**PWE-037**

**PROTON PUMP INHIBITORS AND HYPMAGNESAEMIA**

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S Hebar, N Sharma, P Wilson. Department of Gastroenterology, Heartlands Hospital, Birmingham, UK

**Introduction** Hypomagnesaemia is a rare and potentially serious complication of PPI therapy. About 30 cases of severe hypomagnesaemia have been reported in long term PPI users.1

**Methods** We describe two cases recently admitted to our hospital with symptomatic hypomagnesaemia and a history of long term PPI usage.

**Results** Patient 1—A 54-year-old female was admitted with nausea, vomiting and abdominal discomfort for few months. Patient was on lansoprazole for more than a year. On admission, magnesium level was 0.42 mmol/l. Patient was treated with magnesium supplements and was sent home with increased dose of lansoprazole. Over the next few weeks, magnesium level dropped to 0.4 mmol/l in spite of supplementation. On stopping PPI, magnesium returned to normal levels in 4 weeks time. Patient 2—a 75-year-old female was admitted with vomiting and lethargy. Patient was on PPI for more than 18 years. Magnesium level was 0.15 mmol/l and calcium 1.62 mmol/l. Patient was treated with intravenous supplements and discharged on oral magnesium. Within 2 months, patient was readmitted with similar complaints and magnesium level was again noted to be 0.15 mmol/l. OGD and CT abdomen were normal. Urinary magnesium levels were normal. Magnesium levels did not normalise in spite of supplementation. Omeprazole was stopped and magnesium started improving over the next 4 weeks.

**Conclusion** Hypomagnesaemia is a under recognised complication of long term PPI therapy, which responds rapidly on stopping PPI. In most of the reported cases, a causal relationship with PPI use has been established by recurrence of hypomagnesaemia after rechallenge.2 The cause of hypomagnesaemia is poorly understood. Mutation of TRPM 6/7 gene which is involved in the active transcellular pathway of intestinal absorption of magnesium is one of the postulated mechanisms.3 Monitoring magnesium levels in patients on long term PPI should be considered.4 This rare complication might not even be so uncommon as more people become aware of the association.

**Competing interests** None declared.

**REFERENCES**

3. FDA Drug Safety Communication. Low Magnesium Levels can be Associated with Long-Term use of Proton Pump Inhibitor drugs (PPIs).

**PWE-038**

**INFLUENCE OF POSTOPERATIVE MORBIDITY ON LONGTERM CANCER SURVIVAL AFTER OESOPHAGO-GASTRIC SURGERY**

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A Eltweri, S Satheesan,* S Ubhi, D Bowrey. Department of Surgery, University Hospitals of Leicester NHS Trust, Leicester, UK

**Introduction** Previous studies have shown that postoperative adverse events after colorectal resection predict a poor prognosis with early cancer relapse. The aim of this study was to report the outcome of patients undergoing oesophago-gastric resection to assess the influence of in-hospital factors on longterm cancer survival.

**Methods** Retrospective review of patients undergoing oesophago-gastric resection for carcinoma during the years 2006—2010 at our institution. Minimum follow-up of 12 months was required.

**Results** The study population was 164 patients (110 male) of median age 64 years (range 32—84). 84 underwent oesophagectomy, 80 gastrectomy. 99 received neo-adjuvant chemotherapy. The 90-day, 1-year and 3-year survival were 92%, 84% and 49% respectively. 69 patients (42%) developed postoperative complications (commonest: pneumonia 19%, anastomotic leak 7%, wound infection 6%). None of tumour site (oesophagus vs stomach, p=0.75), length of ITU stay (<3 days vs >3 days, p=0.50) or development of postoperative complications (p=0.70) influenced longterm prognosis. The only two factors that influenced longterm outcome were UICC stage (p<0.001) and circumferential resection margin (positive vs negative, p=0.001).

**Conclusion** Patients experiencing postoperative morbidity can expect the same longterm oncologic outcome as those not suffering these early setbacks.

**Competing interests** None declared.

**PWE-039**

**ROUTINE WATER SOLUBLE CONTRAST SWALLOW HAS LIMITED CLINICAL VALUE IN THE DETECTION OF Anastomotic Leaks Following Oesophagectomy**

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S Love,* S Bruce, T S Athwal, N Howes, M Hartley. Upper GI Surgery, Liverpool Heart and Chest Hospital NHS Foundation Trust, Liverpool, UK

**Introduction** Water-soluble contrast swallow (WSCS) is performed following oesophagectomy to assess anastomotic integrity before commencing oral intake. This study, the largest in the UK to date, challenges the routine use of WSCS following oesophagectomy.

**Methods** All patients undergoing open transthoracic oesophagectomy for oesophageal cancer with intrathoracic anastomosis, within a supra-regional upper GI cancer centre, were registered on a prospective database between 2006 and 2011. WSCS results, anastomotic leak rate and the modality of leak detection were analysed.

**Results** During the study period, 116 oesophagectomies were performed. WSCS was undertaken in 97 (84%) cases on a median of day 5 (range 3—8) post operatively; 95 (98%) WSCS reported no evidence of a leak, two studies reported a leak and one study was equivocal. WSCS was not performed in 19 (16%) cases; 10 patients developed early clinical signs suggestive of an anastomotic leak and were immediately imaged by CT, eight had a prolonged ITU stay due to cardiorespiratory complications while one patient died peri-operatively. There were 6 (5%) anastomotic leaks of which three patients had immediate CT due to clinical deterioration while three patients had routine WSCS. WSCS was followed by CT in two patients due to a positive or equivocal finding. One patient had no WSCS evidence of a leak but then developed sepsis and CT confirmed a leak. Clinical signs suggestive of a leak were evident in all patients within 7 days post-operatively.

**Conclusion** Routine WSCS has limited value in the detection of anastomotic leak following oesophagectomy. All patients with an anastomotic leak developed significant clinical signs of a leak that were subsequently confirmed by CT imaging. WSCS altered the management in just 2% of cases.

**Competing interests** None declared.

**PWE-040**

**LYMPH NODE METASTASIS IN EARLY OESOPHAGEAL CANCER: EXPERIENCE FROM A 10 YEAR UK COHORT**

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