$(0.17\pm0.1\%,\,N{=}3).$  Neither FeNTA nor FeCitrate reversed the effect of Hydroxychloroquine suggesting its effect is not mediated by changes in iron metabolism. A trend towards higher pH was seen with Hydroxychloroquine compared to control (7.22 $\pm0.016$  vs  $6.66\pm0.19)$  but this did not reach significance.

**Conclusion** Hydroxychloroquine enhances antibiotic efficacy and macrophage killing of AIEC. Its mechanism of action is not via pH dependent iron metabolism but is likely due to direct phagolysosomal pH changes. Further work is required to determine its mechanism of action but it holds potential as a treatment for Crohn's

Competing interests P Flanagan: None declared, B Campbell: None declared, J Rhodes consultant for: a member of advisory boards for Atlantic, Procter and Gamble and Falk, Speaker bureau with: Received speaking honoraria from Abbott, Falk, Ferring, Glaxo Smith Kline, Procter and Gamble, Schering Plough, Shire and Wyeth, Conflict with: With the University of Liverpool and Provexis UK, holds a patent for use of a soluble fibre preparation as maintenance therapy for Crohn's disease plus a patent pending for its use in antibiotic-associated diarrhoea.

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## BSG endoscopy section symposium and free papers: "Managing bleeding risk"

OC-141

UPPER GI BLEEDING IN SCOTLAND 2000—2010:
IMPROVING OUTCOME BUT A SIGNIFICANT WEEKEND
EFFECT

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**Introduction** Recent studies have suggested a reduction in incidence of upper GI haemorrhage (UGIH) and a possible worse outcome if patients present at weekends. Our aim was to assess trends in numbers and mortality of patients admitted with UGIH in Scotland and to examine whether weekend presentation affected outcome.

**Methods** We identified 23 ICD-10 codes that identified UGIH and interrogated ISD Scotland data using these codes for the 10-year period 2000–2010. We analysed the annual numbers of patients and their 30-day mortality during this period, comparing length of stay and mortality for those admitted at weekends and weekdays.

**Results** A total of 61 574 Scottish residents were admitted to Scottish hospitals with a diagnosis of UGIH during the years 2000/ 1-2009/10. There was no significant change in annual numbers of admissions during this period, but there was a reduction in 30-day mortality from 10.3% to 8.8% (p<0.001). For the whole study period, patients admitted with UGIH at weekends had a higher 30-day mortality compared with those admitted on weekdays (p<0.05). A significantly higher mortality for patients admitted at weekends was seen in 9 of the 10 years, including each of the last five years. This was despite patients admitted at weekends being younger than those admitted on weekdays (57.6 yrs vs 58.8 yrs; p<0.001). Over the study period there was a greater length of stay for patients admitted on weekends compared with weekdays (p<0.05), with the greatest difference found in the most recent year of study.

**Conclusion** There has been a gradual reduction in mortality for patients admitted with UGIH in Scotland over the past 10 years. Despite a younger age, patients admitted at weekends had consistently higher mortality and greater length of stay compared with weekday admissions.

Competing interests None declared.

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OC-142

## HEMOSPRAY FOR NON-VARICEAL UPPER GASTROINTESTINAL BLEEDING: RESULTS OF THE SEAL DATASET (SURVEY TO EVALUATE THE APPLICATION OF HEMOSPRAY IN THE LUMINAL TRACT)

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**Introduction** Hemospray is an endoscopic haemostatic agent licensed for use in non-variceal upper gastrointestinal bleeding (UGIB). It has been shown to be effective in achieving haemostasis in bleeding peptic ulcers in a pilot study from Hong Kong.<sup>1</sup>

**Methods** From June until September 2011 several European hospitals participated in the SEAL dataset. Data on the use of Hemospray, lesions treated and other endoscopic modalities employed were prospectively collected. Rockall score and treatment outcomes were obtained retrospectively. The type of lesion treated and the use of Hemospray as monotherapy or combination therapy was at discretion of the endoscopist.

Results Eighty two patients (57M:25F) were treated across 10 hospitals. Median age was 70 years. Aetiology of UGIB was gastroduodenal ulceration in 52% (n=43), post EMR 9% (n=7), tumour 6% (n=5), oesophageal ulceration 4% (n=3), dieulafoy lesion 4% (n=3), GAVE 2% (n=2), post-polypectomy 2% (n=2) and other causes totalling 21% (n=17). The gastroduodenal ulcers were classified as Forrest 1a (n=19), Forrest 1b (n=21) and unclassified (n=3). Hemospray was used as monotherapy in the majority of patients (57% n=47). In 8 (10%) it was used as first modality followed by additional endoscopic treatment and in 27 (33%) it was used as an adjuvant (rescue) therapy. Primary haemostasis was achieved in 71 patients (87%). Results of therapy for each of the three subgroups are shown in the Abstract OC-142 table 1. There were five deaths none of which were due to bleeding. Cause of death was liver disease in two patients, myocardial infarction, aspiration pneumonia and perforation in the remaining three patients respectively. There were eight technical complications: four blockages of the application catheter, one blockage of the endoscope working channel, on two occasions the endoscope became adherent to the oesophageal mucosa after use in retroflexion and on one occasion the CO<sub>2</sub> propellant cartridge failed to operate.

Abstract OC-142 Table 1

	Hemospray monotherapy	Hemospray + additional endoscopic treatment	Standard endoscopic therapy + hemospray
Number of patients	47	8	27
Rockall score (median)	6	7	6.5
Primary haemostasis	46/47 (98%)	6/8 (75%)	19/27 (70%)
Rebleed (7 days)	7/46 (15%)	1/6 (17%)	7/19 (37%)
Mortality (7 days)	3/47 (6%)	0	2/27 (7%)
Number of peptic ulcers	19	6	18
Proportion forrest 1a	7/19 (37%)	3/6 (50%)	9/18 (50%)
Proportion forrest 1b	10/19 (53%)	3/6 (50%)	8/18 (44%)
Unclassified	2/19	0	1/18

**Conclusion** Hemospray provides an effective endoscopic modality for achieving primary haemostasis of non variceal UGIB as

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