

# Specialist Palliative Care Audit and Guidelines Group (SPAGG)

Clinical Guideline for the Management of a Major Haemorrhage (Catastrophic bleed) for Palliative Care Patients.

**Version 4** 

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#### Introduction

The following clinical guidelines are written for the situation when a major haemorrhage may be expected in the context of advanced progressive disease. They are only applicable when active management of acute bleeding is not considered clinically appropriate and a major bleed is likely to be a terminal event. Although many patients may be at risk of a major bleed, it is fortunately a rare event. The goals of management of the event must be to minimise anxiety, ease suffering and ensure death with dignity by providing a calm, reassuring, and caring atmosphere.

## Scope

To provide a clear framework to ensure the safe and effective care of a patient who suffers a significant bleeding event due to advanced palliative illness. It covers assessment of risk and management of bleeding in a number of different settings which may include, surface bleeding from malignant or non-healing wounds, internal bleeding due to malignancy or non-malignant conditions and generalised bleeding due to severe clotting abnormalities.

#### **Definitions**

ACP- Advance Care Plan

TEP- Treatment Escalation Plan

ReSPECT- Recommended Summary Plan for Emergency Care and Treatment

## **Background**

Massive haemorrhage (bleeding) is a life-threatening emergency. It can be distressing for patients, the people close to them, and health and social care professionals. It is important to recognise those patients most at risk, so that appropriate planning and management can be anticipated.

## Risk factors for bleeding

There should be a multidisciplinary approach to assessing the likelihood of the occurrence of bleeding.

Several factors increase an individual's risk of uncontrolled bleeding at the end of life:

- 1. Site of cancer with fungating/malignant ulceration near major anatomical vasculature e.g. head and neck, breast, penile cancer, or propensity for bleeding e.g. haematological
- 2. Presentation with bleeding e.g. haemoptysis in lung cancer, melaena
- 3. Co-existing disease e.g. gastrointestinal bleeding, oesophageal varices
- 4. Smaller warning (herald) bleeds
- 5. Local infection at the tumour site
- 6. Clotting abnormalities (including liver failure)
- 7. Certain medications which may increase the risk, e.g. non-steroidal anti-inflammatory drugs (NSAIDs), steroids, anticoagulants

For those identified as high risk for major bleeding, a plan should be individualised, reviewed and clearly documented.

## Signs of bleeding:

Haemontvsis

- Haematemesis
- Melaena
- Haematuria
- Bleeding from ulcers, tumours or wounds on the skin.

Bleeding may also be internal in which case the patient may have symptoms of shock or a rapid loss of consciousness with no apparent source of bleeding.

#### Who needs to be informed?

Discussion with patients and relatives may cause unnecessary anxiety and concern. There should be careful assessment of how beneficial this may be for a particular individual. However, it is good practice to offer patients/families the opportunity to discuss any worries or concerns they may have about the mode of death.

In some situations, it is advisable to discuss the risk of major haemorrhage:

- If it is raised by the patient or family
- If knowledge about the risk allows the patient/family to change their behaviour in a helpful manner and facilitate other care planning e.g. place of care
- If there have been warning bleeds
- If there are special circumstances which make it valuable for the family to know e.g. children in the home

Communicate risk and care plan to healthcare professionals involved by documenting clearly in the clinical care record. For some patients in their own home, having a written plan of what to do in an emergency might be helpful for family members/carers.

#### Risk reduction

- 1. If any of these risk factors are identified this should trigger a multidisciplinary approach to reducing the risk of major bleeding and of distress to both patient and families if it happens.
- 2. There should be consideration of the appropriateness of radiotherapy, chemotherapy, cauterisation or embolisation.
- 3. If wound infection felt to be present treatment should be considered.
- 4. Review and stop anticoagulants and antiplatelet drugs where possible.
- 5. Minimise trauma during dressing changes by cleaning gently with irrigation and using non-adherent dressings.

## Management

## **Advance Care Planning / Anticipatory prescribing**

This should include:

 Treatment Escalation Plan Or Recommended Summary Plan for Emergency Care and Treatment (TEP or ReSPECT) to be agreed with patient and family and documented in clinical notes to include DNACPR and preferred place of care and death.

- 2. A clear written plan documented and shared as appropriate, detailing what to do in the event of a major bleed.
- 3. Ensure availability of emergency equipment to manage a major bleed including dark towels, face shields (where available), gloves, aprons, plastic sheet or pads, clinical waste bag.
- 4. Where applicable ensure the availability of topical haemostatic treatment options, to include:
  - a. Haemostatic gauze or haemostatic granules (See Appendix 1)
  - b. 5–10 mL of adrenaline 1 in 1000 (1 mg in 1 mL) on a gauze swab which can be applied with pressure for 10–20 minutes. This causes local vasoconstriction but may also cause 'rebound' bleeding once these effects wear off. Care should be taken to avoid ischaemic necrosis.
  - c. Undiluted 500mg/5ml (10% solution) tranexamic acid ampoule soaked into gauze and applied with pressure for 10 minutes before covering with a dressing.
  - d. Some brands of alginate claim to have haemostatic properties that can be used to control minor bleeding. Alginate dressings are manufactured from the calcium salt of an alginic acid polymer derived from brown seaweed. It is claimed that calcium ions that are released into the wound from the dressing activate platelets, which results in haemostasis. However, these dressings are not licensed as haemostatic dressings.
- 5. Prescription of midazolam 10 mg for intramuscular administration use in event of catastrophic bleed with appropriately completed Medicines Administration Form (in home setting) or electronic/paper prescription chart if they are an inpatient.
  - Buccal midazolam 5–10 mg can be considered if family or carers are able and willing to administer, especially if the patient lives in a more rural / remote area, to avoid delays in receiving time critical medication. However, carers **must** be carefully counselled about correct and indicated use of this (mainly to avoid high dose midazolam being given inadvertently given for anxiety/agitation when a lower dose is indicated).

It is much more important that family members are actively involved in discussions about other aspects of the treatment plan so that they know how to respond and who to call in an emergency situation.

## **Emergency Bleeding Management checklist:**

Ensure a supply of dark sheets/towels is available along with other equipment such as gloves, aprons, plastic sheet or incontinence pad, clinical waste bags.

A drug box should include;

- a. 5 ampoules midazolam 10 mg/mL
- b. 3 syringes
- c. 3 needles green
- d. 3 needles blue
- e. 10 mL tranexamic acid injection (500 mg/5 mL)
- f. 10 mL adrenaline 1:1000 (1 mg/mL) injection
- g. 5 x gauze swabs (10x10 cm)
- h. 1 x haemostatic dressing
- i. 1 x haemostatic Granules

## In event of a catastrophic bleed:

It is important to remember, that in the event of a massive, terminal bleed the patient may be unconscious within minutes and may die very quickly, even before the sedation has had a chance to work. Thus, it is important to remember that whilst sedation is important, never leave the patient alone, and always stay with them.

- 1. Stay calm and if possible, summon assistance.
- 2. Ensure that someone is with the patient.
- 3. If possible, nurse in recovery position to keep airway clear.
- 4. Stem / disguise bleeding with dark towels.
- 5. Apply pressure to the area if bleeding from external wound with haemostatic dressings/gauze or adrenaline soaks if available.
- 6. Administer crisis medication if prescribed which can be repeated after 10 minutes if needed.
- 7. Events of this nature are likely to be distressing to relatives/carers and staff. Offer support, opportunity to debrief, follow up with chaplaincy and psychological support to everyone involved.

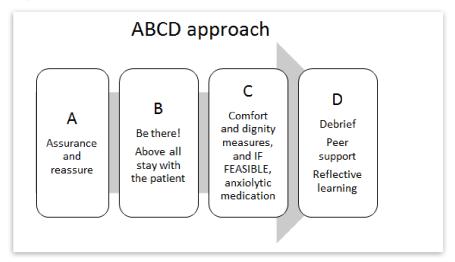
Drug	Route*& Onset of effect	Dose **	Frequency
MIDAZOLAM	Intramuscular preferably deltoid 5–15 minutes	10 mg	Repeat after 10 minutes if needed

<sup>\*</sup> The subcutaneous route is inappropriate due to peripheral shut down and unpredictable absorption.

R

<sup>\* \*</sup> If the patient is already on large background doses of midazolam or other benzodiazepines, but still not adequately sedated during catastrophic bleeding they may need larger doses of midazolam in proportion with the background dose.

## In summary:



Reference: Ubogagu E , Harris DG. Guideline for the management of terminal haemorrhage in palliative care patients with advanced cancer discharged home for end-of-life care. BMJ Supportive & Palliative Care 20102 doi:10.1136/bmjspcare-2012-000253

#### **Non-Terminal Bleed:**

In the event that a major bleed does not rapidly result in death, urgent assessment and plans for ongoing care / treatment need to be made.

Treatment and care plans will depend on the patient's clinical condition, expected prognosis, likely source/site of bleeding, and wishes and preferences.

For those with persistent major bleeding and expected to die soon, consider an infusion of midazolam to manage ongoing anxiety or distress.

If bleeding appears to have stopped or reduced, a full assessment is required to ensure the risk of further distressing bleeding is minimised appropriately. Haemostatic gauze/granules, if used, can be left in situ for up to 24 hours before being gently removed.

## **Appendix 1: Haemostatic Gauze/Granules**

Haemostatic gauze/granules can be used on any open wound when haemorrhage cannot be controlled by application of direct pressure alone, or wounds with soft tissue loss. It is of value in controlling haemorrhage at junctional areas where a tourniquet cannot be applied such as the groin, axilla, and neck. This should be used in conjunction with an advance care plan and ReSPECT process/ Treatment Escalation Plan.

It is suitable for arterial and venous bleeding. It is effective at clotting blood containing anticoagulants.

There are no special storage instructions.

Haemostatic gauze does not require cutting, it can easily be torn to the required size. When used on facial wounds, care must be taken to avoid contact with eyes.

Haemostatic gauze dressings or haemostatic granules should be used to pack the wound at the point of haemorrhaging. Cavities should be packed with gauze down to the wound bed.

Direct pressure should be applied for at least **3 minutes** to allow a stable clot to form. Continued direct significant pressure may be required to control bleeding after application of haemostatic gauze dressings.

When using a haemostatic gauze, it is important to cover the entire bleeding surface and where necessary use another gauze on top if bleeding soaks through the first layer. If the wound is deep, then it may be necessary to use other dressings on top to provide bulk and pressure to the wound.

Haemostatic gauze/granules is a Medical Device. It cannot be prescribed on an FP10. It can be ordered via general or health purchases.

It is licensed for "pre-hospital" care i.e. emergency, military scenarios. The active constituent is chitosan – a natural polymer derived from shrimp shells. Chitosan works by reacting with blood to swell, and on forming a gel merge together to form a clot. Haemostatic gauze/ granules work with a background treatment of anticoagulant products.

Use in palliative care would be 'off-licence' at present.

Haemostatic gauze/granules do not impair wound healing, they are single use products only. Haemostatic gauze/granules, if used, can be left in situ for up to 24 hours before being gently removed.

All staff likely to be involved in using Haemostatic gauze should view the online training film in advance of a product being ordered and subsequently used for a patient.

#### **Contraindications**

Product warning – patients with allergies to shellfish to use alternative management, staff advise caution on handling due to potential risk.

Use within abdominal, chest cavity and open skull fracture where bleeding point cannot be visualised, wounds which are unamenable to pressure. It is not indicated for use in the mouth or eyes.

### care patient

PAT	IEN <sup>-</sup>	ΓNA	ME:	
ADI	DRE:	SS:		

DOB:

#### **NHS NUMBER:**

This person is at risk of bleedingfrom.....

No further medical intervention is possible to stop the bleeding.

The aim of treatment in the event of a bleed is to keep the patient calm and comfortable.



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The following plan describes the actions to take if the person experiences a major (very heavy) bleed. The goal of this plan is to ensure the person is comfortable and their carer well supported.

Experiencing a sudden large bleed may be frightening for the person and their family. It may also be distressing for professionals involved. Ensure someone remains with the patient to provide reassurance.

#### **Actions**

- Call for help. Support from the paramedic service may be very helpful. Calling for ambulance assistance does not mean the person has to be taken to hospital.
- Ensure ReSPECT process (or local DNACPR) and escalation plan (TEP where applicable) is in the persons home/ usual place of residence.
- Keep calm, reassure the patient, and avoid leaving patient alone.
- Use dark towels and sheets to help absorb the blood.
- Have gloves, aprons and clinical waste bags at hand.
- Support family/ carers who may also be distressed.

**Medications** (see Medicine Administration Form for

#### doses) Symptoms of:

- Anxiety/distress/ breathlessness: Give midazolam intra-muscularly.
- Pain/ breathlessness: Give strong opioid subcutaneously as per Local anticipatory medicine guidance.

#### Other symptoms may sometimes occur such as:

- Troublesome oral/lung secretions: Give appropriate anti-secretory subcutaneously as per prescription as per Local guidance.
- Nausea/vomiting: Give prescribed antiemetic subcutaneously.

#### Actions after the bleed

- If the patient survives the bleed, aim to relieve any symptoms. The need for medication via a subcutaneous syringe driver should be considered.
- Review advance care plan/ ReSPECT process, do the patients' wishes and preferences remain appropriate?
- A hospice admission may be appropriate if person/carer agrees and a bed available.
- Should the person be transported to the Emergency Department, staff there may contact their palliative care team.
- Continue to offer reassurance to the patient if conscious.
- Support family.
- Consider debrief for professionals involved in care of the event.

Plan Written by:	
Professional	
Title	Date
For plan review: Yes / No	
Date for review if applicable	
Telephone for further advice if needed	
Specialist Palliative Care Team	
Telephone Number	

# **Appendix 3: Example Audit tool**

Section	Question	Options
Patient identifier	Anonymised	E.g. CPC1, JTH1
Location of patient	Where were they?	Home/Hospice/Hospital/Care Home/ other – free text
Risk assessmen t		
Why is patient at risk of bleeding	What is the cause of bleeding risk	Site of cancer with fungating/malignant ulceration e.g. head and neck, haematological, breast, penile cancer, other
		Presentation with bleeding e.g. haemoptysis in lung cancer, melaena Co-existing disease e.g. gastrointestinal bleeding, oesophageal varices Smaller warning (herald) bleeds Local infection at the tumour site Clotting abnormalities (including liver failure)
	Drugs that inhibit coagulation	Y/N Which ones:  a. Warfarin b. DOAC c. Low molecular weight heparin d. Aspirin e. Clopidogrel f. Other
Advance Care	Documented advance care plan available in place patient was.	Y/N If yes was there:

Planning		<ul> <li>a. DNACPR</li> <li>b. TEP/ReSPECT form completed</li> <li>c. Place of death         documented If yes was it:         Home/Hospice/Hospital/Care         home / other – free text</li> </ul>
	Documented review of medicines and consideration of stopping	Y/N If yes which drugs

Section	Question	Options
		a. Warfarin
		b. DOAC
		c. Low molecular weight heparin
		d. Aspirin
		e. Clopidogrel
		f. Other
	Communication with other health care professionals	Y/N
	professionals	Documentation in house
	Prepare equipment: Haemostatic Gauze/	What was put in house:
	Granules for bleeding wounds	Haemostatic gauze
		2. Adrenaline soaks/
		3. Tranexamic acid soaks
		4. Haemostatic Granules
		5. Other
	Dark towels, surgical face shields (where available), gloves, aprons, plastic sheet or pads, clinical waste bags	Y/N
	Was there a prescription and preparation of crisis medication and emergency drug box?	Y/N  If yes free text document which drugs
Outcome	Where did they die?	Home/Hospice/Hospital/     Care Home/ other – free     text     Was this their preferred place of     care?
	Did they bleed?	No Yes – multiple options possible: a. Large bleed requiring intervention b. Small bleed no interventions required Time between bleed and death c. 1 hour d. Less than 4 hours e. Less than 12 hours f. Less than 24hours g. 24hours–7 days h. More than 7 days Free text for more details

If	yes	What equipment was used:  1. Haemostatic gauze
		1. Hacinostatio gauze

Section	Question	Options
		<ol> <li>Adrenaline soaks/</li> <li>Tranexamic acid soaks</li> <li>Celox TM dressings (or similar)</li> <li>Dark towels</li> <li>Midazolam – buccal</li> <li>Free text dose</li> <li>Midazolam - IM</li> <li>Free text dose used</li> </ol>
	How did the family experience the bleeding?	Feedback from family
	How did the staff involved experience the bleeding?	Feedback from staff

Table 1 Published evidence outside of licence

Efeoglu, C et al. Turk J Gastroenterol 2019;30(2):171-6	CeloxTM CeloxTM vs Surgicel in 80 patients with cirrhosis having tooth extractions. No significant difference between products
Carles, G etal. J Gynaecol Obst Huma Reprod 2017	4 case reports of post-partum haemorrhage resolved by using Celox.
Muzzi, L et al. Interactive Cardiovascular & Thoracic Surgery 2012;14:695-698	2 case reports of patients post-cardiotomy needing ECMO where CeloxTM CeloxTM was used on sternal edges and pericardial cavity alongside other measure such as VAC.

#### References

#### https://www.celoxmedical.com/

Bin Jeremiah D. Barba, Charito T. Aranilla, Lorna S. Relleve, Veriza Rita C. Cruz, Jeanina Richelle Vista, Lucille V. Abad, Hemostatic granules and dressing prepared from formulations of carboxymethyl cellulose, kappa-carrageenan and polyethylene oxide crosslinked by gamma radiation, Radiation Physics and Chemistry, Volume 144, 2018, Pages 180-188.

Hatamabadi HR, Asayesh Zarchi F, Kariman H, Arhami Dolatabadi A, Tabatabaey A, Amini A. Celox-coated gauze for the treatment of civilian penetrating trauma: a randomized clinical trial. *Trauma Mon*. 2015;20(1):e23862. doi:10.5812/traumamon.23862

#### Palliative Care Formulary

Ubogagu E, Harris DG. Guideline for the management of terminal haemorrhage in palliative care patients with advanced cancer discharged home for end-of-life care. BMJ Supportive & Palliative Care 2012;2(4):294-300

Welch M, Barratt J, Peters A, et al. Systematic review of prehospital haemostatic dressings BMJ Mil Health 2020;166:194-200.

## **Guide History**

Document Title	Clinical Guideline for the Management of a Major Haemhorrage/Catastrophic Bleed for Palliative Care patients
Document Date	July 2024
Document Purpose and Intended Audience	This guideline has been produced to provide a clear framework to ensure the safe and effective care of a patient at the end of life who suffers a catastrophic bleed in both an inpatient and community setting.
Authors	St Giles Hospice (Dr Nial McCarron, Katie Taroni, Toni Flanagan, Jane Mogford) Dr Brenda Ward Update Dr Anna Lock 2021 Update Dr Katie Shellis and Tricia Evans 2024 Update Dr Louise Hills and Dr Nicky Baker 2024
References	Palliative Care Formulary  https://www.celoxmedical.com/
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Review Date (must be within three years)	July 2027
Approval Signatures: SPAGG chair SPAGG deputy chair SPAGG	Dr Jon Tomas  Dr Alice Martin
Date Approved	by SPAGG: July 2024

Version	Date	Summary of change/ process
1	September 2015	Endorsed and approved by SPAGG
2	September 2018	Reviewed
3	February 2024	Reviewed
4	June 2024	Reviewed