CATASTROPHIC EVENTS IN TERMINAL PATIENTS

Staff this document applies to:

All Clinical Staff of Austin Health.

Related Austin Health policies, procedures or guidelines:

Medical Oncology Manual

Advance Care Planning Policy

Advance Care Planning Guideline

Life Prolonging Treatment :A Guide to Life Prolonging Treatment and Limitation of Treatment

Guidelines for Care of the Dying Patient

Care of the Deceased

Religious Guidelines for Care of the Dying

Standard and Transmission Based Precautions

Laundry Practice

Hand Hygiene

Cleaning Patient Equipment

Cytotoxic Spill Management

Prescribing Policy

Administration of Medication

Background

Catastrophic terminal events lead to the death of the patient within minutes of onset. They include massive haemorrhage or complete airway obstruction. Patients experiencing terminal events will need rapid effective management to minimise the distress of their imminent death. Support will also be required for relatives and staff.

Terminal haemorrhage is rapid, massive blood loss in a patient who is not appropriate for active treatment (such as radiotherapy or endovascular interventions). It occurs in 3-12% of cancer patients.

Management of complete airway obstruction depends on the individual. Reversible factors such as sputum plugging or kinking of a tracheostomy tube should be considered. In some cases it may be appropriate to refer urgently for consideration of interventions such as endobronchial stent placement or laser treatment, or palliative radiotherapy. In many cases, however, airway obstruction is an anticipated terminal event, and these interventions are not indicated.

Purpose:

To assist health professionals to provide appropriate care to patients experiencing a catastrophic terminal event at Austin Health.

This guideline is NOT appropriate if the patient is for definitive treatment of bleeding or obstruction or for resuscitation in the event of a life-threatening episode.

Identification and Preparation of High-Risk patients

Patients at high risk of a catastrophic terminal event should be identified and preparations made.

1. **Identify high risk patients:**
    - Cancer patients – tumours close to major arteries or airways, eg central lung tumours, head and neck tumours, liver tumours, fungating tumours
    - Haematology patients – refractory leukaemia and myeloproliferative disorders
    - Patients at risk of upper gastrointestinal bleeds, e.g. oesophageal varices
    - Patients who have presented with bleeding or had smaller warning bleeds
    - Local infection, poor wound healing or recent radiotherapy at tumour site
    - Clotting disorders (including chronic liver disease) or anticoagulant medications
    - Those with signs of partial airway obstruction e.g. stridor or refractory wheeze.
2. **Establish goals of care:**
    - Clarify and document resuscitation status as per hospital policy (Life Prolonging Treatment :A Guide to Life Prolonging Treatment and Limitation of Treatment) on the Resuscitation Plan, L0.5.
        - A MET call may still be appropriate to ensure enough staff are available to organise medications and patient comfort
    - Discuss with patient and family as appropriate
        - Ensure that they are aware that resuscitation will not be performed
        - Balance the need for patients and relatives to be aware of the risk versus the reality, that catastrophic haemorrhages and airway obstruction are rare. It is always 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 definitely advisable to discuss the risk of major haemorrhage, for example if there have been warning bleeds, or if there are special circumstances which make it valuable for the family to know e.g. children present
    - Consider ceasing anticoagulant and anti-inflammatory medications.
3. **Chart appropriate medication** (see below).
4. **Ensure that intravenous (or at least subcutaneous) line is in place.**
5. **Document management plan in history.**
6. **Inform nurse-in-charge of shift.**
7. **Ensure that appropriate equipment is available:**
    a. Dark coloured towels or blankets (e.g. green/navy blue) and dark bowl are available (blood looks less dramatic against these colours)
    b. Personal Protective Equipment (PPE) - gloves, goggles, aprons, and waste bags (consider discretely located trolley)
    c. Check suction
    d. Check oxygen.
8. **Consider if patient should be moved to a single room.**

If a catastrophic terminal event occurs

- It is important to provide a calm, reassuring and caring environment for the patient, family members and/or carers. The patient **must NEVER be left alone** during a catastrophic terminal event. In some cases death is rapid and **staff comfort may be the only support** that the patient and family have during this period
- Consider calling a MET if additional staff required
- Provide psychological support to patient, family members and/or carers
- For patients who are experiencing a catastrophic haemorrhage, placing the patient in lateral decubitus position toward site of bleeding may reduce the risk of aspiration and improve comfort
- For patients who are experiencing airway obstruction, consider sitting patient upright and providing oxygen. These measures are less helpful once the patient is sedated.
- Apply pressure to bleeding site if possible, and/or cover bleeding with dark towels
- Consider suctioning of blood or respiratory secretions
- Administer appropriate medications (as below), if staffing allows.
- **Do not leave patient alone.**
- Provide privacy and protect other patients by drawing curtains. Moving other patients from the room may be required if sufficient staff available.

Medications for Palliative Sedation

In many cases, the patient will lose consciousness before the medications can be administered, hence **staying with and comforting the patient** is the most important treatment to be offered.

There is limited high level evidence to dictate which medications should be used. All recommendations in the literature are based on consensus, expert opinion and isolated case reports.

The aim of medications is to relieve the anxiety and distress of a large volume bleed or the sensation of suffocation. There is no intention to hasten death. If the patient survives, then midazolam is also an amnestic agent, and the patient should have little memory of the event. Morphine is usually not beneficial for haemorrhage alone, but may be appropriate if the episode is prolonged and associated with pain or dyspnoea. Morphine can help the discomfort associated with airway obstruction.

Medication	Starting dose	Route	Frequency	Rate of onset
Midazolam	5mg	IV or subcut	5-10 minutely	2-3 minutes; slower if subcut
Morphine	Double usual prn dose	IV or subcut	5-10 minutely	2-3 minutes; slower if subcut

IV = intravenous

Subcut = subcutaneous

Repeat dose every 5 – 10 minutes as required until patient comfortable / fully sedated. Higher doses are likely to be required if the patient has already been receiving benzodiazepines.

Midazolam can be stored at room temperature (less than 25°C) and should be protected from light.

After the patient has died:

Patient care: see Care of the Deceased for further details.

If there are other patients or visitors in the room, check that they are not distressed by the event. Offer support as required, for example social work or pastoral care involvement, keeping in mind the need to maintain privacy for the patient who has died.

Family care

- Ring General Practitioner
- Ensure follow up by social worker or community palliative care team
- Offer a follow-up meeting to discuss the event
- Offer bereavement counselling, for example through referral to the Australian Centre for Grief and Bereavement (1300 664 786, http://www.grief.org.au/).

Staff care

- Offer debriefing
- Consider case review

Communication Strategy:

All Austin Health Staff - Forward emails to all of the below.

Medical Documents

Email to DL Medical Education All
Email to DL CSU Medical Directors

Nursing Documents

Email to DL CNE
Email to DL Nursing Group

Allied Health Documents

Email DL Allied Health Austin 5

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Authorised/Endorsed by:

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Drug and Therapeutics Committee

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