Emergencies

Introduction

Palliative care emergencies are sudden life-threatening changes in a patient's condition that, without an adequate response, will result in deterioration in that person's health or quality of life. Some patients can be identified as higher risk because of the nature of their disease, and emergency situations can be anticipated and planned for. In these circumstances the patient's wishes can be ascertained and the response required to meet the patient's wishes can be discussed and incorporated into the Advance Care Plan. It is important to explore the benefits, burdens and limits of acute treatments. Palliative care emergencies include:

- hypercalcaemia
- malignant spinal cord compression
- superior vena cava obstruction
- terminal agitation
- raised intracranial pressure
- catastrophic bleeding
- seizures
- stridor

However, it should be noted that patients who have advanced disease can be more susceptible to any type of medical emergency. Their physiological reserve is often poor and special attention needs to be given to their underlying disease. Communication with the patient and their families is key in these circumstances.

Assessment and management

Symptoms	Signs	Management
Hypercalcaemia		
• Fatigue • Muscle pain • Nausea and vomiting • Confusion • Anorexia • constipation	• Difficult to distinguish from general deterioration • Signs of delirium • Can mimic opioid toxicity • Reduced tendon reflexes and globally reduced power	• Check adjusted calcium of treatment felt appropriate • Admission for (IV) rehydration and IV bisphosphonates • (refer to the management of hypercalcaemia)
Symptoms	**Signs**	**Management**

Malignant spinal cord compression (MSCC)

• New, progressively severe back pain (particularly thoracic) • Significant worsening of existing back pain • New spinal nerve root pain (burning, shooting, numbness); may radiate down anterior or posterior thigh (like sciatica), or like a band around the chest or abdomen • Coughing, straining or lying flat may aggravate pain • Pain worse at night Late symptoms: • New difficulty walking or climbing stairs; reduced power (motor weakness) • Sensory impairment or altered sensation in limbs • Bowel or bladder disturbance; loss of sphincter control is a late sign with a poor prognosis	• Spinal tenderness on palpation • Dermatome level can sometimes be found (but lack of a dermatomal level should not provide reassurance) • Reduced sensation in a dermatomal distribution (thermal sensation is affected first and can be checked for using an ice cube) • Power deficits on examination (may be asymmetrical) • Inability to weight bear (can occur even if power is normal on supine examination) • Lhermitte's sign • Hyper-reflexia • Saddle anaesthesia and loss of anal tone sphincter • Palpable bladder	• Communicate with the patient and family to outline the possibility of an MSCC diagnosis • Urgent admission – keep in supine position (unless felt to be too frail for aggressive management) • Consider a trial of corticosteroids with gastroprotection (usually proton pump inhibitor) • † Dexamethasone 16mg orally (or IV) immediately and subsequently • † Dexamethasone 8mg twice daily orally (second dose before 2pm if possible). Discontinue promptly if no benefit and reduce gradually in responders • Urgent referral for a whole spine MRI (always scan the whole spine, not just area of suspected lesion) • Immediate discussion with neurosurgery if there is instability of the spine • Immediate referral to clinical oncology for advice on ongoing management • If the patient is on disease-modifying treatment ensure that the treating consultant is aware • After the initial treatment with radiotherapy or surgery, many specialties may

		need to be involved in the management of spinal cord compression, including physiotherapy, occupational therapy and orthotics for brace advice • Goals for treatment should be discussed with patient who may opt for no active treatment
Symptoms	**Signs**	**Management**
Superior vena cava obstruction (SVCO)		
• Usually occurs with mediastinal tumours • Shortness of breath and cough • Difficulty swallowing • Headache • Feeling of "fullness" in head and swelling of the face • stridor	• Usually a gradual onset of symptoms • Oedema of face and arms • Dusky colour of skin and distended superficial veins in face, neck and thorax • Breathlessness (worse lying flat) • Pemberton's sign (the face becomes cyanosed on raising the arms) • Can be associated with significant oedema of the epiglottis	• Admission to hospital • In patients with a known cancer diagnosis, an urgent diagnostic pathway should be initiated as corticosteroids should not usually be commenced until tissue samples have been taken • In patients with a known cancer diagnosis, consider a trial of corticosteroids, with gastroprotection (usually proton pump inhibitor) • † Dexamethasone 8mg to 16mg orally (or IV) immediately and subsequently • † Dexamethasone 4mg to 8mg twice daily orally (second dose before 2pm if possible) • Referral to oncology is important to establish whether disease modifying treatment of palliative radiotherapy can be offered • Stenting via interventional radiology

		can be helpful and usually results in rapid improvement of symptoms • Fans and oxygen can make the patient feel more comfortable
Symptoms	**Signs**	**Management**
Terminal agitation (also known as terminal restlessness or terminal delirium)		
May be associated with: • Extreme restlessness • Fluctuating episodes of cognitive decline • Worsening of pre-existing delirium • High levels of existential distress	Can be very variable but signs can include: • Restlessness • Aimlessness • Calling or shouting out • Fidgeting • Confusion • Anguish • "plucking"	• Respond calmly and offer to explain what is happening to family and friends of the person • Examine the patient to exclude treatable causes of distress, for example too hot or too cold, urinary retention, itch or rash, poorly controlled pain, drug toxicity • Reduce polypharmacy • If opioid toxicity suspected reduce dose by 50% and observe • † Midazolam SC 2mg to 5mg hourly as required **Persistent anxiety / distress:** **First step:** † Midazolam SC 10mg to 20mg over 24 hours in a syringe pump. Doses can be gradually titrated up to over 60mg over 24 hours under specialist advice **Second step:** Titrate † Midazolam with advice starting at 10mg over 24 hours in a syringe pump. Doses can gradually be titrated up to 60mg over 24 hours under specialist advice. QT Levomepromazine may need to be used in addition to midazolam under specialist advice

		Use lower doses if not used previously and in frail elderly, for example, 2.5mg to 5mg SC as required 2 hourly Higher doses may be needed for persistent distress or delirium for example, 10mg to 25mg SC as required 2 hourly May need to be given more frequently initially, for example, hourly to control symptoms Stop any QT haloperidol Strongly consider referral to specialist palliative care for ongoing support and advice
Symptoms	**Signs**	**Management**
Raised intracranial pressure (ICP)		
• Headache gradually increasing in severity over time • Persistent headache classically worse in morning • Headache often worse on coughing, sneezing and bending over • Vomiting (commonly without nausea) • Visual disturbance • Dizziness • Personality change • Seizures	Diagnosis is usually based on the history. • Signs are often late but can include: • Raised blood pressure • Altered level of consciousness • Ocular palsies • Papilloedema • Raised blood pressure	Urgent CT Brain may be necessary For patients with cancer, raised ICP may be caused by the cancer or a bleed into or around the tumour Consider a trial of corticosteroids with gastroprotection (usually with proton pump inhibitor) † Dexamethasone 8mg to 16mg orally (or IV) immediately and subsequently † Dexamethasone 4mg to 8mg twice daily orally (second dose before 2pm if possible). Discontinue promptly if no benefit and reduce gradually in responders Raise the head of the patient's bed If intracranial bleed suspected stop anticoagulents Symptom relief with analgesia and anti-emetics

		(† Ondansetron 4mg twice a day can be effective in patients with raised ICP) Referral to oncology is important to understand the implications for the patient's prognosis, and whether disease-modifying therapy would be offered Consider referral to neurosurgery
Symptoms	**Signs**	**Management**
Haemoptysis		
• Haemoptysis can range from small flecks to catastrophic haemorrhage • The patients may also have symptoms relating to the cause of the haemoptysis, for example infection, pulmonary thromboembolism, tumour erosion, severe heart failure • Other symptoms may include: ○ Pain ○ Cough ○ Shortness of breath	• Signs should be sought to confirm the diagnosis from the history	• Consider and manage the underlying cause (for example tumour erosion / infection / pulmonary thromboembolism) • Consider admission where there is a potentially reversible cause • Stop anticoagulants unless there is a high suspicion of thromboembolic disease causing haemoptysis • Oral corticosteroids can be helpful for those with inflammation and direct invasion from cancer • Antifibrinolytics can be helpful but can be associated with increased thromboembolic disease • Antibiotics should be considered where infection is suspected
Symptoms	**Signs**	**Management**
Haematemesis		
• The symptoms of haematemesis can range from a single small	• Signs should be sought to confirm the diagnosis from the history	• Consider and manage the underlying cause (for example tumour, NSAID, coagulopathy)

vomit to catastrophic life threatening bleeds • There are multiple cause of haematemesis in people with advance disease • Coagulopathy • NSAID and corticosteroid use • Portal hypertension causing varices • Tumour bleeding • Stress ulcers		• Consider admission where there is a potentially reversible cause • Stop anticoagulants, corticosteroids and NSAIDs where possible • Commence a proton pump inhibitor • Antifibrinolytics can be helpful but can be associated with increased thromboembolic disease • Consider giving vitamin K
Symptoms	**Signs**	**Management**
Catastrophic bleeding (haemoptysis, haematemesis, carotid artery erosion)		
Patients may have been identified as being at risk of haemorrhage Risks include: • Previous small bleeds • Imaging showing necrotic tumour near major blood vessels • Coagulopathy	• Just prior to a major haemorrhage, patients often report feeling very unwell with a sense of "impending doom"	• If a catastrophic bleed is anticipated, prepare the patient and family and ascertain wishes where possible • Position the patient comfortably (often best sitting forward and well supported) • Use dark towels to absorb as much of the blood as possible • 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 • Buccal † Midazolam 10mg (Buccolam® or Epistatus®) • If a patient begins to haermorrhage, death often occurs rapidly so it is more important to have someone at the bedside providing support than leaving to get medication • Family often need some support in bereavement, especially if a haemorrhage has occurred at home
Symptoms	**Signs**	**Management**
Acute convulsive seizures		
• Muscle spasms • Falling • Confusion • Loss of bowel or bladder control • Clenched teeth • Irregular breathing • Inability to speak	• If seizure persists for more than 5 minutes or if there are serial seizures with no recovery between episodes consider status epilepticus	• Secure airway • Give oxygen • Ensure safe environment • Check capillary blood sugar • † Midazolam 5mg bucally or SC. If seizure activity persists repeat dose once after 10 minutes • Review current anti-epileptic medicines or start on anti-epileptics Refer to Seizure guideline
Symptoms	**Signs**	**Management**
Stridor		
• Patients will often report distressed breathing	• Stridor is a sign characterised by a high pitched breathing sound	• If stridor is an anticipated part of disease progressions (for example head and neck

• They will report increase in distress on lying down	resulting from turbulent air flow • Consider cause: intrinsic obstructing lesion or extrinsic compression from adjacent structure, for example thyroid	cancer), prepare the patient and carer and ascertain wishes where possible • Ensure wishes are documented in Advance Care Plan / electronic Key Information Summary. • If tracheostomy is an option, arrange emergency admission for definitive procedure to alleviate obstruction • If tracheostomy is not an option, treatment will depend on anticipated prognosis • If the patient is felt to be imminently dying treat any distress with † Midazolam 10mg IV or IM • Otherwise consider immediate management with corticosteroids with gastroprotection (usually proton pump inhibitor), • † Dexamethasone 16mg orally (or IV) immediately and subsequently • † Dexamethasone 8mg twice daily orally (second dose before 2pm if possible). Discontinue promptly if no benefit and reduce gradually in responders • In discussion with senior doctor, consider nebulised adrenaline (1:1000) 1mg – 5mg driven on oxygen. Assess and repeat if necessary