JAG clinical audit report

Title: Acute upper gastrointestinal bleeding in over 16s: Management Audit

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Aim(s) of Audit:

To review if GRHT manages Upper GI Bleeds **(UGIB)** are managed in accordance with **NICE recommendations for Acute upper Gastrointestinal bleeding in over 16s**.

NICE recommend patients should have the following diagnostic and therapeutic steps:

Risk Assessment

- All patients should be given a Blatchford score at first assessment and the full Rockall score post endoscopy

Resuscitation and Initial management

- Transfuse patients with massive bleeding with blood, platelets and clotting factors in line with local protocols for managing massive bleeding.
- Base decisions on blood transfusion on the full clinical picture, recognising that over-transfusion may be as damaging as under-transfusion
- Do not offer platelet transfusion to patients who are not actively bleeding and are haemodynamically stable.
- Offer platelet transfusion to patients who are actively bleeding and have a platelet count of less than 50 x 10^9/litre.
- Offer fresh frozen plasma to patients who are actively bleeding and have a prothrombin time (or international normalised ratio) or activated partial thromboplastin time greater than 1.5 times normal. If a patient's fibrinogen level remains less than 1.5 g/litre despite fresh frozen plasma use, offer cryoprecipitate as well.
- Offer prothrombin complex concentrate to patients who are taking warfarin and actively bleeding.
- Treat patients who are taking warfarin and whose upper gastrointestinal bleeding has stopped in line with local warfarin protocols.
- Do not use recombinant factor Vlla except when all other methods have failed.

Timing of endoscopy

- Offer endoscopy to unstable patients with severe acute upper gastrointestinal bleeding immediately after resuscitation.
- Offer endoscopy within 24 hours of admission to all other patients with upper gastrointestinal bleeding.

- Units seeing more than 330 cases a year should offer daily endoscopy lists. Units seeing fewer than 330 cases a year should arrange their service according to local circumstances.

Management for non-variceal bleeding

Endoscopic treatment

- Do not use adrenaline as monotherapy for the endoscopic treatment of non-variceal upper gastrointestinal bleeding

- For the endoscopic treatment of non-variceal upper gastrointestinal bleeding, use one of the following:
  -a mechanical method (for example, clips) with or without adrenaline
  -thermal coagulation with adrenaline
  -fibrin or thrombin with adrenaline.

Proton pump inhibitors

- Do not offer acid-suppression drugs (proton pump inhibitors or H_2-receptor antagonists) before endoscopy to patients **with suspected non-variceal** upper gastrointestinal bleeding.
- Offer proton pump inhibitors to patients **with non-variceal** upper gastrointestinal bleeding and stigmata of recent haemorrhage shown at endoscopy.

Treatment after first or failed endoscopic treatment

- Consider a repeat endoscopy, with treatment as appropriate, for all patients at high risk of re-bleeding, particularly if there is doubt about adequate haemostasis at the first endoscopy.
- Offer a repeat endoscopy to patients who re-bleed with a view to further endoscopic treatment or emergency surgery.
- Offer interventional radiology to unstable patients who re-bleed after endoscopic treatment. Refer urgently for surgery if interventional radiology is not promptly available

Management of variceal bleeding

- Offer terlipressin to patients with suspected variceal bleeding at presentation. Stop treatment after definitive haemostasis has been achieved, or after 5 days, unless there is another indication for its use.
- At the time of publication (June 2012), terlipressin was indicated for the treatment of bleeding from oesophageal varices, with a maximum duration of treatment of 72 hours (3 days). Prescribers should consult the relevant summary of product characteristics. Informed consent for off-label use of terlipressin should be obtained and documented.
- Offer prophylactic antibiotic therapy at presentation to patients with suspected or confirmed variceal bleeding.

Oesophageal varices

- Use band ligation in patients with upper gastrointestinal bleeding from oesophageal varices.

- Consider transjugular intrahepatic portosystemic shunts (TIPS) if bleeding from oesophageal varices is not controlled by band ligation.

Gastric varices

- Offer endoscopic injection of N-butyl-2-cyanoacrylate to patients with upper gastrointestinal bleeding from gastric varices.
- Offer TIPS if bleeding from gastric varices is not controlled by endoscopic injection of N-butyl-2-cyanoacrylate.

Control of bleeding and prevention of re-bleeding in patients on NSAIDs, aspirin or clopidogrel

- Continue low-dose aspirin for secondary prevention of vascular events in patients with upper gastrointestinal bleeding in whom haemostasis has been achieved.
- Stop other non-steroidal anti-inflammatory drugs (including cyclooxygenase-2 [COX-2] inhibitors) during the acute phase in patients presenting with upper gastrointestinal bleeding.
- Discuss the risks and benefits of continuing clopidogrel (or any other thienopyridine antiplatelet agents) in patients with upper gastrointestinal bleeding with the appropriate specialist (for example, a cardiologist or a stroke specialist) and with the patient.

Primary prophylaxis for acutely ill patients in critical care

- Offer acid-suppression therapy (H_2-receptor antagonists or proton pump inhibitors) for primary prevention of upper gastrointestinal bleeding in acutely ill patients admitted to critical care. If possible, use the oral form of the drug.
- As of September 2023, the use of proton pump inhibitors or H_2-receptor antagonists other than ranitidine and cimetidine for this indication would be off label. Ranitidine is currently unavailable. See the MHRA drug alert on ranitidine for more information.
- Review the ongoing need for acid-suppression drugs for primary prevention of upper gastrointestinal bleeding in acutely ill patients when they recover or are discharged from critical care. Information and support for patients and carers

Information and support for patients and carers

Establish good communication between clinical staff and patients and their family and carers at the time of presentation, throughout their time in hospital and following discharge. This should include:

- giving verbal information that is recorded in medical records
- different members of clinical teams providing consistent information
- providing written information where appropriate
- ensuring patients and their families and carers receive consistent information.

Method:

-Data of patients presenting with Upper GI Bleeding sourced from Medilogik
-Patient notes obtained on Sunrise Electronic Patient Record, Medilogik, ICE.
-Data analysed against NICE standards.

-50 patients were used in the analysis/reporting. Estimated patient group for first quarter of 2023; 452 patients (unable to filter out 2ww non acute referrals).
-Patient age range 21-91
-30 male patients, 20 female patients

Analysis of data for patient group 01/01/2023-24/02/2023

Risk Assessment
-28 patients were given a Blachford score at first presentation, 3 were recorded after first assessment, 16 patients had no score recorded
-Non-compliance with Rockall score post endoscopy (although recently added to EMS)

Resuscitation and Initial management
-25 patients required transfusion pre-endoscopy, all were within local guidance
-All patients were monitored post endoscopy with 13 requiring further transfusion

Timing of endoscopy
-8 unstable patients were scoped immediately after resuscitation
-27 patients were scoped within 24 hours
-15 patients were scoped after 24 hours

Analysis of patients scoped after 24 hours

Most common cause of delay was unstable patient/ clinical judgement (10 patients).

Patient 1 required scope within 24 hours which was requested but issues with referral reported in notes, patient 2 ate on ward so procedure delayed, patient 3 stable suspected variceal bleed scoped after 24 (unsure of reason for delay), patient 4 suspected variceal bleed referred for OGD but was non-compliant until outside of recommended timeframe, remaining patients deemed stable and discharged home for outpatient procedure due to in-patient bed crisis, patient 5 was delayed as no space on the in-patient list.

Endoscopic intervention: non- variceal bleeding, variceal bleeding and treatment after first or failed endoscopic treatment
-12 patients required therapeutic treatment (1 x banding) and all were compliant with NICE guidance
-4 patient were appropriately re-scoped as at high risk of re-bleed
-2 patients rescoped due to further episode of UGIB after first endoscopy. Neither patient required interventional radiology but were further investigated with CT CAP

Proton pump inhibitors
-9 patients were taking PPI as outpatient prior to admission
-15 patients with suspected non-variceal UGIB were given PPI pre-endoscopy in non-critical care
-2 patients with suspected non-variceal UGIB were given PPI pre-endoscopy in critical care

PPI in varices management
-9 patients taking PPI as outpatient prior to admission
-1 suspected variceal bleed had PPI stopped and re-started post endoscopy
-3 suspected variceal bleed were not given PPI prior to endoscopy

-48 patients were treated with PPI/dose increased post endoscopy, 2 patients did not require treatment

Management of variceal bleeding
-All patients (4/4) with suspected variceal bleeding were given Terlipressin and prophylactic antibiotics pre-endoscopy
-2 patients required banding of oesophageal varices

Control of bleeding and prevention of re-bleeding in patients on NSAIDs, aspirin or clopidogrel
-2/2 patients taking NSAIDs had their medication held
-4/4 patients continued to take aspirin and clopidogrel as advised
-3 patients had aspirin or Clopidogrel held appropriately and re-started post endoscopy
-1 patient taking aspirin and clopidogrel continued medication pre/post endoscopy. Clinical decision for this was not documented in notes

Information and support for patients and carers
-All patients had good verbal communication recorded in medical notes
-38 patients had written discharge information as recorded in medical notes
-12 patients had no record that written discharge information was given. 2 patients excluded from data as were deceased before discharge (non-endoscopy related)

Discussion:
-Efficient inpatient service allowing patients to be scoped within recommended timeframe.
-Therapeutic treatment always given within recommended guidance.
-Excellent documentation of verbal communication with patients.
-Compliant in treatment of patients presenting with suspected variceal bleeding.
-Compliance with local protocol for patients requiring transfusions.
-Appropriate management of patients taking NSAIDs, Aspirin and Clopidogrel.
-Compliance with PPI treatment post endoscopy.

-56% compliant with Blachford score at first assessment.
-Non compliance with Rockall score post endoscopy.
-15 patients given PPI treatment prior to endoscopy in non-critical care (not in line with NICE guidance).

Recommendation:
-Mandatory documentation of Blachford score on first presentation. Governance to discuss implementation
-Post Rockall score to be added to EMS (already actioned)
-Medical team to be reminded of PPI guidance pre-endoscopy for with suspected non-variceal UGIB and importance of clear discharge information

-Governance to discuss future management of UGIB audit; lead, medical involvement, large volume of patients to be distributed for analysis among a team of staff for large pool of data, method to ease analysis of data eg patient form in notes, upload to EMS from patient notes to record data.

Audit presentation: **Date:** 26/01/2024 **Venue:**

Actions	**Person responsible for implementing actions (name & designation)**	**Date for completion**

Project Presentation(s)/Publications: Date Venue/Publication (*Please attach copies of your presentation/article(s) to this form if possible*)
Do you wish to re-audit this aspect of care? ☐ YES ☐ NO Recommended Re-audit date: