NICE National Institute for Health and Care Excellence

NICE Pathways

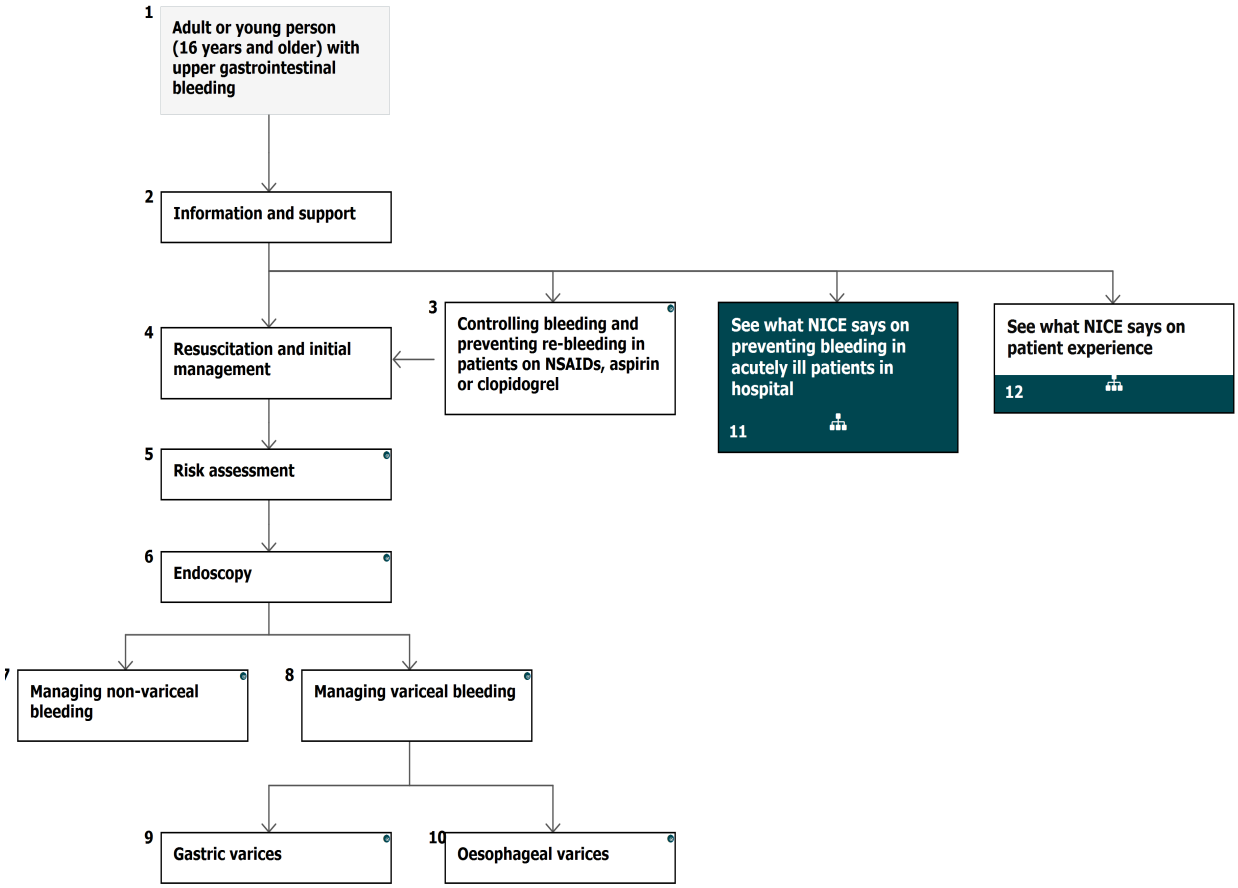
Acute upper gastrointestinal bleeding overview

NICE Pathways bring together everything NICE says on a topic in an interactive flowchart. NICE Pathways are interactive and designed to be used online.

They are updated regularly as new NICE guidance is published. To view the latest version of this NICE Pathway see:

http://pathways.nice.org.uk/pathways/acute-upper-gastrointestinal-bleeding
NICE Pathway last updated: 10 February 2017

This document contains a single flowchart and uses numbering to link the boxes to the associated recommendations.



1 Adult or young person (16 years and older) with upper gastrointestinal bleeding

No additional information

2 Information and support

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.

NICE has written information for the public explaining its guidance on acute upper gastrointestinal bleeding in over 16s: management.

3 Controlling bleeding and preventing 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.

Quality standards

The following quality statement is relevant to this part of the interactive flowchart.

10. Continuation on low-dose aspirin

4 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 VIIa except when all other methods have failed.

5 Risk assessment

Use the following formal risk assessment scores for all patients with acute upper gastrointestinal bleeding:

- the Blatchford score at first assessment, **and**
- the full Rockall score after endoscopy.

Consider early discharge for patients with a pre-endoscopy Blatchford score of 0.

Quality standards

The following quality statement is relevant to this part of the interactive flowchart.

1. Risk assessment

6 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.

Quality standards

The following quality statements are relevant to this part of the interactive flowchart.

2. Immediate endoscopy for people who are haemodynamically unstable

3. Endoscopy within 24 hours for people who are haemodynamically stable

7 Managing 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.

Quality standards

The following quality statements are relevant to this part of the interactive flowchart.

4. Endoscopic treatment for non-variceal bleeding

5. Treatment of non-variceal bleeding after first or failed endoscopic treatment

8 Managing variceal bleeding

Offer terlipressin[1] 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.

Offer prophylactic antibiotic therapy at presentation to patients with suspected or confirmed variceal bleeding.

See what NICE says on antimicrobial stewardship.

[1] 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.

Quality standards

The following quality statement is relevant to this part of the interactive flowchart.

6. Prophylactic antibiotic therapy for variceal bleeding

9 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.

Quality standards

The following quality statements are relevant to this part of the interactive flowchart.

8. N-butyl-2-cyanoacrylate for gastric variceal bleeding

9. Management of variceal bleeding using transjugular intrahepatic portosystemic shunts (TIPS)

10 Oesophageal varices

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

Consider TIPS if bleeding from oesophageal varices is not controlled by band ligation.

Stent insertion

NICE has published interventional procedures guidance on stent insertion for bleeding oesophageal varices with **normal arrangements** for clinical governance, consent and audit.

Quality standards

The following quality statements are relevant to this part of the interactive flowchart.

7. Band ligation for oesophageal variceal bleeding

9. Management of variceal bleeding using transjugular intrahepatic portosystemic shunts (TIPS)

11 See what NICE says on preventing bleeding in acutely ill patients in hospital

See Acutely ill patients in hospital / Acutely ill patients in hospital overview / Preventing upper gastrointestinal bleeding in acutely ill patients

12 See what NICE says on patient experience

See Patient experience in adult NHS services

Glossary

TIPS

transjugular intrahepatic portosystemic shunts

Sources

Acute upper gastrointestinal bleeding in over 16s: management (2012 last updated 2016) NICE guideline CG141

Your responsibility

Guidelines

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Technology appraisals

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, health professionals are expected to take these recommendations fully into account, alongside the individual needs, preferences and values of their patients. The application of the recommendations in this interactive flowchart is at the discretion of health professionals and their individual patients and do not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

Commissioners and/or providers have a responsibility to provide the funding required to enable the recommendations to be applied when individual health professionals and their patients wish to use it, in accordance with the NHS Constitution. They should do so in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

Medical technologies guidance, diagnostics guidance and interventional procedures guidance

The recommendations in this interactive flowchart represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, healthcare professionals are expected to take these recommendations fully into account. However, the interactive flowchart does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Commissioners and/or providers have a responsibility to implement the recommendations, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity, and foster good relations. Nothing in this interactive flowchart should be interpreted in a way that would be inconsistent with compliance with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.