PHARMACOLOGICAL THERAPY (CONTD)

ACID SUPPRESSION AND AGENTS TO ARREST BLEEDING

A	**High-dose intravenous proton pump inhibitor therapy** *(eg, omeprazole or pantoprazole 80 mg bolus followed by 8 mg/hour infusion for 72 hours)* **should be used in patients with major peptic ulcer bleeding** *(active bleeding or non-bleeding visible vessel)* **following endoscopic haemostatic therapy.**

CONTINUATION OF THERAPY FOR OTHER MEDICAL CONDITIONS

☑	Medicines known to increase the risk of upper gastrointestinal complications should, where possible, be given in monotherapy and at the lowest effective dose to minimise the risk of upper gastrointestinal complications.
A	**Patients with healed bleeding ulcers who test negative for Helicobacter pylori require concomitant proton pump inhibitor therapy at the usual daily dose if NSAIDs, aspirin or COX-2 inhibitors are indicated.**
A	▪ **Aspirin and NSAIDs should be discontinued when patients present with peptic ulcer bleeding.** ▪ **Once ulcer healing and eradication of Helicobacter pylori are confirmed, aspirin and NSAIDs should only be prescribed if there is a clear indication.**
D	**Selective serotonin reuptake inhibitors should be used with caution in patients who have an increased risk of gastrointestinal bleeding, especially in patients taking NSAIDs or aspirin. A non-SSRI antidepressant may be an appropriate choice in such patients.**
D	**Oral anticoagulants or corticosteroids should be used with caution in patients at risk from gastrointestinal bleeding, especially in those taking aspirin or NSAIDs.**

MANAGEMENT OF VARICEAL UPPER GI BLEEDING

ENDOSCOPIC THERAPY FOR OESOPHAGEAL VARICEAL BLEEDING

A	**Patients with confirmed oesophageal variceal haemorrhage should undergo variceal band ligation.**

ENDOSCOPIC THERAPY FOR GASTRIC VARICEAL BLEEDING

B	**Patients with confirmed gastric variceal haemorrhage should have endoscopic therapy, preferably with cyanoacrylate injection.**

VASOACTIVE DRUG THERAPY PRIOR TO ENDOSCOPY

A	**Prior to endoscopic diagnosis, terlipressin should be given to patients suspected of variceal haemorrhage.**

VASOACTIVE DRUG THERAPY AFTER ENDOSCOPIC DIAGNOSIS

A	**After endoscopic treatment of acute oesophageal variceal haemorrhage patients should receive vasoactive drug treatment** *(terlipressin for 48 hours, octreotide, or high-dose somatostatin each for three to five days).*

ANTIBIOTIC THERAPY

A	**Antibiotic therapy should be commenced in patients with chronic liver disease who present with acute upper gastrointestinal haemorrhage.**

MANAGEMENT OF BLEEDING VARICES NOT CONTROLLED BY ENDOSCOPY

C	**Transjugular intrahepatic portosystemic stent shunting is recommended as the treatment of choice for uncontrolled variceal haemorrhage.**
D	**Balloon tamponade should be considered as a temporary salvage treatment for uncontrolled variceal haemorrhage.**

PREVENTION OF VARICEAL REBLEEDING

A	**Variceal band ligation combined with a beta blocker is recommended as secondary prevention for oesophageal variceal haemorrhage.**
A	**In patients unsuitable for variceal band ligation, combination of non-selective beta blocker and nitrate is recommended as secondary prevention for oesophageal variceal haemorrhage.**

PORTOSYSTEMIC SHUNTS

A	**Transjugular intrahepatic portosystemic stent shunts should be considered to prevent oesophageal variceal rebleeding in patients with contraindications, intolerance to or failure of endoscopic and/or pharmacological therapy.**
B	**Transjugular intrahepatic portosystemic stent shunts should be considered to prevent gastric variceal rebleeding.**

MANAGEMENT OF COLONIC BLEEDING

☑	All patients with rectal bleeding should have a full history taken, abdominal examination and should undergo digital rectal examination and proctoscopy.

INTERVENTIONS

D	**In patients with massive lower gastrointestinal haemorrhage, colonoscopic haemostasis is an effective means of controlling haemorrhage from active diverticular bleeding or post-polypectomy bleeding, when appropriately skilled expertise is available.**

This Quick Reference Guide provides a summary of the main recommendations in the SIGN guideline on **Management of acute upper and lower gastrointestinal bleeding.**

Recommendations are graded A B C D to indicate the strength of the supporting evidence. Good practice points ☑ are provided where the guideline development group wishes to highlight specific aspects of accepted clinical practice.

Details of the evidence supporting these recommendations can be found in the full guideline, available on the SIGN website: **www.sign.ac.uk**

SIGN
Scottish Intercollegiate Guidelines Network

NHS Quality Improvement Scotland

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Management of acute upper and lower gastrointestinal bleeding

Quick Reference Guide

September 2008

Copies of all SIGN guidelines are available online at www.sign.ac.uk

ASSESSING GI BLEEDING IN HOSPITAL

PRE-ENDOSCOPIC RISK ASSESSMENT

D **All patients presenting with acute upper gastrointestinal bleeding should have an initial *(pre-endoscopic)* Rockall score calculated. Patients with a Rockall score of 0 should be considered for non-admission or early discharge with outpatient follow up.**

D **In patients with initial *(pre-endoscopic)* Rockall score >0 endoscopy is recommended for a full assessment of bleeding risk.**

ACUTE UPPER GASTROINTESTINAL BLEEDING – INITIAL ASSESSMENT PROTOCOL

Consider for discharge or non-admission with outpatient follow up if:

- age <60 years, and;
- no evidence of haemodynamic disturbance (systolic blood pressure ≥100 mm Hg, pulse<100 beats per minute), and;
- no significant comorbidity (especially liver disease, cardiac disease, malignancy), and;
- not a current inpatient (or transfer), and;
- no witnessed haematemesis or haematochezia.

Consider for admission and early endoscopy (and calculation of full Rockall score) if:

- age ≥60 years (all patients who are aged >70 years should be admitted), or;
- witnessed haematemesis or haematochezia (suspected continued bleeding), or;
- haemodynamic disturbance (systolic blood pressure <100 mm Hg, pulse ≥100 beats per minute), or;
- liver disease or known varices.

ACUTE LOWER GASTROINTESTINAL BLEEDING – INITIAL ASSESSMENT PROTOCOL

Consider for discharge or non-admission with outpatient follow up if:

- age <60 years, and;
- no evidence of haemodynamic disturbance, and;
- no evidence of gross rectal bleeding, and;
- an obvious anorectal source of bleeding on rectal examination/ sigmoidoscopy.

Consider for admission if:

- age ≥60 years, or;
- haemodynamic disturbance, or;
- evidence of gross rectal bleeding, or;
- taking aspirin or an NSAID, or;
- significant comorbidity.

POST-ENDOSCOPIC RISK ASSESSMENT

D **Patients with a full *(post-endoscopic)* Rockall score <3 have a low risk of rebleeding or death and should be considered for early discharge and outpatient follow up.**

	Score				
Variable	**0**	**1**	**2**	**3**	
Age	<60 years	60-79 years	≥80 years		Initial score criteria
Shock	'no shock', SBP* ≥100 mm Hg, pulse <100 beats per minute	'tachycardia', SBP≥100 mm Hg, pulse ≥ 100 beats per minute	'hypotension', SBP <100 mm Hg,		Initial score criteria
Comorbidity	no major comorbidity		cardiac failure, ischaemic heart disease, any major comorbidity	renal failure, liver failure, disseminated malignancy	Initial score criteria
Diagnosis	Mallory-Weiss tear, no lesion identified and no SRH	all other diagnoses	malignancy of upper GI tract		Additional criteria for full score
Major stigmata of recent haemorrhage (SRH)	none, or dark spot only		blood in upper GI tract, adherent clot, visible or spurting vessel		Additional criteria for full score

**SBP - systolic blood pressure *SRH - Stigmata of recent haemorrhage*
Maximum additive score prior to diagnosis = 7
Maximum additive score after diagnosis = 11.

ORGANISATION OF SERVICES

DEDICATED GI BLEEDING UNIT

D **Patients with acute upper gastrointestinal haemorrhage should be admitted, assessed and managed in a dedicated gastrointestinal bleeding unit.**

RESUSCITATION AND INITIAL MANAGEMENT

FLUID RESUSCITATION

D

- **Shocked patients should receive prompt volume replacement.**
- **Red cell transfusion should be considered after loss of 30% of the circulating volume.**

EARLY PHARMACOLOGICAL MANAGEMENT

A **Proton pump inhibitors should not be used prior to diagnosis by endoscopy in patients presenting with acute upper gastrointestinal bleeding.**

EARLY ENDOSCOPY

C **Early endoscopic examination should be undertaken within 24 hours of initial presentation, where possible.**

MANAGEMENT OF NON-VARICEAL UPPER GI BLEEDING

ENDOSCOPY

D **Endoscopic therapy should only be delivered to actively bleeding lesions, non-bleeding visible vessels and, when technically possible, to ulcers with an adherent blood clot.**

A **Combinations of endoscopic therapy comprising an injection of at least 13 ml of 1:10,000 adrenaline coupled with either a thermal or mechanical treatment are recommended in preference to single modalities.**

B **Endoscopy and endo-therapy should be repeated within 24 hours when initial endoscopic treatment was considered sub-optimal *(because of difficult access, poor visualisation, technical difficulties)* or in patients in whom rebleeding is likely to be life threatening.**

REBLEEDING FOLLOWING ENDOSCOPIC THERAPY

D **Non-variceal upper gastrointestinal haemorrhage not controlled by endoscopy should be treated by repeat endoscopic treatment, selective arterial embolisation or surgery.**

PHARMACOLOGICAL THERAPY

A **Patients with peptic ulcer bleeding should be tested for Helicobacter pylori *(with biopsy methods or urea breath test)* and a one week course of eradication therapy prescribed for those who test positive. A further three weeks ulcer healing treatment should be given.**

A **In non-NSAID users, maintenance antisecretory therapy should not be continued after successful healing of the ulcer and Helicobacter pylori eradication.**

B **Biopsy samples to test for presence of Helicobacter pylori should be taken at initial endoscopy prior to commencing proton pump inhibitor therapy. Biopsy specimens should be histologically assessed when the rapid urease test is negative.**

☑

- Successful Helicobacter pylori eradication should be confirmed by breath test or biopsy to minimise the risk of rebleeding from peptic ulcer.
- Second line treatment should be prescribed in the case of eradication failures.

☑ Helicobacter pylori testing to confirm successful eradication should only be taken after proton pump inhibitor and antibiotic therapy has been completed and discontinued.

☑ Follow up endoscopy should be performed to confirm healing of gastric ulcers if there is suspicion of malignancy.