sis have an almost two-fold overall risk of mortality from non variceal UGIB. Duodenal ulcer and, to a lesser extent, gastro-duodenal erosions, represent the main determinants of death both for frequency and for risk profile.

### P.17.4

## CYANOACRYLATE INJECTION FOR TREATMENT OF NON-VARICEAL UPPER GASTROINTESTINAL BLEEDING AFTER FAILURE OF CONVENTIONAL ENDOSCOPIC HAEMOSTASIS

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**Background and aim:** Non-variceal upper gastrointestinal bleeding (NV-UGIB) is a major cause of morbidity and mortality worldwide. Peptic ulcer disease is the most common cause. Endoscopic treatment is considered standard of care for patients with NV-UGIB. Nevertheless failure of endoscopic haemostasis in reported in 3–5% of treated patients and early rebleeding in about 7–10% despite successful initial haemostasis. The need for surgery is firmly below 2%. Despite the improvements in the management of NV-UGIB the overall mortality rate remains at 3.5–6% and it depends largely on underlying comorbidities regardless of any endoscopic treatment. Cyanoacrylate is a tissue glue used for variceal bleeding that has occasionally been reported as an alternative haemostatic technique in NV-UGIB. We retrospectively describe personal experience using cyanoacrylate injection in the management of NV-UGIB after failure of conventional endoscopic modalities.

**Material and methods:** Between April 2008 and March 2012, 266 out of 527 patients with a NV-UGIB received an endoscopic treatment. Initial haemostasis was not achieved in 20 of 266 patient and early rebleeding occurred in 8 of 266 patients (total failures of conventional haemostasis: 28/266: 10.5%). 5 patients underwent surgery. 23 of the 28 patients (Tables 1, 2) were treated with cyanoacrylate (15 M/8 F, mean age 74.4 years): 19 patients had duodenal, gastric or anastomotic ulcers, 2 patients had post-mucosectomy bleeding. 1 patient had a gastric Dieulafoy and 1 patiente had a duodenal diverticular bleeding.

**Results:** A successful haemostasis with cyanoacrylate was achieved in 18 of 23 patient (78.2%). 4 patients underwent surgery and 1 was treated with selective transarterial embolization (4 duodenal ulcers and 1 anastomotic ulcer). One patient had an early rebleeding after cyanoacrylate. No late rebleeding

occurred during the follow-up. No complications related to the glue injection were recorded.

**Conclusions:** In our retrospective experience cyanoacrylate was effective in NV-UGIB after the failure of conventional treatment modalities. However it should be considered as a last resort for endoscopic haemostasis especially in high surgical risk patients because of the possibility of life-threatening adverse events (systemic embolization).

#### P.17.5

## UPPER GI BLEEDING: CLINICAL AND DEMOGRAPHIC FEATURES IN AN ENDOSCOPIC POPULATION STUDY OF NORTH-EAST ITALY

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**Background and aim:** Acute upper gastrointestinal bleeding (UGIB) is a gastroenterological emergency with a mortality of 6%-13%. Despite changes in management, mortality has not significantly improved. More information is needed to improve the management of this entity. The aims of this study was to determine the characteristics of bleeding episodes and the factors that may have induced the bleeding episode.

**Material and methods:** During the 2-year study period (January 2010 to December 2011), 8636 gastroscopies were performed; 7,226 patients with age >18 years were consecutively evaluated. 387 hospitalized patients (5.3%) (M= 224, F=163, mean age=69.2, range-22–101) for acute upper gastrointestinal bleeding were included. Diagnosis of bleeding was based on clinical and endoscopic features.

**Results:** Endoscopic diagnosis of upper GI bleeding were peptic ulcer 32.0%, erosive gastritis 27.4%, esophagitis 14.2%, varices 7.5%, and other lesion (i.e. Mallory-Weiss, Dieulafoy) 5.2%, GI bleeding from unknown origin 1.0%, non organic lesion 27.4%.

The incidence of acute upper GI bleeding was 98/100,000 in 2010 and 101/100,000 in 2011 and the overall 1-year mortality rate was 23.0% (total population 187,000).

Abstract P.17.4 – Table 1. Patients who underwent cyanoacrylate injection during first endoscopy

Pz No.	Age/sex	Lesion	Forrest	Initial treatment	Haemostasis with cyanoacrylate	Rebleeding after cyanoacrylate	Failure therapy	Comorbidity	Follow-up (mo)
1	81/M	DU	Ia	Epi+Clip	Yes	No	_	Renal failure	26
2	74/M	GU	Ia	Epi+Clip	Yes	No	-	_	14
3	86/F	G-EMR	-	APC	Yes	No	-	_	12
4	74/M	An-U	Ia	Epi+Clip	Yes	No	-	Coronaric disease	13
5	80/M	DU	Ib	Clip	Yes	No	-	Coronaric disease	3
6	63/M	E-EMR	-	Clip	Yes	No	-	Renal failure	10
7	71/M	GU	IIa	Clip+APC	Yes	No	-	Hypertension	20
8	75/M	DU	IIa	Epi+Clip	Yes	No	-	NSAID	12
9	82/F	DU	IIa	Epi+Clip	No	-	TAE	Hypertension	6
10	43/F	DU	Ia	Epi+Clip	No	-	Surgery	NSAID	12
11	61/M	DU	Ia	Epi+Clip	No	-	Surgery	NSAID	8
12	85/F	DU	Ia	Clip	Yes	No	_	Coronaric disease	10
13	71/M	DU	Ib	Epi+Clip	Yes	No	-	Coronaric disease	8
14	70/M	GU	Ia	APC+Epi+Clip	Yes	No	-	Hypertension	10
15	85/M	G-Dieulafoy	-	Clip	Yes	No	-	Hypertension renal failure	3
16	84/F	DU	Ia	Epi+Clip	No	-	Surgery	Coronaric disease	2
17	89/M	GU	Ib	Epi+Clip	Yes	No	_	-	5
18	82/F	DU	Ia	Epi+Clip	Yes	No	-	Hypertension colon cancer	3

DU, duodenal ulcer; GU, gastric ulcer; An-U, anastomotic ulcer; DD, duodenal diverticulum; G-EMR, gastric mucosectomy; E-EMR, esophageal mucosectomy; Epi, epinephrine; TAE, transarterial embolization.

Abstract P.17.4 – Table 2. Patients who underwent cyanoacrylate injection for rebleeding

Pz No.	Age/sex	Lesion	Forrest	First treatment	Haemostasis with cyanoacrylate	Rebleeding after cyanoacrylate	Failure therapy	Comorbidity	Follow-up (mo)
1	87/M	DU	Ia	Clip	Yes	No	-	Coronaric disease	1
2	38/F	An-U	Ib	Clip	Yes	Yes	Surgery	Obesity	6
3	76/M	DD	-	Clip	Yes	No	_	Chronic liver disease	10
4	73/F	An-U	Ia	Epi+Clip	Yes	No	-	Pancreatic cancer	12
5	82/M	DU	Ia	Epi+Clip	Yes	No	-	Hypertension	5

DU, duodenal ulcer; An-U, anastomotic ulcer; DD, duodenal diverticulum; Epi, epinephrine.