**Abstract OC-062 Table 1**

| | Before | | After | | | |
|---|---|---|---|---|---|---|
| Quartile | N | ADR (%) | N | ADR (%) | Difference ratio | p value ADR |
| Upper | 785 | 27.4 | 2508 | 21.5 | 0.78 | <0.001 |
| Upper middle | 1116 | 17.5 | 3119 | 19.2 | 1.10 | 0.20 |
| Lower middle | 785 | 13.3 | 2539 | 19.3 | 1.45 | <0.001 |
| Lower | 936 | 7.3 | 2405 | 13.9 | 1.90 | <0.001 |

N = number of colonoscopies

≥25 procedures during the period before were ranked according to ADR and quartiles constructed. Change in Buscopan use was used as a surrogate marker for intervention uptake. A corrected Chi Squared test was used to check for significant change.

**Results** One hundred and eighteen and 68 colonoscopists were included in the global and quartile analyses. The study included 17508 colonoscopies, 4351 and 13157 in the pre and post intervention periods respectively. There was a significant global increase in buscopan use (15.8 vs. 54.4%, $p < 0.001$), also seen in each quartile, and ADR (16.0 vs. 18.1%, $p = 0.002$), Table 1.

**Conclusion** Our evidence based educational intervention resulted in a significant change in behaviour, evidenced by increased Buscopan use. A significant increase in ADR occurred globally and in the two lower quartiles. A fall was seen in the upper quartile, but the ADR in this group remained above that in the other groups and the global mean of 18.1%. This study demonstrates that simple evidence based educational interventions with support can significantly change practice and ADR, particularly amongst the poorest performers.

## REFERENCE

1 Pronovost P *et al*. An intervention to decrease catheter-related bloodstream infections in the ICU. *N Engl J Med* 2006:355:2725–32

**Disclosure of Interest** None Declared.

# Joint neuro-gastroenterology/motility and AGIP section free papers

## OC-063 PHARYNGEAL ELECTRICAL STIMULATION (PES) IN DYSPHAGIA POST-ACUTE STROKE: A DOUBLE-BLIND, RANDOMISED TRIAL

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**Introduction** Pharyngeal Electrical Stimulation (PES) is known to activate pharyngeal motor pathways. It has shown promise in acute stroke pilot studies, having improved swallowing function at 2-weeks.[1,2]

**Methods** We aimed to recruit 100 hospitalised patients with new-onset dysphagia within 6 weeks of stroke at three Greater Manchester centres. Participants were randomised to either Active or Sham PES. Both interventions were delivered via an intraluminal pharyngeal catheter, left *in situ* for 10 min, once-daily for 3 days. Active intervention was delivered at optimal parameters (5Hz, at 75% maximum-tolerated intensity). The primary outcome measure was intended to be penetration-aspiration scores on videofluoroscopic assessment at 2-weeks. Owing to logistic difficulties with videofluoroscopy, prior to unblinding and analysis of data, we upgraded the dichotomised Dysphagia Severity Rating (DSR) scale,[2] assessed by independent, blinded speech therapists, to be the primary outcome: mild/no dysphagia (scores 0–3) or moderate-severe dysphagia (scores 4–12). We analysed under the intention to treat principle using logistic regression with an odds ratio (OR)/ Hazards ratio (HR) >1 indicating a favourable outcome for the active group.

**Results** We recruited 36 participants: median age 71y; 61% male, 92% moderate-severe dysphagia; 58% with enteral feeding tubes in-situ. At 2-weeks, 11/18 (61%) in the active group had DSR <4 compared with 9/18 (50%) in the sham group: OR (95% CI) = 2.53 (0.52 to 14.56). Patients in the active group also had shorter times to hospital discharge (39 vs. 52 days, HR (95% CI) of 1.19 (0.55, 2.57)) and removal of nasogastric feeding tubes (8 vs.14 days, HR (95% CI) of 2.01 (0.51, 7.93)). By 3 months, all but 3 patients in each group had DSR <4: OR (95% CI) = 1.0 (0.13 to 7.02).

**Conclusion** The observed differences are consistent with the hypothesised effect of PES in accelerating recovery of swallowing over the first 2-weeks following treatment. Lower than desired recruitment prevents definitive answers from this study but study design experience and outcome data reported here are essential to inform a definitive, multi-centre randomised trial.

## REFERENCES

1 Fraser, *et al*. 2002
2 Jayasekeran, *et al*. 2010

**Disclosure of Interest** None Declared.

## OC-064 PSYCHOPHYSIOLOGICAL AND CORTICAL RESPONSES TO VISUALLY INDUCED MOTION SICKNESS

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**Introduction** Nausea is an aversive experience, which negatively impacts on quality of life, adherence to treatment and is a cause for discontinuation of the development of novel compounds. Significant knowledge gaps remain in our understanding of the cortical and psychophysiological mechanisms involved in the genesis and maintenance of nausea. We aimed to develop and validate a readily administered a visually induced motion sickness (VIMS) stimulus to examine the psychophysiological changes induced by the stimulus and characterise the changes in cortical activity using functional magnetic resonance imaging (fMRI).

**Methods** A 10-min video of motion and a control video of a still image were presented to 98 healthy volunteers (mean age



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