

had better mean comfort score (0.4 vs 2.0, $p < 0.001$) even with intravenous sedation during gastroscopy in 17 (55%) patients.

Conclusion Real-time viewing of oesophageal capsule potentially offers a less invasive means of variceal screening/surveillance with better patient comfort.

REFERENCE

- DeFranchis *et al.* Esophageal capsule endoscopy for screening and surveillance of esophageal varices in patients with portal hypertension. *Hepatology* 2008;47:1595–1603

Disclosure of Interest None Declared.

PTU-028 FIRST HUMAN SERIES OF MAGNET ASSISTED CAPSULE ENDOSCOPY (MACE) IN THE UPPER GI TRACT USING THE NOVEL MIROCAM-NAVI SYSTEM

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Introduction Attempts in employing a simple technique of capsule endoscopy for visualisation of the upper GI tract has, thus far, been experimental, cumbersome and potentially expensive. We describe the first human series for comprehensive visualisation of the upper GI tract using the simple Intramedic MiroCam-Navi system. Our aim was to demonstrate the manoeuvrability of this magnetic capsule and evaluate its ability to completely visualise and maintain views in the upper GI tract. **Methods** 26 volunteers observed a 12 hr overnight fast. 30 mins before the examination volunteers drank a preparation mixture of 20 mg of maxalon syrup with simethicone and pronase. After capsule ingestion, volunteers were allowed sips of water during the procedure. The MiroCam-Navi magnet was placed at strategic points on the body surface and rotated to hold and manoeuvre the capsule. Control was assessed by moving and holding the capsule for 1 min to visualise each of the following stations: lower oesophagus, cardia, fundus, body, incisura, antrum and pylorus and also by traversing across the stomach and through the pylorus. Total procedure time was taken from the moment of ingestion of the capsule to either reaching the duodenum, or after attempting a maximum of 10mins to traverse the pylorus. All volunteers subsequently underwent a standard upper GI endoscopy within 3 days.

Results Volunteers' median age was 38 yrs (range 26–45), median BMI 24.1 (range 19.4–38.2), median volume of water consumed 800 mls (range 200 mls–1500 mls) and median procedure time 24 min (range 12–39 min). Table 1 shows the success of clear visualisation of landmarks

The capsule could be held in the lower oesophagus, cardia, fundus, body and antrum in 92%, 88%, 92%, 88% and 81%

Abstract PTU-028 Table 1

	Landmark visualised	Landmark not visualised
GOJ	92% (n = 24)	8% (n = 2)
Cardia	88% (n = 23)	12% (n = 3)
Fundus	96% (n = 25)	4% (n = 1)
Body	100% (n = 25)	0% (n = 0)
Incisura	96% (n = 25)	4% (n = 1)
Antrum	96% (n = 25)	4% (n = 1)
Pylorus	100% (n = 26)	0% (n = 0)

occasions respectively. The capsule could be moved from the fundus to the antrum in all cases and traverse the pylorus in 50% (n = 13). Age ≥ 40 was associated with successful pyloric traversing ($p = 0.04$).

There was positive concordance for 8 out of 9 minor pathological findings with standard upper GI endoscopy. A small 4 mm submucosal lesion was missed by capsule endoscopy in the cardia of one volunteer where views were obscured.

Conclusion This is the first convincing demonstration of the potential value of MACE in the upper GI tract. There is a high degree of visualisation and control, with some improvement required for optimising fundal views and traversing the pylorus.

Disclosure of Interest None Declared.

PTU-029 THE USE OF ENDOCLOT™ THERAPY IN THE ENDOSCOPIC MANAGEMENT OF GASTROINTESTINAL BLEEDING

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Introduction Endoclot™ is a non-toxic topical haemostatic powder consisting of absorbable modified polymers. We previously described our early experience using Endoclot™ as an adjunct haemostatic endoscopic therapy in 6 patients undergoing elective/emergency upper or lower gastrointestinal (GI) endoscopy.¹ We now present the largest case series to date describing the use of Endoclot™ therapy in GI bleeding.

Methods Endoclot™ was applied in upper GI bleed cases only when initial treatment with standard endoscopic dual therapies failed to achieve complete haemostasis. It was also applied to control bleeding post endoscopic mucosal resection (EMR) of rectal polyps. Endoclot™ was delivered by a dedicated applicator system onto bleeding areas. Successful Endoclot™ therapy was defined as achieving complete haemostasis during endoscopy, with no further bleeding within 30 days.

Results Endoclot™ was utilised for 18 patients (11 men, 7 women, mean age 74; upper GI bleed n = 15, lower GI n = 3). Haemostasis was achieved in 16/18 (89%) patients. Endoclot™ was successful in 13 patients with an upper GI bleed: mallory-weiss tear (n = 2); gastric ulcer, all Forrest classification 1b (n = 2); duodenal ulcer, all Forrest classification 1b (n = 8); duodenal adenoma (n = 1). Prior haemostasis combinations used were: adrenaline injection with diathermy (n = 11); adrenaline injection with clips (n = 1); adrenaline injection, diathermy and clips (n = 1). Endoclot™ was successful in 3 patients with lower GI bleeding after EMR. Prior haemostasis used was argon plasma coagulation (n = 1).

Endoclot™ therapy failed in 2 cases. In the first patient, haemostasis was achieved when Endoclot™ was applied to an originally suspected duodenal ulcer that continued to bleed despite adrenaline injection and diathermy. However, the patient developed melena 2 days later, requiring repeat endoscopic therapy with adrenaline injection, clips and diathermy to regain haemostasis. Ensuing investigations showed an underlying gastrointestinal stromal tumour. The second patient had residual bleeding from a Dieulafoy lesion despite treatment with clips and sclerotherapy. Although Endoclot™ initially achieved haemostasis, the patient had melena 3 days later. The recurrent bleed was controlled with adrenaline injection and banding of the bleeding vessel.

Conclusion Endoclot™ is a potentially effective method of achieving haemostasis in GI bleeding when standard endoscopic therapies have failed. Anecdotally, in this series it was noted to