

393), dementia (n = 9) and other (n = 311). The lowest mortality was seen in patients with HNC (30 day mortality = 5.2%, 1 year mortality = 32.6%). In comparison, 30 day mortality in all other groups was significantly higher (8.47% in neurological diseases, 15.86% in dysphagic stroke, 33.3% in dementia and 11.25% in 'other' indication,  $p < 0.01$ ). Mortality was also significantly higher at one year ( $p < 0.01$ ). There was no significant difference in mortality when comparing radiologically inserted and percutaneous endoscopic gastrostomies. Higher mortality rates were seen in patients aged 60 years or above at 30 days (OR 2.439 (1.666 – 3.731)  $p < 0.0001$ ) and also at 1 year (OR 3.140 (0.268 – 0.600)  $p < 0.0001$ ). Albumin less than 30 g/L was also associated with significantly higher 30 day (OR 4.486 (3.067 – 6.561)  $p < 0.0001$ ) and 1 year mortality outcomes (OR 2.319 (1.830 to 2.939)  $p < 0.0001$ ). In accordance with recent published data, our findings would support an elevated CRP ( $>5$  mg/L) being a factor associated with 30 day mortality (OR 8.930 (1.199 to 66.51)  $p = 0.006$ ).

**Conclusion** Referral indication for gastrostomy significantly impacts 30 day and 1 year mortality outcomes, with lowest rates demonstrated in patients with HNC. Identification of factors associated with mortality as seen in this study could help improve patient selection and be of relevance in the decision making process for gastrostomy.

**Disclosure of Interest** None Declared.

#### OC-024 PREDICTING 30-DAY MORTALITY FOLLOWING PEG INSERTION: EXTERNAL VALIDATION OF A PREVIOUS SCORING SYSTEM AND ANALYSIS FOR ADDITIONAL PREDICTIVE FACTORS

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10.1136/gutjnl-2014-307263.24

**Introduction** Percutaneous endoscopic gastrostomy (PEG) insertion is a well-established technique for providing long-term enteral nutrition. However concerns have been raised regarding the high 30-day mortality associated with PEG, and the related ethical implications of patient selection. Accordingly, a previous predictive tool was developed using age and serum albumin level but was created on a relatively small cohort. External validation of the score was performed in the same region but has not been outside of this area. This study aimed to externally validate this previous scoring system and also try to identify any further predictors of 30-day mortality in a larger cohort.

**Methods** Retrospective review of all gastroscopy reports documenting PEG insertions between January 2001 and January 2012 in our centre was undertaken. Hospital electronic systems were used to determine patient demographics, laboratory results and outcome at 30 days. In patients with newly inserted PEG tubes, the scoring system was applied and assessed using receiver operating curve analysis to determine the discriminative capacity. Furthermore, univariate and multivariate binary logistic regression analyses were performed using the current database to identify additional predictors of 30-day mortality.

**Results** The PEG database included 1373 patients, of which 808 were new PEG insertions and suitable for analysis. For each increasing gradation of the scoring system, mortality rose with 4% of those scoring zero dying compared to 50% scoring three. An area under the ROC curve of 0.686 (95% confidence interval 0.635–0.737) indicated reasonable discriminative capacity. Multivariate analysis demonstrated that age  $\geq 60$  years

(OR = 2.097 [ $p = 0.016$ ]), serum albumin levels of 25–34 g/l (OR = 2.447 [ $p = 0.001$ ]) or  $< 25$  g/l (OR = 6.769 [ $p < 0.001$ ]), C-Reactive Protein  $\geq 10$  mg/l (OR = 2.713 [ $p = 0.009$ ]) and lymphocyte count of  $< 1.5 \times 10^9/l$  (OR = 2.016 [ $p = 0.004$ ]) increased the odds of 30-day mortality, whilst inpatient PEG placement decreased the risk of death (OR = 0.529 [ $p = 0.005$ ]).

**Conclusion** The previous scoring system demonstrated reasonable predictive proficiency but the area under the ROC curves were not  $> 0.8$ . The recognition of further predictors of 30-day mortality allows for remodelling of the score which may improve the accuracy. However, future prospective, multicentre studies with defined outcomes are necessary to improve data collection. Additionally, more information is needed about cause of 30-day mortality and importantly quality of life following PEG insertion.

**Disclosure of Interest** None Declared.

#### OC-025 SURVIVAL OF PATIENTS WITH PALLIATIVE INOPERABLE GASTROINTESTINAL OBSTRUCTION DUE TO MALIGNANCY TREATED WITH HOME PARENTERAL NUTRITION

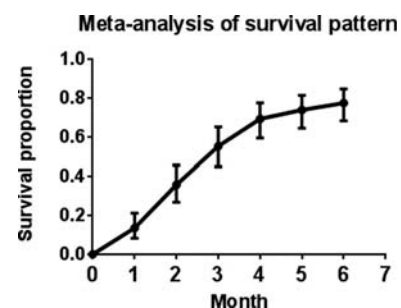
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10.1136/gutjnl-2014-307263.25

**Introduction** There is controversy about the indications for home parenteral nutrition (HPN) during the palliative phase of malignancy causing inoperable gastrointestinal obstruction (IBO). This is partly due to uncertainty about the survival of patients. This study aimed to establish the survival characteristics of these patients in order to inform decisions about the use of HPN.

**Methods** A systematic review with meta-analyses were carried out in accordance with the Cochrane protocol for adult patients ( $> 18$  years) with a confirmed diagnosis of malignancy causing IBO (in at least 80% of the patients) being treated with palliative HPN. A literature search was carried out in April 2013 using Medline, EMBASE, CINALH and Web of knowledge. Whenever possible, individual patient data were extracted to allow meta-analyses.

**Results** 11 studies involving 420 patients, met the inclusion criteria. 3 studies reported individual patient data, 4 studies represented this using Kaplan Meier, one study using scatter plot and 3 studies only reported averages for survival length. The extraction procedure which gathered individual information on



**Abstract OC-025 Figure 1** Random effects meta-analyses of survival at monthly intervals up to 6 months (n=220 patients; 8 studies). The bars represent the 95% confidence intervals