Critical Care Guidelines for Oesophago-Gastro-Duodenoscopy (OGD)

1. Urgent/emergency endoscopy for Acute Upper GI Bleeding

Aim: rapid, safe and appropriate access to theatre for haemorrhage control & Critical Care, for resuscitation and post-procedural care (after referral to GI team).

Major Acute Upper GI Bleed. Urgency?

Emergency-Unstable

Active severe bleeding Shock, despite IV fluid resuscitation

- Contact CEPOD Anaesthetist (2200) for emergency/urgent OGD in theatre
- Consider potential role of IR[i]
- Inform ET Surgical StR/Cons, if GI Cons considers risk of need for laparotomy to be high[ii]
- Contact ICU StR(2306) if urgent assistance required pre-scope, and for post OGD care
- Oesophageal varices should undergo OGD in theatre[iii]

Refer to Critical Care StR (2306) and admit to relevant level 2, or 3 critical care area

Urgent

Now stable but pre-resus SBP <100, HR>100 and/or Elderly (Age >70), major co-morbidities

- Contact CEPOD Anaesthetist (2200) and ICM StR (2306)
- Arrange urgent OGD in CEPOD theatre within 6-24hr timeframe[iii]
- Consider potential role of IR[i]
- Admit to crit care for pre-scope resuscitation [iv] unless immediate OGD planned or patient would not benefit from crit care admission
- Inform ET Surgeon if advised by GI consultant [ii]

Endoscopic diagnosis
*High Risk of re-bleeding?

YES → Refer to Critical Care StR (2306) and admit to relevant level 2, or 3 critical care area

NO → Discharge to ward 205 (GI) or appropriate medical/specialty ward

Non-Urgent

Does not meet urgent or emergency criteria

Admitting team/GI physicians arrange further care out with critical care

Discharge to ward 205 (GI) or appropriate medical/specialty ward

- Referral to Critical Care and/or ET Surgeons, should be undertaken by GI Reg (2117)/ Consultant.
- See page 2 for expanded comments re notes i-iv

***High Risk of Rebleeding Criteria:**
- Adherent clot over ulcer
- Visible vessel in ulcer
- Active bleeding
- Varices

i) Patients most likely to benefit from IR for haemorrhage control

- Non-variceal haemorrhage (NB. TIPSS may be indicated post banding of OV)
- Failed endoscopic management
- Known lesion, potentially amenable to IR intervention
- Patient is stable enough to transfer to IR (May require GA and anaesthesia assistance)
- Risk of need for laparotomy is low (see below)
- Significant co-morbidities, which may preclude further OGD/surgery

ii) Patients at high risk of need for laparotomy (OGD must be performed in theatre)

- Uncontrolled non-variceal haemorrhage, patient too unstable for transfer to IR
- Failed endoscopic management and IR contraindicated/bleeding point not amenable to IR intervention
- Suspected perforation (de novo or iatrogenic), surgical abdomen, bleeding GIST
- GI consultant considers risk to be high

iii) Urgent OGD in Critical Care

OGD for oesophageal varices (or other acute GI haemorrhage, where the risk of need for laparotomy, is low), may be performed in ICU within dayshift hours, in selected patients, e.g. if the patient is already a critical care inpatient, intubated and staffing levels/experience levels allow. **This is at the discretion of the duty Critical Care Consultant, who must be involved in discussions.**

iv) Admission to critical care, prior to OGD

Patients who require urgent, but not emergency endoscopy, may benefit from admission to Critical Care pre-endoscopy, for resuscitation and transfusion. There is evidence that, this may improve outcome and that **OGD in patients without liver disease, is rarely required within 6 hours of the bleed** (2,3,4).

Further management of acute upper GI haemorrhage

- There is no role for Tranexamic acid -see HALT-It study (5)
- Adopt a restrictive blood transfusion strategy (post emergency resuscitation) that aims for a target haemoglobin between 7g/dL and 9g/dL. A higher target haemoglobin, should be considered in patients with significant co-morbidity e.g. ischaemic cardiovascular disease (1,2,7)
- PPI infusions should be administered for 72 hours post endoscopy (unless directed otherwise, by senior GI physicians) as per the Hong Kong protocol (6)
- Consider correction of coagulopathy and reversal of antiplatelets -may require specialist input from haematology (1,2,7)

2. Non-urgent endoscopy for Critical Care inpatients

Non-urgent OGD can be performed in a level 3 Critical Care area (pods 118A,118B and 116 D) for patients already in ICU, requiring procedural interventions e.g. NJ tube insertion, providing the following conditions are met:

- The ICU base duty Critical Care consultant and Charge nurse are in agreement.
- Medical and nursing staffing levels/experience are adequate for the procedure to be performed safely.
- The procedure is performed in dayshift hours.

OGD should not be performed in a level 2 Critical Care area, i.e. 116C

References

1. NICE guideline: **"***Acute upper gastrointestinal bleeding in over 16s: management*" Clinical guideline [CG141] Published: 13 June 2012 Last updated: 25 August 2016**.** https://www.nice.org.uk/guidance/cg141
2. "British Society of Gastroenterology (BSG)-led multi-society consensus care bundle for the early clinical management of acute upper gastrointestinal bleeding". 2019 https://www.bsg.org.uk/clinical-resource/bsge-acute-upper-gi-bleed-care-bundle/
3. Guo CLT, Wong SH, Lau LHS*, et al. "*Timing of endoscopy for acute upper gastrointestinal bleeding: a territory-wide cohort study". *Gut* 2022;**71:**1544-1550. https://gut.bmj.com/content/gutjnl/71/8/1544.full.pdf
4. Lau, J. Y. W. *et al.* Timing of endoscopy for acute upper gastrointestinal bleeding. *N. Engl. J. Med.* **382**, 1299–1308 (2020). https://www.nejm.org/doi/full/10.1056/NEJMoa1912484
5. HALT-It trial. "Effects of a high-dose 24-h infusion of tranexamic acid on death and thromboembolic events in patients with acute gastrointestinal bleeding (HALT-IT): an international randomised, double-blind, placebo-controlled trial". 2020 https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30848-5/fulltext
6. Hong Kong protocol https://www.cag-acg.org/images/publications/Intl_consensus_recommendations_on_managmen_%20of_UGIB_2010.pdf
7. "Diagnosis and management of nonvariceal upper gastrointestinal haemorrhage: European Society of Gastrointestinal Endoscopy (ESGE) Guideline"; 2015 https://pubmed.ncbi.nlm.nih.gov/26417980/

Title: Critical Care Guidelines for Oesophago-Gastro-Duodenoscopy (OGD)	
ID	**Authors:** M Beatty, N Church
Category	**Document Version:** 4 (June 2023)
Status: Draft	**Review Date:**
Authoriser: RIE QIT team	**Date Authorisation:**
Date added to intranet	
Key words: Endoscopy, OGD, Acute upper GI haemorrhage	