Acute Upper Gastrointestinal Bleeding Due to Gastro-Oesophageal Varices Clinical Guideline

V 3.0
September 2018
Summary
Local clinical guidelines based on BSG/EASL recommendations for the management of upper gastrointestinal bleeding from varices.

1. **Aim/Purpose of this Guideline**
   1.1 To provide guidelines for medical staff when caring for patients with bleeding varices or suspected bleeding varices.

1.2. **Data Protection Act 2018 (General Data Protection Regulation – GDPR) Legislation**

The Trust has a duty under the DPA18 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed and documented. We can’t rely on Opt out, it must be Opt in.

The DPA18 covers how the Trust obtains, hold, record, use and store all personal and special category (e.g. Health) information in a secure and confidential manner. This Act covers all data and information whether held electronically or on paper and extends to databases, videos and other automated media about living individuals including but not limited to Human Resources and payroll records, medical records, other manual files, microfilm/fiche, pathology results, images and other sensitive data.

DPA18 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the DPA18 please see the ‘information use framework policy’, or contact the Information Governance Team rch-tr.infogov@nhs.net

2. **The Guidance**

2.1. **Responsibility**

Medical staff caring for adult inpatients or Accident & Emergency Department patients who are waiting for transfer to inpatient care, in Royal Cornwall Hospital Trust.

2.2. **General Points**

2.2.1 **Patients are often known to have chronic liver failure and may have such signs as:**

- Jaundice
- Encephalopathic flap
- Spider naevi
- Palmar erythema
- Ascites

2.2.2 If in doubt about GI bleed, check for melaena on rectal examination.

2.2.3 Assess whether patient is hypovolaemic (lying and standing BP sensitive test), encephalopathic or septic.
2.2.4 Bloods for Hb/INR/U&E/LFT/Random blood sugar/G&S.

2.2.5 All patients should have 2 peripheral lines (grey venflons if possible, central venous access if poor peripheral access).

2.2.6 If shocked at presentation (BP<100 systolic, pulse>100bpm):
   - Volume replace with crystalloids (not 5% dextrose) until blood available
   - Oxygen by 100% reservoir mask
   - Urinary catheter
   - Discuss with critical care staff regarding admission
   - If coagulation tests are grossly deranged, discuss with haematologist
   - Discuss management strategy with Intensivist and Gastroenterologist (or if out of hours on call endoscopist).

2.2.7 If patient cannot maintain an airway due to encephalopathy consider for ventilation. Discuss with ITU staff (If GCS<8 will probably require ventilation).

2.2.8 Stop NSAIDs/aspirin/antiplatelet drugs and anticoagulants. Reverse anticoagulants with advice from a haematologist (see haematology reversal guidelines).

2.2.9 Offer prothrombin complex concentrate to patients who are taking warfarin and actively bleeding.

2.2.10 Treat patients who are taking warfarin and whose upper gastrointestinal bleeding has stopped in line with local warfarin protocol.

2.2.11 Contact endoscopy unit (ext. 3247) – 24-hour line/on-call Endoscopist.

2.3. Resuscitation

2.3.1 Ensure adequate volume replacement (aim for systolic BP ~ 100 mm Hg and close monitoring of fluid status and urine output).

2.3.2 Transfuse patients with massive bleeding with blood, platelets and clotting factors in line with local protocols for managing massive bleeding (http://intra.cornwall.nhs.uk/DocumentsLibrary/RoyalCornwallHospitalsTrust/Clinical/Haematology/BloodTransfusionPolicyGuidelineSummaryMassiveHaemorrhage.pdf)

2.3.3 Blood transfusion – aim for Hb 7-8g/dl - restitution of the Hb to higher than this may result in a higher portal pressure than at baseline:

2.3.4 Blood product use:
   - Consider FFP if INR > 1.5 + active bleeding.
   - Give Platelets if platelet count <50 + active bleeding.
   - (Do not offer platelet transfusion to patients who are not actively bleeding and are haemodynamically stable)

2.4. Sepsis: Ensure a full septic screen is performed on every patient

2.4.1 Culture ascites/blood/urine/sputum/CXR.
2.4.2 Ascitic fluid (10 ml) for WCC in FBC bottle (send to haematology) and in Blood culture bottles as well as ascitic albumin level.

2.4.3 All patients with variceal bleeding should be started on a broad-spectrum antibiotic (IV Tazocin 4.5g tds or oral ciprofloxacin 500mg bd 5 days). This reduces mortality by reducing the rate of early rebleeding.

2.4.4 Switch to oral therapy should be as soon as the patient can take oral medication & therapy should stop at five days with re-culture & microbiological advise if clinical concern of sepsis

2.5. Endoscopy and Control of Variceal Bleeding

2.5.1 Inform endoscopy unit of patient early in resuscitation process – all patients should undergo endoscopy within 24h of admission.

2.5.2 First stabilise and transfuse patients.

2.5.3 Commence terlipressin (a synthetic analogue of vasopressin) prior to endoscopy in patient with known varices or likely variceal bleed after a degree of fluid resuscitation if possible. This can be effective in controlling variceal bleeding however it should not be used to delay specific endoscopic therapy. If haemostasis is achieved endoscopically or no variceal bleeding at endoscopy then terlipressin is not required:

2.5.4 2mg iv stat bolus, and then 4 hourly iv injection (dose based on body weight):

- <50kg: 1 mg
- 50-70kg: 1.5 mg
- >70kg: 2 mg

2.5.5 Continue until clinically certain haemostasis achieved.

2.5.6 Teripressin is contra-indicated in patients with ischaemic heart disease or peripheral vascular disease.

2.5.7 The majority of patients with a suspected variceal bleed should be intubated for endoscopy especially if any doubt about airway maintenance or encephalopathy - inform anaesthetist early (via critical care or 4th on call CEPOD).

2.5.8 If no re-bleeding, repeat banding should be considered in 2 weeks

2.5.9 Request early abdominal ultrasound to assess patency of portal vein.

2.5.10 Discuss need for further hepatic imaging and Hepatic Vein Pressure Gradient (HVPG) measurements early.

2.5.11 Consider starting a non-selective B blocker (Propanolol 40mg bd or Carvedilol 6.25-12.5 mg od) as long as haemodynamic stability has been achieved and in the absence of contraindications and terlipressin withdrawn.
2.6. All patients to be transferred to GALU ward for long-term management

2.7. At endoscopy
   2.7.1 1st line treatment for oesophageal varices is Variceal Band Ligation.

   2.7.2 1st line treatment of gastric variceal bleeding is endoscopic injection of histoacryl glue.

   2.7.3 Consider early referral for TIPSS if portal vein patent - in selected patients with Child’s B cirrhosis and active bleeding or Child’s C cirrhosis with Child’s score <13 (MELD score > 18).

2.8. Uncontrolled bleeding (failure of vasoactive drug + endoscopic therapy)
   2.8.1 Transfer to ITU.

   2.8.2 Ventilate patient with PEEP.

   2.8.3 Insert Sengstaken tube for 12 hours- this should be done at endoscopy by gastroenterologist- its use can be associated with potentially lethal complications.

   2.8.4 Repeat endoscopy – if failure consider TIPSS (Derriford Hospital, Plymouth).

   2.8.5 Weekdays 9-5pm:
      • Hepatology SpR = 07795 224403
      • Second line contact Ward consultant (Switch board or Marlborough ward will know whom): page nos
         o 89135
         o 89758
         o 85407
         o 89484
         o 89241

   2.8.6 Out of hours/weekends
      • On call Hepatology Consultant via Derriford Switch
2.9 Algorithm for prevention of acute variceal bleeding

Patients with known cirrhosis are at risk if variceal bleeding and should be counselled regarding screening of varices. Those patients with early cirrhosis (Fibroscan median liver stiffness < 20 kPa + platelet count > 150) are at low risk of significant portal hypertension and do not requiring screening. These patients should have an annual fibroscan and platelet count and enter screening if liver stiffness increases > 20 kPa or platelet count falls < 150.

---

**UK guidelines on the management of variceal haemorrhage in cirrhotic patients**


**2.10 References**


3. Monitoring compliance and effectiveness

<table>
<thead>
<tr>
<th>Element to be monitored</th>
<th>Audit of variceal bleeding from endoscopy data base</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead</td>
<td>Dr SH Hussaini</td>
</tr>
<tr>
<td>Tool</td>
<td>Scorpio Endoscopy Data base.</td>
</tr>
<tr>
<td>Frequency</td>
<td>Annual with report to GI Governance</td>
</tr>
<tr>
<td>Reporting arrangements</td>
<td>Monthly GI Governance meeting</td>
</tr>
<tr>
<td>Acting on recommendations and Lead(s)</td>
<td>GI Governance Group</td>
</tr>
<tr>
<td>Change in practice and lessons to be shared</td>
<td>Required changes to practice will be identified and actioned within 3 months. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders</td>
</tr>
</tbody>
</table>

4. Equality and Diversity

4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the 'Equality, Inclusion & Human Rights Policy' or the Equality and Diversity website.

4.2. Equality Impact Assessment
The Initial Equality Impact Assessment Screening Form is at Appendix 2.
## Appendix 1. Governance Information

<table>
<thead>
<tr>
<th>Document Title</th>
<th>Acute Upper Gastrointestinal Bleeding due to Gastro-Oesophageal Varices Clinical guideline V3.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Issued/Approved:</td>
<td>01/11/2018</td>
</tr>
<tr>
<td>Date Valid From:</td>
<td></td>
</tr>
<tr>
<td>Date Valid To:</td>
<td></td>
</tr>
<tr>
<td>Directorate / Department responsible (author/owner):</td>
<td>Dr Hyder Hussaini, Consultant Gastroenterologist and Hepatologist</td>
</tr>
<tr>
<td>Contact details:</td>
<td>01872 252717</td>
</tr>
<tr>
<td>Brief summary of contents</td>
<td>This document is intended to provide guidelines for medical staff when caring for patients with bleeding varices or suspected bleeding varices.</td>
</tr>
<tr>
<td>Suggested Keywords:</td>
<td></td>
</tr>
<tr>
<td>Target Audience</td>
<td>RCHT CFT KCCG</td>
</tr>
<tr>
<td>Executive Director responsible for Policy:</td>
<td>Medical Director</td>
</tr>
<tr>
<td>Date revised:</td>
<td>November 2018</td>
</tr>
<tr>
<td>This document replaces (exact title of previous version):</td>
<td>Clinical Guideline for Management of Upper Gastrointestinal Bleeding Due to Gastro-Oesophageal Varices</td>
</tr>
<tr>
<td>Approval route (names of committees)/consultation:</td>
<td>GI Governance Group</td>
</tr>
<tr>
<td>Divisional Manager confirming approval processes</td>
<td>Natalie James</td>
</tr>
<tr>
<td>Name and Post Title of additional signatories</td>
<td>Not required</td>
</tr>
<tr>
<td>Name and Signature of Divisional/Directorate Governance Lead confirming approval by specialty and divisional management meetings</td>
<td>{Original Copy Signed}</td>
</tr>
<tr>
<td>Name: Dr. SH Hussaini</td>
<td></td>
</tr>
<tr>
<td>Signature of Executive Director giving approval</td>
<td>{Original Copy Signed}</td>
</tr>
<tr>
<td>Publication Location (refer to Policy on Policies – Approvals and Ratification):</td>
<td>Internet &amp; Intranet Intranet Only</td>
</tr>
</tbody>
</table>

*Acute Upper Gastrointestinal Bleeding Due to Gastro-Oesophageal Varices Clinical Guideline V3.0*

Page 9 of 13
All or part of this document can be released under the Freedom of Information Act 2000

This document is to be retained for 10 years from the date of expiry.
This document is only valid on the day of printing

Controlled Document
This document has been created following the Royal Cornwall Hospitals NHS Trust Policy for the Development and Management of Knowledge, Procedural and Web Documents (The Policy on Policies). It should not be altered in any way without the express permission of the author or their Line Manager.
### Appendix 2. Initial Equality Impact Assessment Form

<table>
<thead>
<tr>
<th>Name of the strategy / policy / proposal / service function to be assessed</th>
<th>Acute Upper Gastrointestinal Bleeding Due to Gastro-Oesophageal Varices Clinical Guideline V3.0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Directorate and service area:</strong></td>
<td>Gastroenterology</td>
</tr>
<tr>
<td><strong>Is this a new or existing Policy?</strong></td>
<td>Existing</td>
</tr>
<tr>
<td><strong>Name of individual completing assessment:</strong></td>
<td>SH Hussaini</td>
</tr>
<tr>
<td><strong>Telephone:</strong></td>
<td>01872 252717</td>
</tr>
</tbody>
</table>

1. **Policy Aim***

   *Who is the strategy / policy / proposal / service function aimed at?*

   Local management of upper gastrointestinal haemorrhage from oesophageal or gastric varices

2. **Policy Objectives***

   Optimise management of variceal haemorrhage

3. **Policy – intended Outcomes***

   Minimise mortality and morbidity from variceal bleeding

4. **How will you measure the outcome?**

   As per section 3 of this guideline.

5. **Who is intended to benefit from the policy?**

   All patients who present with variceal bleeding

   Medical & Nursing staff

6a **Who did you consult with**

   Workforce

   Patients

   Local groups

   External organisations

   Other

   X

   **Please record specific names of groups**

   Gastro Governance Group

7. **What was the outcome of the consultation?**

   Ratified

---

**7. The Impact**

Please complete the following table. *If you are unsure/don’t know if there is a negative impact you need to repeat the consultation step.*
Are there concerns that the policy could have differential impact on:

<table>
<thead>
<tr>
<th>Equality Strands:</th>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
<th>Rationale for Assessment / Existing Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex (male, female, trans-gender / gender reassignment)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race / Ethnic communities /groups</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disability - Learning disability, physical impairment, sensory impairment, mental health conditions and some long term health conditions.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religion / other beliefs</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marriage and Civil partnership</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pregnancy and maternity</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Orientation, Bisexual, Gay, heterosexual, Lesbian</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

You will need to continue to a full Equality Impact Assessment if the following have been highlighted:

- You have ticked “Yes” in any column above and
- No consultation or evidence of there being consultation- this excludes any policies which have been identified as not requiring consultation. or
- Major this relates to service redesign or development

8. Please indicate if a full equality analysis is recommended. Yes No X

9. If you are not recommending a Full Impact assessment please explain why.

Signature of policy developer / lead manager / director
SH Hussaini

Date of completion and submission
November 2018

Names and signatures of members carrying out the Screening Assessment
1. SH Hussaini
2. Human Rights, Equality & Inclusion Lead

Keep one copy and send a copy to the Human Rights, Equality and Inclusion Lead
c/o Royal Cornwall Hospitals NHS Trust, Human Resources Department, Knowledge Spa, Truro, Cornwall, TR1 3HD

This EIA will not be uploaded to the Trust website without the signature of the Human Rights, Equality & Inclusion Lead.

A summary of the results will be published on the Trust’s web site.

Signed __ SH Hussaini ____________

Date ________November 2018______