast City Hospital, Belfast, N. Ireland.

Aims:
Squamous cell carcinoma (SCC) of the oesophagus accounts for 28% of all oesophageal cancer cases in the UK. The MRC OEO2 trial established the use of pre-operative Cisplatin and 5-fluorouracil chemotherapy prior to surgical resection and the use of pre-operative cisplatin-based chemo-radiotherapy has also been examined. Long term results demonstrated 5 year survival rates of 25.5% and 27.9% for cisplatin-based pre-operative chemotherapy and chemo-radiotherapy respectively. We sought to assess treatment delivery, survival outcomes and prognostic factors for oesophageal SCC patients treated with pre-operative chemotherapy and surgical resection at a tertiary referral centre.

Methods:
Pre-operative chemotherapy comprised of 2 cycles of CFU (Cisplatin 80mg/m² D1 and 5-fluorouracil 1000mg/m²/day D1-4). Baseline demographics, treatment details and clinical outcomes were collected and clinical and pathological factors predicting outcome were assessed.

Results:
From January 2004 to December 2012, 73 patients with oesophageal SCC were treated with pre-operative chemotherapy followed by surgical resection. Patients at our centre were significantly older (p=0.035) and had a poorer performance status (p=0.023) compared to patients in the OEO2 trial. Median age was 66 (range 44-81) and a higher proportion of female patients (43.8% v 23.5%, p=0.0005) were treated at our centre. 70 (95.6%) patients completed two cycles of CFU chemotherapy with 67 (91.2%) patients proceeding to planned surgical resection. The median overall survival was 32.6 months with a 5 year survival rate of 39%. A clear circumferential margin and absence of lymphovascular invasion were statistically significant predictors of relapse free and overall survival.

Conclusions:
Survival outcomes for SCC of the oesophagus at our centre were better than the published data for cisplatin-based pre-operative chemotherapy and chemoradiotherapy despite an older and less fit population.