Weight Loss during chemotherapy in patients with advanced Oesophagogastric (OG) and Hepatobiliary-Pancreatic (HPB) cancers is not a surrogate for disease progression

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Introduction: Weight loss is a common presenting symptom for patients with cancers of the upper gastrointestinal (UGI) tract. The causes are multifactorial, and include physical obstruction to nutrition, malabsorption, reduced appetite and tumour related cachexia from uncontrolled malignancy. A high incidence of weight loss was documented in the group of patients who died within 30 days of systemic therapy in a previous audit by our group. We therefore wanted to investigate whether weight loss during systemic chemotherapy for advanced malignancy could be a clinical predictor for disease progression.

Methods: We undertook a retrospective audit of patients with locally advanced unresectable or metastatic UGI malignancy starting 1st-line chemotherapy between 01/04/2013 and 31/03/2014 at our hospital trust. Patients were identified according to diagnosis by ICD-10 code. We divided diagnoses into oesophagogastric (OG: C15, C16, C17) and Hepatobiliary-Pancreatic (HPB: C22, C23, C24, C25) malignancies.

Results: 133 patients with UGI malignancies and PS 0-2, started 1st-line chemotherapy at GSTT between 01/04/2013 and 31/03/2014. For 59 OG cancer patients, the mean value of body weight change for those with Progressive Disease (PD) was -2.16% with standard deviation of 5.66 (range -14.5% to +9%). 50% of those who gained weight, had developed ascites. For those with disease control (CR, PR, SD) the mean value of body weight change was -1.94% with standard deviation of 6.19 (range -18.2% to +14.3%). Subgroup analysis showed for radiological SD a mean value of body weight change to be -1.79%, with standard deviation 5.94, compared to PR having a mean value -2.09%, with standard deviation 6.5. For 74 HPB cancer patients, the mean value of body weight change for those with PD was -2.15% with standard deviation of 7.85 (Range -17% to +11.3%). 28.6% of patients who gained weight had developed ascites and 4.8% malignant pleural effusion. For those with disease control (CR, PR, SD) the mean value of body weight change was +0.49% with standard deviation of 7.05 (Range -17.3% to +18.4%). Subgroup analysis showed for radiological SD a mean value of body weight change of +1.39%, with standard deviation 5.95 compared to PR having a mean value -0.9%, with standard deviation 8.75

Conclusion: In our cohort of patients we did not detect a correlation between weight change and tumour response. Weight change cannot be used as a reliable early predictor of disease control or progression of disease, during primary or 1st-line chemotherapy for UGI malignancies. The weight loss observed in patients achieving disease control is currently unexplained and requires further investigation. This reinforces the need for dietetic input to address reversible causes as significant weight loss may impact on dose intensity and potentially access to subsequent lines of therapy.