University Hospitals of Derby and Burton
NHS Foundation Trust

GI Bleeds - Emergency Endoscopy & Embolisation - Full Clinical Guideline

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1. Introduction

Embolisation for patients with acute GI/abdominal visceral haemorrhage has previously been managed in the Angio suite (F6) in the imaging dept, although now will preferentially be undertaken in the Hybrid theatre. There had been several incidents where there was insufficient support for such out of hours (OOH) embolisation cases. This resulted in Datix notification and a subsequent risk assessment in June 2015. Existing practice was therefore unsustainable in the long term, exposing patients to the risks inherent to transfer of the potentially unstable patient and care within a distant and poorly equipped unsupported site. It was therefore agreed that, from a patient risk perspective, these patients should be treated in a safe, well supported environment and that the ideal facility for this is the hybrid vascular theatre within a main theatre complex. Now that this facility is in place this is the preferred environment for embolisation procedures although in some circumstances the Angio suite may still used.

2. Aim and Purpose

Patients referred for radiologically guided embolisation are likely to present from one of two areas, namely general theatres, or a base ward. Consequently, the purpose of these guidelines is to clarify the current pathway for OOH acute GI/abdominal visceral haemorrhage and to agree an improved pathway, taking into account the hospital location of patients prior to embolisation request and the resources required to support these two distinct pathways of referral to embolisation.

3. Guidelines

Two proposed pathways for care of patients originating from these areas are described below:

1. Patients undergoing emergency endoscopy in theatre (usually OOH)

i) Agreed principles initial management:

- Responsibility for these patients rests with the parent team (medical/surgical) throughout the pathway, with the anaesthetic and radiology teams available for discussion and to provide input as they consider necessary dependent on clinical need.

- Initial resuscitation (large cannula access, baseline bloods, supplemental oxygen and activation of major haemorrhage protocol etc) will be initiated by the parent team.

- At booking for emergency endoscopy for bleeding the on-call anaesthetic and surgical teams will be contacted by the endoscopist to arrange pre-theatre review.

- The theatre coordinator will be contacted by the endoscopist to make theatre aware of the patient and discuss timescales of care.

- A post-endoscopy plan will be agreed at this juncture, between endoscopist, radiologist, surgeon and anaesthetist, should haemostasis not be achieved (i.e. progression to embolisation or laparotomy, taking into account comorbidity and physiological stability).

- If embolisation is required then it is paramount that the response of the Interventional Radiology team is optimal. If it is apparent that endoscopic treatment is unlikely to be successful, then the Interventional Radiologist on call should be contacted immediately so that either urgent imaging and /or embolisation treatment can be expedited.

- Hybrid theatre or Angio suite will be ready to receive the patient as soon as possible , ideally within forty minutes of the on-call radiologist being notified that interventional radiology is required

    - The anaesthetic team will assess the need to provide airway control +/- physiological support, dependent upon patient need and clinical indication.

ii) Agreed principles following unsuccessful in-theatre endoscopy:

Transfer of the physiologically unstable patient is associated with a high degree of risk. The balance between progression to embolisation or laparotomy therefore needs to be carefully considered in such circumstances, with anaesthetic considerations paramount.

a. Agreed principles for transfer to Hybrid theatre or Angio suite for embolisation:

- Responsibility for these patients rests with the parent team (medical/surgical) throughout the pathway, with the anaesthetic and radiology teams available for discussion and to provide input as they consider necessary dependent on clinical need.

- The Interventional Radiology team will have previously been readied for the patient by the on-call radiologist.

- The anaesthetic team will assess the need to provide airway control +/- physiological support, dependent upon patient need and clinical indication.

- Following successful embolisation patients will return to main theatre recovery, step down unit, HDU/ICU, or ward, dependent on clinical need.

- The parent team (medical/surgical) will be responsible for arranging care in the appropriate post-procedure area (SDU, HDU/ITU or ward), taking into account the existing clinical picture.

b. Agreed principles for progression to laparotomy:

- On-going responsibility for these patients rests with the surgical team.

- Surgical and anaesthetic teams will be responsible for arranging care in the appropriate post-procedure area (SDU, HDU/ITU or ward), taking into account the existing clinical picture.

iii) Agreed principles following successful in- theatre endoscopy:

- The parent team (medical/surgical) will be responsible for arranging care in the appropriate post-procedure area (SDU, HDU/ITU or ward), taking into account the existing clinical picture.

- The anaesthetic team will assess the need to provide airway control +/- physiological support dependent upon patient need and clinical indication.

2. Patient originating from a base ward/ICU

Usually, these patients will have undergone an endoscopy at some earlier point, with the endoscopist recommending proceeding directly to embolisation rather than to repeat endoscopy. These patients may have had a positive urgent CT angiogram and been referred, usually by a gastroenterologist or surgeon.

i) Agreed principles

- Responsibility for these patients rests with the parent team (medical/surgical) throughout the pathway, with the anaesthetic and radiology teams available for discussion and to provide input as they consider necessary dependent on clinical need.

- Initial resuscitation (large cannula access, baseline bloods, supplemental oxygen, and activation of major haemorrhage protocol etc) will be initiated by the parent team.

- It is the responsibility of the referring medical or surgical team to ensure that the patient is safely supported to the Hybrid theatre or Angio suite. If the patient originates from ICU, then ICU staff should support any embolisation procedure.

- The location of the embolisation procedure and support required will be made on a case-by-case basis but an unstable patient will usually require embolisation to be performed in Hybrid theatre using the team from the emergency surgical list. This should be arranged via the theatre coordinator and with the involvement of the anaesthetic team.

- Some patients who are more stable may still undergo embolisation in the Angio suite but this will require medical and nursing staff from the clinical team to provide support to the patient during the procedure.

- In practice the on-call medical or surgical SpR in discussion with the OOH coordinator will identify a suitably experienced doctor (above F2 grade) and registered nurse who will remain with the patient throughout the procedure in x-ray.

- The IR consultant will not accept such patients for embolisation unless appropriate supporting staff have been clearly identified and made available.

- For OOH cases, if the anaesthetic team is not involved in the case the parent teams (medical/surgical) SpR will contact the theatre coordinator to make them aware of the embolisation procedure taking place.

- Should the patient become, or is very unstable, and especially if there are airway problems, then the interventional radiologist or parent team will request urgent assistance from the on-call anaesthetist / theatre team via the theatre coordinator.

- The anaesthetic team will assess the need to provide airway control +/- physiological support dependent upon patient need and clinical indication.

- A dedicated anaesthetic machine and appropriate monitoring equipment should remain present in the Angio suite so as to facilitate a safe, rapid anaesthetic response should one be needed.

- Ongoing anaesthetic care cannot be delivered in an area devoid of appropriate monitoring, as per AAGBI standards.

ii) Agreed principles for progression to laparotomy following unsuccessful embolization:

- Emergency theatre will have previously been readied for the patient by the on-call parent team (medical/surgical)

- On-going responsibility for these patients rests with the surgical team.

- The anaesthetic team will assess the need to provide airway control +/- physiological support dependent upon patient need and clinical indication.

- The surgical and anaesthetic teams will be responsible for arranging care in the appropriate post-procedure area (SDU, HDU/ITU or ward), taking into account the existing clinical picture.

References

Time to Get Control? A review of the care received by patients who had a severe gastrointestinal haemorrhage . A report by the National Confidential Enquiry into Patient Outcome and Death (2015)

NICE : Acute upper gastrointestinal bleeding in over 16s: management Clinical guideline [CG141] Published date: June 2012 Last updated: August 2016

4. Documentation Controls

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