Bleeding

Introduction
Haemorrhage (obvious or occult bleeding) occurs in 10 to 20% of patients with advanced cancer. Acute haemorrhage is likely to be distressing for the patient, family and staff.

Assessment
- Assess whether it is severe acute bleeding which is life threatening, or more controllable with specific measures. If the latter, discuss management with appropriate specialist.
- Also assess whether bleeding is due to local effects (such as blood vessel invasion) or to systemic effects of disease (such as disseminated intravascular coagulopathy [DIC]).
- Review the need for drugs that increase risk of bleeding e.g. low molecular weight heparin, aspirin, warfarin, dexamethasone, NSAIDS.

Management
Anticipatory planning
- If significant bleeding can be anticipated, it is usually best to discuss the possibility with the patient and their family.
- Ensure carers at home have an emergency contact number.
- An anticipatory care plan is helpful. This includes having sedative medication prescribed for use if needed.
- If the patient is at home, discuss options for sedation and enquire if carers feel able to administer this medication.
- Discuss resuscitation; document and communicate resuscitation status.
- Ensure a supply of dark sheets or towels along with other equipment: gloves, aprons, plastic sheet, and clinical waste bags.
- Plan for who will clean up after an event and how to contact them.
- Make sure all professionals and services involved are aware of the care plan, including out-of-hours services (see Out of hours Handover guideline).

Management of severe, acute bleeding
Non-pharmacological management
- Try to remain calm. Call for help. Talk to the patient and comfort them.
- Put the patient in the recovery position if appropriate.
- If able, apply direct pressure to bleeding area; dark coloured towels are best.
- If resuscitation is appropriate, admit to hospital and manage according to local protocols for haemorrhage.
- If the patient has a massive haemorrhage and is clearly dying, support and non-pharmacological interventions are more important until help arrives than trying to give sedative medication; the patient will usually lose consciousness rapidly and may be frightened especially if left alone.
Sedative medication for use in massive terminal haemorrhage

If the patient is distressed, a rapidly acting benzodiazepine is indicated. The route of administration guides the choice of drug:

- intravenous (IV) access available: †midazolam 10mg IV or †diazepam (emulsion for IV injection) 10mg IV.
- intramuscular (IM) injection: †midazolam 10mg can be given into a large muscle such as deltoid, gluteal.
- rectal route or via a stoma: †diazepam rectal solution 10mg.
- sublingual: †midazolam 10mg can be given using a parenteral preparation or the buccal liquid (Buccolam® or Epistatus®) (see ‘Practice points’ section of this guideline).

Note: if the patient is already on large background doses of benzodiazepines, a larger dose may be needed. If they are frail, a smaller dose may be sufficient.

After the event

- Offer de-briefing to team and family.
- Ongoing support as necessary for relatives and staff members.
- Disposal of clinical waste appropriately.

Management of minor bleeding

Minor bleeding may herald a fatal bleed. Although minor, these bleeds may still be distressing to the patient and family. There are some specific measures (described below) which can be taken to try to control these. It is reasonable to review need for aspirin and any other drugs with antiplatelet effects, such as many non-steroidal anti-inflammatory drugs (NSAIDs). Consider also if interventions including diathermy, laser, embolisation, radiotherapy, surgery (including endoscopy, bronchoscopy, cystoscopy) are relevant.

Assess for appropriateness and need for transfusion or other blood products.

† Indicates this use is off licence
QT Indicates this medication is associated with QT prolongation
Medication

Bleeding from skin (including fungating tumours) and mucous membranes

- Apply direct pressure if possible. This can be with gauze soaked in tranexamic acid (500mg in 5ml) or adrenaline (epinephrine) 1 in 1,000.
- The tranexamic acid soaks can be left in situ with a dressing on top. Alternatively, a tranexamic acid paste (4x500mg tablets crushed in 60g base such as hydrophilic soft paraffin) can be applied twice daily under dressings or, in the case of oral cavity bleeding, 10ml four times daily of a 4 to 5% aqueous solution of tranexamic acid may be used as a mouth wash.
  - A 5% solution can be made by crushing and dispersing a 500mg tablet in 10ml water or diluting the contents of one 500mg/5ml ampoule to a final volume of 10ml. (If using the ampoules, the ampoule contents must be filtered before use to minimise risk of glass particles.)
- Silver nitrate sticks can be used to cauterise bleeding points.
- Surgical haemostatic sponges can be used at home by patients or families to control fast capillary bleeding.
- Haemostatic alginate dressings such as Kaltostat® can be helpful.
- Nasal tampons or Rapid Rhino® nasal packs can be used for epistaxis as available locally. Local A&E or ENT department may be able to advise on what is available locally and how to obtain.
- If bleeding not thought due to DIC, consider systemic antifibrinolytics such as tranexamic acid:
  - initial dose of 1.5g orally followed thereafter by 1g three times daily
  - if not settling after 3 days, increase to 1.5g three times daily
  - reduce or discontinue 1 week after bleeding stops; restart if recurs.
- Sucralfate suspension 2g in 10ml twice daily as mouth wash, or orally for oesophageal lesions or rectally for rectal lesions. A paste made of 2g (2x1g tablets crushed in 5ml aqueous jelly) can be used topically for other lesions.

Additional measures below may be recommended by specialists.

- If severe surface bleeding and above measures fail to control, consider use of desmopressin with close monitoring.
- If acute rectal mucosal damage following radiotherapy try Predsol® retention enema twice daily. (In chronic ischaemic radiation proctocolitis, use oral or rectal tranexamic acid).

Where oral route is not appropriate, oral solution can often be given rectally. Please contact the specialist palliative care team or palliative care pharmacist for further advice if required.
Bleeding from respiratory tract

- Mortality from haemoptysis is high. Risk of asphyxiation is greater than the risk of exsanguination. Rate of bleeding affects outcome.
- Maintain the airway.
- If the bleeding site is known, lay the patient on the bleeding side to reduce effect on the other lung. Alternatively use a head down position if possible to aid drainage of blood.
- Use oxygen and suction as required.
- Exclude or treat infection or pulmonary thromboembolism (PTE) if appropriate.
- Cough suppressant may be helpful.
- Tranexamic acid (as in section on 'Bleeding from skin and mucous membranes').
- Radiotherapy can give full control of bleeding in 85% of patients with lung bleeding.

Bleeding from urinary tract

- Exclude or treat infection.
- Additional measures below may be recommended by specialists.
  - Consider tranexamic acid (as in section on 'Bleeding from skin and mucous membranes') although there is a risk of clot retention until the complete cessation of bleeding.
  - Bladder irrigation ± instillations with 0.9% Sodium Chloride or tranexamic acid (5g in 50ml water) can be tried once or twice daily if oral treatment is unsuccessful.

Bleeding from gastrointestinal (GI) tract (for oral or rectal bleeding see under mucous membranes)

- H2 antagonist or proton pump inhibitor.
- Tranexamic acid (as in section on 'Bleeding from skin and mucous membranes').
- Sucralfate (as in section on 'Bleeding from skin and mucous membranes') for oesophageal bleeding.
- Consider Vitamin K (although paradoxically, hepatic impairment may increase risk of venous thrombosis therefore seek advice).

Bleeding due to advanced haematological malignancy

- Platelet infusion may provide transient benefit in thrombocytopaenia.
- Sensitive discussions will be required regarding the appropriateness of this treatment in marrow failure.
Practice Points

- Fear of major bleed may prevent continuing care at home.
- Advise the carer to sit or stand behind the patient when applying pressure in a severe bleed if possible as this reduces bleeding onto the carer and can limit impact of event on them. Advise them to speak to or touch the patient to reassure them they are not alone.
- All those involved with a patient who bleeds (family, carers and staff) may need support.
- Ensure bleeding is not due to dressing adherence or inappropriately vigorous cleaning of wound.
- Check for appropriateness of drugs and dose in the British National Formulary (BNF) or Summary of Product Characteristics (SPC) on an individual basis.
- Buccolam® 5mg/ml has marketing authorisation (adult dose is unlicensed) and Epistatus® 10mg/ml is an unlicensed formulation. Check local policy for preferred product.
- Systemic haemostatic drug such as etamsylate 500mg four times daily4,5,9 (if available), may also be helpful for skin, mucous membranes and urinary tract bleeding. Review 1 week after bleeding stops.

Patient and carer advice points
Advice on fungating wound management can be obtained here (http://www.macmillan.org.uk/Cancerinformation/Livingwithandaftercancer/Symptomssideeffects/Othersymptomsideeffects/Fungatingwounds.aspx).

References