North West Coast
Strategic Clinical Networks

Clinical Practice Summary

For Palliative Care Symptoms

North West Coast Strategic Clinical Network
Cheshire & Merseyside Audit and
Clinical Guidelines Group

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Contents

Clinical Practice Summary For Palliative Care Symptoms	
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Introduction and Aide Memoire

These clinical practice summaries are based on the Merseyside and Cheshire Palliative Care Network Audit Group Guidelines. They support decision-making in symptom management and care co-ordination for people with palliative care needs. If there is any doubt regarding clinical decisions for individuals, help should be sought from local Palliative Care services. Details regarding local services can be found at the end of these guidelines.

Ambitions for Palliative and End of Life Care – supporting people in the last weeks of life

All approaches regarding palliative and end of life care should reflect Ambitions for Palliative and End of Life Care, A national framework for local action 2015-2020 and the 6 key principles

Each person is seen as an **individual** and
Receives **fair access** to care
We **maximise comfort & wellbeing**
Care is coordinated
All staff are prepared to care
Each **community** is prepared to help

Ensure that you have considered the following in communication with the person and those important to them:

- Preferences and possibilities that could constitute an **Advance Care Plan**
- Sensitive communication about care in the last days of life and decisions about Do Not Attempt Cardiopulmonary Resuscitation (**DNACPR**) Orders
- Ensure that if there is an **ICD (Implantable Cardioverter Defibrillator)** in place, it has been deactivated.
- Ensure that all relevant Out of Hours services are made aware of any critical documentation e.g. using special note **notification** and in hospital settings that clear **treatment escalation plans** are made
- **Anticipatory prescribing** to relieve common symptoms in the last weeks of life should be considered in a timely manner and individualised to avoid delay in managing distressing symptoms Care of dying adults in the last days of life, NICE guideline NG31

One Chance to Get it Right – Care in the last few days and hours of life

- **Recognise** deterioration and **consider if this is potentially reversible** e.g. infection or if the person is likely to die from irreversible causes. Potentially reversible causes should be treated provided that this is in accordance with the person's wishes or in their best interests
- If the person is likely to die from irreversible causes in the next hours or few days **communicate** this clearly and sensitively
- **Involve** the dying person and those important to them in day-to-day decisions about personal care and clinical treatments
- Avoid undertaking **investigations** that are unlikely to affect care in the last few days of life unless there is a clinical need to do so (NG31) e.g. curtailing renal monitoring in advanced heart failure
- Construct **an individual plan of care**, which includes food and drink, symptom control and psychological, social and spiritual support
- **Hydration** is not covered in these guidelines but guidance can be found in Care of dying adults in the last days of life, NICE guideline NG31
- **Deliver** this plan of care sensitively and **review** frequently especially if symptoms are not controlled, there is concern from family members or the person shows sign of improvement

QUICK GUIDE	BOWEL OBSTRUCTION
Reference	Merseyside and Cheshire Palliative Care Network Audit Group Guidelines on Nausea and Vomiting and Medical Management of Malignant Bowel Obstruction

Assessment/Description

Malignant bowel obstruction is a recognised complication of advanced pelvic or abdominal malignancy. Common symptoms associated with malignant bowel obstruction include abdominal pain, abdominal colic, nausea and vomiting.
The evidence base for management of malignant bowel obstruction is weak and this chapter summarises the best available evidence.

An individualised approach to management is recommended for each patient and specialist palliative care advice should be sought.

- The diagnosis is made clinically through history and examination
- This may be confirmed with imaging (abdominal X-ray or CT scan) depending on individual circumstance and preferences

Medications for Symptom Control in Malignant Bowel Obstruction
Dose adjustments may need to be made depending on renal and hepatic function

Indication(s)	Drug name	Dose (over 24 hours via CSCI unless otherwise stated)	Notes
Relief of constant pain	Opioid via CSCI/24 hours or transdermal Fentanyl patch	Dependent on previous dose	Absorption of oral formulation via gut may have been impaired when converting from oral to CSCI. Consider adjusting the dose accordingly
Relief of colic	Hyoscine butylbromide	60mg - 240mg	**Do not combine with cyclizine in CSCI as can cause crystallisation**
	Glycopyrronium	600micrograms - 2.4mg	Does not crystallise
Reduce volume of gastrointestinal secretions	Octreotide	300micrograms - 600micrograms	Should be considered first line. (If acutely unavailable, use Hyoscine Butylbromide but **do not combine with cyclizine in CSCI as can cause crystallisation)**
	Hyoscine butylbromide	60mg - 240mg	**Do not combine with cyclizine in CSCI as can cause crystallisation**
	Ranitidine	100mg - 200mg	Does not crystallise
	Glycopyrronium	600micrograms - 2.4mg	Does not crystallise
Reduce tumour oedema. Reduce nausea and vomiting	Dexamethasone	8mg subcutaneously od or 4mg subcutaneously bd	Given as a single dose or divided into 2 doses (10am and 2pm or before 12 noon if single dose). Late administration may cause insomnia /agitation
Reduce nausea and vomiting	Cyclizine	150mg	**Do not combine with Hyoscine butylbromide in CSCI as can cause crystallisation**
	Haloperidol	1.5mg - 5mg	
	Levomepromazine	6.25mg - 25mg	
	Metoclopramide	30mg - 90mg	Contraindicated in complete bowel obstruction. Dose may be increased to 120mg/24 hours. Monitor for increased abdominal colic
	Ondansetron	8mg - 32mg	**seek local specialist palliative care advice if over 16mg**

IMPORTANT CONSIDERATIONS:

Symptom Control

Pain:
- Opioid analgesia should be titrated to control continuous abdominal pain.
- Colic should be managed with the reduction in dose or discontinuation of prokinetic drugs followed by the commencement of anti-spasmodic medications.

Reduction of secretions:
- Patients experiencing large volume vomiting should be prescribed anti-secretory medication.
- Octreotide is the recommended first line anti-secretory medication.

Reduction of nausea and vomiting:
- Anti-emetics should be administered via the subcutaneous route.
- Prokinetics are not advised if the diagnosis of complete vs partial bowel obstruction is uncertain.

Corticosteroids:
- A five day trial of dexamethasone 4mg subcutaneously twice daily morning and lunch should be considered in all patients.

Laxatives:
- The use of stimulant laxatives should be avoided. The use of stool softeners may be appropriate.

Interventions

Medication Delivery:
- Medication should be delivered via the subcutaneous route due to potential problems with absorption.

Nasogastric Tubes:
- A wide bore nasogastric tube should be considered for patients with upper gastrointestinal obstruction or large volume vomiting.

Venting Gastrostomies:
- Venting gastrostomies or jejunostomies should be considered for patients with malignant bowel obstruction who have a prognosis of greater than 2 weeks.
- Venting gastronomies have been shown to be cost effective with low morbidity and mortality.

QUICK GUIDE	BREATHLESSNESS
Reference	Merseyside and Cheshire Palliative Care Network Audit Group Guidelines on Breathlessness

Assessment/Description

Causes of breathlessness can be multi-factorial: physical, psychological, social and spiritual factors can all contribute to a person feeling breathless. Assessment is vital, particularly in a new presentation. Undertake a history and clinical examination, including oxygen saturations. Investigations such as chest x-ray may be necessary and management will depend on clinical diagnosis. Treat what may be caused by an acute event and reversed, e.g. infection, anaemia, pulmonary oedema etc.

Is there a treatable/ reversible cause?

Yes → Treat & Monitor → Review → Condition improves, reduce monitoring and evaluate treatment

No → **Pharmacological Options:**

Opioids: Morphine Oral solution 2.5mg qds and 4 hourly prn. The maximum dose of oral morphine that is likely to be helpful for dyspnoea is 30mg/24 hour period. If patient unable to tolerate oral meds, subcutaneous Morphine Sulphate (1.25mg in opioid naïve patients) – 2.5mg 4 hourly prn. If the patient's eGFR is <30mls/min an alternative opioid should be considered

Benzodiazepines: Lorazepam 0.5mg-1mg SL prn (max dose 4mg in 24 hour period). If patient unable to tolerate oral meds, subcutaneous Midazolam 2.5mg-5mg 4hrly prn. If effective this can be incorporated into a syringe driver over 24 hours

Oxygen: The evidence for efficacy is limited. A trial of oxygen should be considered in patients known to have O_2 saturation less than 90%. Care should be taken in patients with known COPD/Type 2 respiratory failure

Corticosteroids: may help in patients with tumour compression or lymphangitis carcinomatosis. Also can be useful in COPD. No evidence of benefit in non specific dyspnoea. Dose: Dexamethasone 4mg – 8mg daily before 2pm and 8mg twice daily morning and lunchtime in lymphangitis and SVCO

Nebulised Medication: Sodium Chloride 0.9% may help as a mucolytic, 5ml 4hrly prn. Consider a bronchodilator, e.g. Salbutamol 2.5mg 6hrly prn

Is there a treatable/ reversible cause?

No → **Non-Pharmacological options:**

- Reassurance and explanation
- Use of fan or cool air across face
- Adequate positioning of the patient to aid breathing
- Breathing exercises and relaxation training
- Acupuncture, aromatherapy and reflexology

QUICK GUIDE	CONSTIPATION
Reference	Merseyside and Cheshire Palliative Care Network Audit Group Guidelines

Assessment/Description

Constipation is defined by the patient and is a symptom not a disease. The cause of the constipation should be identified and treated, managing bowel obstruction where appropriate.

- History, normal bowel habit, medicines other causative factors.
- Abdominal palpation and auscultation and digital rectal examination.
- Investigation abdominal x-ray, check calcium levels.

Causes to consider:

- Drug induced including opioids, diuretics, anti-cholinergics, ondansetron, chemotherapy
- Dehydration: review diuretics and fluid intake
- Reduced mobility
- Hypercalcaemia
- Environmental lack of privacy
- Concurrent disease
- Altered dietary intake
- Neurological
- Intestinal obstruction

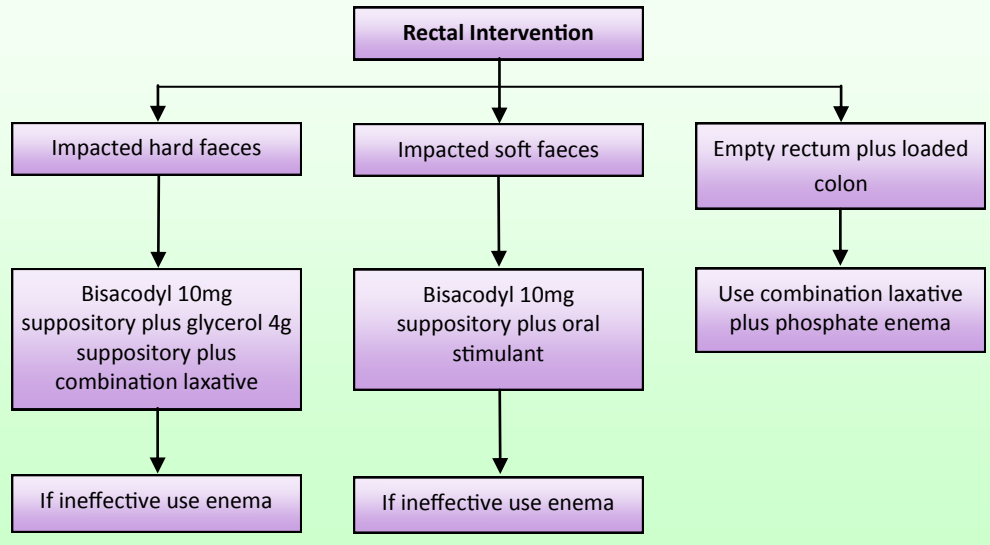
- For patients with established constipation, it is usually most effective to combine faecal softeners and stimulant laxative. If necessary, an osmotic agent can then be added on a prn or regular basis.
- Oral laxatives should be reviewed every 3 to 4 days using stool consistency chart (e.g. Bristol stool chart).
- The use of rectal interventions will be guided by the findings on rectal examination.
- For patients with opioid-induced constipation that has failed to respond to standard measures (oral laxatives and rectal intervention), a peripheral opioid-antagonist (SC methylnatrexone or naloxegol) may be used and specialist advice should be sought.

Treatment and management

Oral laxatives commonly used in palliative care

Type of laxative	Drug name	Starting dose	Additional notes
Combination laxative	Codanthramer Suspension	5ml-10ml at night	Only licensed for use in terminally ill patients of all ages. May cause abdominal colic.
Softener laxative	Docusate sodium	100mg tds	Takes 24-48 hours to have an effect. Mainly acts as softener, but doses over 400mg may have weak stimulant action. Syrup is available but the taste is extremely unpleasant.
Stimulant laxatives	Senna tablets	1-2 tabs at night	Takes 8-12 hours to have effect. May cause abdominal colic.
	Senna syrup	5ml-10ml at night	Reduce dose of senna if colic develops.
	Bisacodyl tablets	1-2 tabs at night	
Osmotic laxatives	Magnesium hydroxide	10ml-20ml bd	Should be avoided in patients with cardiac disease or poor renal function.
	Lactulose	10ml-20ml bd	Can be associated with flatulence/ abdominal colic. Can take 48 hours to have an effect.
	Macrogol	1 sachet tds	Macrogol may be used to treat faecal impaction. Give 8 sachets in 1 litre of water, over 6 hours. Contraindicated in complete bowel obstruction.

Rectal interventions for constipation



QUICK GUIDE	NAUSEA & VOMITING
Reference	Merseyside and Cheshire Palliative Care Network Audit Group Guidelines on Nausea and Vomiting

Is the patient already established on an anti-emetic

Yes

Patients who have previously been nauseated and established on an anti-emetic should have the anti-emetic reviewed and if still appropriate, it should be converted to a subcutaneous route.

No

Reversible causes of nausea, vomiting or regurgitation to be considered?

- Anxiety
- Reflux/Gastritis
- Uncontrolled pain
- Cough
- Urinary retention
- Constipation
- Hypercalcaemia
- Oral/oesophageal candidiasis

Initial Treatment

Assess the likely cause for nausea to guide the anti-emetic most likely to relieve symptoms.
Review reversible causes (see box below).

Patients who become nauseated or start vomiting;
Gut causes
Metoclopramide 10mg tds PO/SC or CSCI 30mg/24 hours *avoid in complete bowel obstruction—see further guidance.*
Domperidone 10mg tds PO.

Non gut causes (e.g. renal failure, biochemical disturbances, cerebral causes)
Cyclizine 50mg tds PO/SC or CSCI 150mg over 24hours in water for injection.
Haloperidol 0.5mg – 3mg at night or CSCI 1.5mg to 5mg.

Alternative anti-emetics may be more appropriate in certain circumstances

1. Severe Heart Failure:
Avoid anti-emetics with anti-muscarinic side effects that may cause tachy-arrthymias e.g. cyclizine
Levomepromazine 6.25mg s/c prn 8 hourly.
If more than 2 doses required in 24 hours, prescribe levomepromazine 6.25mg to 25mg in CSCI over 24 hours.

2. Renal Failure:
Toxicity or metabolic or biochemical cause of vomiting (renal failure, uraemia, hypercalcaemia, medication related)

Use first line medication as above.

Alternatively
Levomepromazine 6.25mg s/c prn 8 hourly—caution, risk of sedation.
If more than 2 doses required in 24 hours, prescribe levomepromazine 6.25mg to 25mg in CSCI over 24 hours.

3. Parkinson's Disease/Lewy Body Dementia:
Avoid anti-emetics with a dopamine receptor antagonist effect e.g. haloperidol, levomepromazine and metoclopramide. Domperidone first line. Ondansetron can be considered 4mg PO/SC prn.

4. Raised Intracranial Pressure (ICP):
If taking oral dexamethasone for symptoms of raised ICP, this should be continued to be given daily via the s/c route.
Aim to maintain at the lowest maintenance dose that controls the symptoms of raised intracranial pressure.
Dexamethasone S/C, 3.3mg to16mg max daily dose in 1 or 2 divided doses.
All doses of dexamethasone should be given **before 2pm.**
***Dexamethasone can raise blood sugar levels and Capillary Blood Glucose levels should be checked*.**
If there is a risk of seizures e.g. in brain metastasis, avoid the use of levomepromazine which can lower the seizure threshold.

5. Gastric Outlet Obstruction/Reflux:
This can occur due to autonomic neuropathy (paraneoplastic) medication (anti-cholinergics), metabolic causes (e.g. hypercalcaemia), mechanical obstruction.
If complete bowel obstruction is excluded:
Metoclopramide 30mg-120mg in CSCI over 24 hours.
Avoid the concurrent prescribing of a prokinetic e.g. metolocpamide and an anti-cholinergic (e.g. cyclizine) which will inhibit it's prokinetic action. Metoclopramide can cause colic.

6. Bowel Obstruction:
See chapter on bowel obstruction.

QUICK GUIDE	PAIN
Reference	Merseyside and Cheshire Palliative Care Network Audit Group Guidelines on Neuropathic Pain, Symptom Control Medication in the Dying Person, Opioid Substitution, Transdermal Opioids in Palliative Care

PAIN MANAGEMENT ***Dose adjustments may need to be made for renal failure***

COMMON TYPES OF PAIN

Visceral / Soft Tissue Pain (nociceptive)
Constant dull pain; Poorly localised
Usually opioid responsive

Bone Pain (somatic nociceptive)
Usually well localised; Worse on movement; Localised tenderness
Partly opioid responsive; NSAID responsive
If cancer diagnosis radiotherapy or IV Bisphosphonates may help

Nerve Pain (neuropathic)
Try opioids first, but may be less responsive
Consider adjuvant neuropathic analgesia

WHO STEP 1
Non-Opioids
Paracetamol 1g qds PO
+/- ADJUVANT

WHO STEP 2
Non-Opioid plus Weak Opioid
Codeine 30mg-60mg qds PO
+/- ADJUVANT

WHO STEP 3
Non-Opioid plus Strong Opioid
Morphine
+/- ADJUVANT

ADJUVANT ANALGESIA;-
- **Co-Analgesics**
- **NSAIDS** (Ibuprofen 400mg tds or Naproxen 500mg bd)
- **Neuropathic Agents** (gabapentin 100mg to 300mg nocté or pregabalin 25mg od-bd (*starting doses in clinical frailty, requires titration to effects*)

Conventional Opioid Titration
IMMEDIATE RELEASE MORPHINE (4 hourly duration of action)

Regularly: Morphine Oral Solution 2.5mg to 5mg 4 hourly
As Required: Morphine Oral Solution 2.5mg to 5mg 1 hourly prn

If clinically frail or eGFR less than 60ml/min/1.72min^2 use lower doses or reduced regular frequency e.g. regularly 6 hourly to 8 hourly. Assess response of background pain to opioids and if necessary, increase dose by 30-50% every 24-48 hours to achieve pain control.

If eGFR less than 30ml/min/1.72min^2 ***see renal failure chapter and guideline***

When pain controlled on steady dose, convert to sustained release morphine. Add total daily dose of 4 hourly immediate release morphine, and divide by two.

SUSTAINED RELEASE MORPHINE
(12 hourly preparation)

Zomorph capsules bd, MST tablets bd, Morphgesic SR bd, Filnarine SR bd e.g. 5mg morphine used 4 times = 20mg oral morphine in 24 hours = 10mg sustained release morphine (12 hourly) twice a day

Alternative Opioid Titration
SUSTAINED RELEASE MORPHINE
(12 hourly duration of action)

Regularly:
Zomorph capsules 10mg bd or MST tablets 10mg bd

Assess response of background pain to opioids and if necessary, increase dose by 30-50% every 24-48 hours to achieve pain control – consider Co-analgesics

PLUS
IMMEDIATE RELEASE MORPHINE
(4 hourly preparation)
PRN FOR BREAKTHROUGH PAIN
Sevredol tablets or Morphine Oral Solution can be up to 1 hourly prn if needed

Add total daily dose of background morphine, and divide by six for prn dose

PLUS
ANTICIPATE OPIOID SIDE EFFECTS

Always co-prescribe regular laxatives
Senna or Docusate or Co-danthramer or Macrogol **and consider prn Anti-emetics**
E.g. Haloperidol 1.5mg to 3mg PO at teatime

Pain can be improved for patients. If not improving, seek local specialist advice

USE OF TRANSDERMAL OPIOID PATCHES

Only consider if:
- Pain is stable, and NOT rapidly changing
- Oral route not appropriate or poorly absorbed in the long term (for short term management consider a continuous subcutaneous infusion [CSCI])
- Unacceptable side effects from other opioids despite opioid rotation, e.g. unmanageable constipation with opioids despite optimisation of laxatives
- Renal impairment

(seek specialist palliative care advice in renal failure)

New prescriptions of fentanyl patches are not recommended out-of-hours, unless on specialist advice

COMMENCING PATCHES
- Titrate with 4 hourly immediate release oral morphine, until pain is controlled
- Remember a fentanyl 25mcg/hour patch is equivalent to a 60mg-90mg total daily dose of oral morphine
- Stick patch to hairless skin; clip (not shave) hair
- Initial analgesic effect will take at least 12-24 hours, and a steady state may not be achieved for 72 hours
- Ensure immediate release oral morphine (or alternative) is available for breakthrough pain
- Change patch every 72 hours; use a new area of skin
- A 12-24 hour depot of drug remains when patch removed; fold in on themselves and discard safely
- Opioid withdrawal may occur when switching from morphine to fentanyl; manage with prn morphine

Guidance in the Last Days of Life
- When a patient is dying, **LEAVE PATCH IN SITU**, and change as before. Use subcutaneous opioids prn for breakthrough pain; if prn needed regularly, start CSCI in addition to patch
- Ensure prn dose adequate for both patch & CSCI
- **Seek Specialist Palliative Care advice for support if need advice**

QUICK GUIDE	PALLIATIVE CARE EMERGENCIES - PAGE 1
Reference	Merseyside and Cheshire Palliative Care Network Audit Group Guidelines on Anti-epileptics, Breathlessness and Hypercalcemia

SEIZURES

ACUTE SEIZURES

- may settle spontaneously
- ensure airway secure and administer oxygen if available
- If seizure does not stop within 5 minutes give either
  - Intranasal, buccal or subcutaneous midazolam 5mg to 10mg **OR**
  - Diazepam 10mg-20mg rectally **OR**
  - Lorazepam 2mg - 4mg intravenously or subcutaneously

IF SEIZURES CONTINUE despite above measures after 15 minutes, if at home/nursing home;

- Repeat dose of the medicine used after 5 minutes.
- Decide if transfer to hospital for emergency management is needed or if care will continue in the current care setting.
- For acute management— A secure airway should be established, oxygen should be administered, cardiorespiratory function should be assessed and intravenous access should be established.
- If patient to stay at home or hospice and two doses needed consider a continuous subcutaneous infusion of midazolam 30mg over 24 hours.

HYPERCALCAEMIA

- Hypercalcaemia is common in cancer of breast, myeloma, lung, head and neck, kidney, thyroid and cervix.
- Primary hyperparathyroidism should be considered as a possible cause (6% of cancer patients).

Presentation:

- Symptoms of hypercalcaemia include: fatigue, weakness, constipation, nausea, vomiting, polyuria, polydipsia, cardiac arrhythmias, delirium, drowsiness and coma.

ASSESSMENT:

Clinical assessment of the patient is crucial in determining whether treatment of hypercalcaemia is appropriate. Generally a decision to treat should be motivated by the patient`s symptomatology rather than absolute calcium level. The most important goal of treatment is to improve clinical symptoms.

- Onset of symptoms raising clinical suspicion should be investigated. Bloods should be checked for urea and electrolytes (U&Es), estimated glomerular filtration rate (eGFR), liver function tests (LFT's) and calcium.
- Corrected serum calcium >2.7mmol/L (some variation between laboratories).

TREATMENT:

- The patient should be rehydrated with 1-3 litres of parenteral sodium chloride 0.9% before the administration of bisphosphonates. The volume and rate of fluid replacement should be adjusted in each patient according to their age, the severity of hypercalcaemia, the degree of dehydration and the ability of the cardiovascular system to tolerate rehydration.
- The treatment of choice is intravenous bisphosphonate—pamidronate, zoledronic acid or ibandronate depending on local formulary choices.
- Corrected calcium levels should be rechecked at 5-7 days after the bisphosphonate infusion. Checking calcium levels prior to this is not appropriate, as the bisphosphonate will not have achieved its maximal effect.

SUPERIOR VENA CAVA OBSTRUCTION (SVCO)

- Compression /invasion or thrombosis of SVCO due to tumour or nodal mass within mediastinum, preventing venous drainage from head, arms and upper trunk.
- Commonest causes (95%) – lung cancer, non-Hodgkin lymphoma.
- Usually onset over weeks or months, but occasionally occurs rapidly.

SYMPTOMS/SIGNS:

- Swelling of face, neck, arms
- Headache
- Dizziness/ Visual disturbance
- CNS depression
- Fits
- Dyspnoea
- Dilated veins – neck, trunk, arms
- Hoarse voice
- Stridor
- Cyanosis

MANAGEMENT:
****DISCUSS URGENTLY WITH ONOCLOGIST FOR FURTHER ADVICE****
Administer dexamethasone 16mg stat with next daily dose of 8mg twice daily - morning & lunch.

METASTATIC SPINAL CORD COMPRESSION

- Affects 5-10% of patients with cancer
- Spinal metastases: most common in prostate, lung, and breast cancer and myeloma
- Catastrophic event – aim is to prevent establishment of paresis
- Symptoms may be vague, there should be a high index of suspicion
- Patients with cancer and neurological signs or symptoms of spinal cord compression should be treated as an **oncological emergency**

SYMPTOMS:
Back/Spinal Pain:
- may radiate in a radicular 'band-like' pattern
- progressive or unremitting
- may be worse on coughing or straining
- may be nocturnal pain preventing sleep
- may not be present

Nerve root pain in limbs
Weakness of limbs (out of proportion to general condition of patient)
Difficulty walking
Sensory changes – tingling, numbness, "my legs don't belong to me"
Difficulty passing urine – usually a late presentation
Constipation or faecal incontinence

SIGNS:
Localised spinal tenderness
Weakness of limbs
Reflexes:
- Absent/increased
- Extensor plantars
- Clonus may be present

Altered sensation - look for a sensory level
Distended bladder

MANAGEMENT:

GP medical assessment - same day
History, neurological examination, fitness to treat

Fit to Treat

Unfit *(e.g. poor performance status or no neurological function for >48 hours. Unfit patients with severe pain may still be considered for radiotherapy but do not require an MRI)*

Contact Specialist Palliative Care Team if advice on symptom management required.

Patient has cancer
+
Progressive spinal pain (no neurological symptoms or signs; no neuropathic pain features)

Escalating severe spinal pain
or
Escalating spinal pain with neuropathic features +/- neurological signs e.g. weakness, sensory loss, bowel/bladder disturbance

Known to oncologist/specialist palliative care consultant/site specific team:

Choose clinician actively managing patient.
Make **same day** contact with responsible consultant or covering colleague.
Agree management plan to include early MRI.

Known only to primary health care team

Make **same day** contact with previous site specific team/ oncologist or seek advice from local specialist palliative care team.
Flag letter 'SUSPECTED MSCC' Do not just fax a letter - may cause delay.

Standard - MRI and treatment within 24 hours

Standard - investigation & treatment concluded within 1 week

GP to admit urgently via local acute medical route to hospital with MRI capability.

Advise patient to remain flat until MRI if possible. Order ambulance with stretcher to transfer within 2 hours.

Give dexamethasone 16mg orally if available - do not delay admission to prescribe/give. Inform admitting team if given.

Ensure assessing team aware 'SUSPECTED MSCC' via letter plus telephone contact if able.

MAJOR HAEMORRHAGE

- Bleeding of all types occurs in 14% of patients with advanced disease.
- Haemorrhage causes death in approximately 6% patients.
- Catastrophic external haemorrhage less common than internal bleeding.
- It may be a terminal event in both advanced cancer and non-malignant disease.

CLINICAL PRESENTATION:
- Cardiovascular compromise – hypotension, tachycardia (>100bpm = significant recent bleed).
- Identifiable bleeding source – haematemesis, melena, haemoptysis, PV or PR bleeding, haematuria.
- Erosion of an artery by a malignant ulcer or superficial/fungating tumour.

CATASTROPHIC BLEED:
- **Ensure patient is not left alone**
- Keep patient warm
- Use anxiolytic or analgesics as needed if the patient is distressed
- Support the patient and family

MANAGEMENT:
A member of staff must remain with the patient to provide reassurance at all times
- Plan ahead where possible
- If there are warning signs or high anticipated risk of bleeding have a proposed management plan ideally discussed with patient and/or family and staff
- Record management plan in case notes and communicate this to all team members
- Provide dark coloured towel to disguise blood loss
- Anticipatory prescribing of midazolam 10mg i/v, i.m, buccal or sublingual
- The subcutaneous route should not be used in catastrophic bleeds due to peripheral shut down and therefore unpredictable absorption of the medication

FURTHER CARE:
- If bleeding temporarily stops further management will depend on overall clinical status and discussion with patient and family in relation to further acute interventions
- It may be necessary to commence and continue an infusion of anxiolytic (midazolam) or analgesic (e.g. morphine or oxycodone) in the last hours of life

QUICK GUIDE	RESPIRATORY TRACT SECRETIONS IN THE DYING PATIENT
Reference	Merseyside and Cheshire Palliative Care Network Audit Group Guidelines on Symptom Control in the Dying Person

Assessment/Description

Patients can't clear secretions from their upper respiratory tract properly, causing secretions to move as they breathe, creating noise

Pharmacological Options:

INITIALLY: Hyoscine hydrobromide 400 micrograms sc prn **OR** Glycopyrronium 200 micrograms sc prn

ONGOING:

Anti-cholinergics	Dose Range via CSCI/24 hours
Hyoscine hydrobromide	1.2mg to 2.4mg
Glycopyrronium	600 micrograms to 2400 micrograms
Hyoscine butylbromide	60mg to 240mg

Seek Local Specialist Palliative Care advice if doses above 120mg of hyoscine butylbromide are needed

- Anti-cholinergic side effects can arise, treat this with frequent mouth care which may include artificial saliva replacement gels or sprays.
- If one agent doesn't work, try switching to the other after full titration to maximum dose over 24 hours; if there is still no improvement, consider stopping medication.
- If not responding, seek specialist advice as required.

Non-Pharmacological options

- Reposition patient
- Active Surveillance
- Suction
- Reassurance and explanation

QUICK GUIDE	AGITATION IN THE DYING PATIENT
Reference	Merseyside and Cheshire Palliative Care Network Audit Group Guidelines on Symptom Control in the Dying Person

Assessment/Description

Look for any reversible cause of agitation, and if identified, appropriate management towards it.
Consider possible physical, psychological and spiritual factors as well as environmental factors such as lighting and noise.

Pharmacological Options:

INITIALLY: Midazolam 2.5mg - 5mg sc up to 2-4 hourly prn.
If eGFR < 30 give a reduced dose of midazolam e.g. 1 mg to 2.5 mg sc prn

DELIRIOUS: Consider haloperidol 500 micrograms sc 2 hourly prn (monitor for extrapyramidal side effects)

ONGOING:

Agitation	Dose Range via CSCI/24 hours
Haloperidol for agitation	2.5mg to 8mg
Midazolam for agitation	10mg to 30mg

Seek Local Specialist Palliative Care advice if doses above 30mg of midazolam are needed

Levomepromazine	12.5mg to 200mg

Seek Local Specialist Palliative Care advice if doses above 25mg of levomepromazine are needed

QUICK GUIDE	CONTINUOUS SUBCUTANEOUS INFUSION USING SYRINGE DRIVERS
Reference	Merseyside and Cheshire Palliative Care Network Audit Group Guidelines on Agitation, Anti-epileptics, Delirium, Symptom Control Medication in the Dying Person, Nausea and Vomiting, Opioid Substitution, Syringe Drivers

Assessment/Description

Syringe drivers are used to administer medication by a continuous subcutaneous infusion (CSCI) over a 24 hours period. They are classed as high risk devices and should only be used by suitably trained clinicians or registered nurses.

Indications for commencing medication via continuous subcutaneous infusion

1. Patient is unable to take oral medication
   - Nausea and vomiting
   - Difficulty in swallowing
   - Intestinal obstruction
2. Malabsorption
3. Most effective medicine can only be used via CSCI

COMMON MEDICINES USED VIA CSCI

Anti-cholinergics	Dose Range via CSCI/24 hours
Hyoscine hydrobromide	1.2mg to 2.4mg
Glycopyrronium	600 micrograms to 2400 micrograms
Hyoscine butylbromide	60mg to 240mg

Seek Local Specialist Palliative Care advice if doses above 120mg of hyoscine butylbromide are needed

Agitation	Dose Range via CSCI/24 hours
Haloperidol for agitation	2.5mg to 8mg
Midazolam for agitation	10mg to 30mg

Seek Local Specialist Palliative Care advice if doses above 30mg of midazolam are needed

Levomepromazine	12.5mg to 200mg

Seek Local Specialist Palliative Care advice if doses above 25mg of levomepromazine are needed

Anti-emetics *(See Nausea and Vomiting Chapter for further guidance)*	Dose Range via CSCI/24 hours
Cyclizine	150mg
Haloperidol for nausea	2.5mg to 5mg
Ondansetron	8mg to 32mg

Seek Local Specialist Palliative Care advice if doses above 16mg of ondansetron are being considered

Metoclopramide	30mg to 120mg

Seek Local Specialist Palliative Care advice if doses above 60mg of metoclopramide are needed

Levomepromazine for nausea	6.25mg to 25mg

Strong Opioids	Dose Range via CSCI/24hrs
Morphine Sulphate	*Doses for all opioids should be calculated based on existing opioid use. If no previous opioid use, seek local specialist advice.*
Diamorphine	
Oxycodone	
Alfentanil	

Diluent All drugs should be diluted with 0.9% saline or Water for Injection. Cyclizine or diamorphine (doses above 40mg/ml) should always be diluted in water for injection.

Oral Morphine to Subcutaneous Morphine Conversions

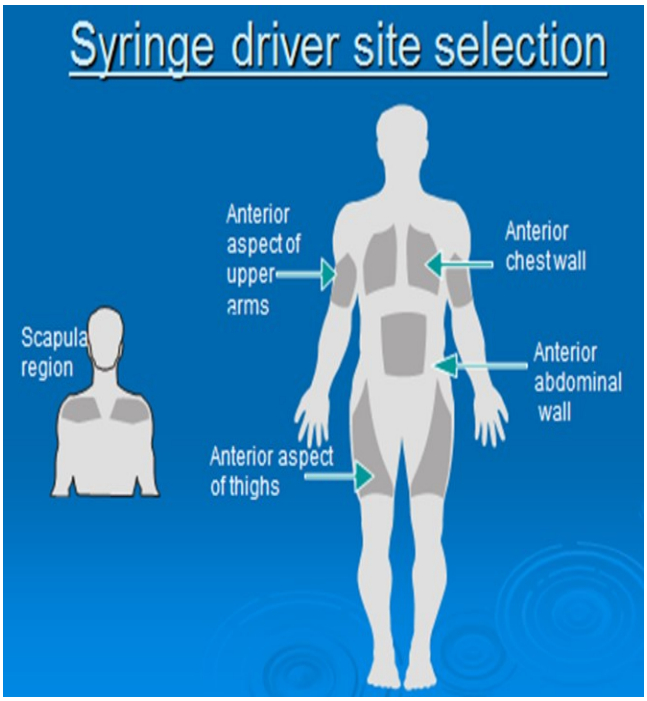
- Calculate the total daily dose of morphine in a 24 hour period e.g. 90mgs MST bd = 180mgs
- Divide daily dose of morphine by 2 to give the 24 hour dose of morphine to be infused e.g.

$$\frac{180\text{mgs}}{2} = \textbf{90mgs morphine over 24 hours}$$

- Breakthrough dose 1/6 of total daily dose of morphine e.g.

$$\frac{90\text{mgs}}{6} = \textbf{15mgs morphine}$$

Seek local Specialist Palliative Care advice for support if needed



QUICK GUIDE	RENAL FAILURE - PAGE 1
Reference	Merseyside and Cheshire Palliative Care Network Audit Group Guidelines on Prescribing in Renal Failure

ANALGESIC PRESCRIBING IN RENAL IMPAIRMENT

1. **NSAIDS** should be avoided if possible, unless a patient is already on dialysis and anuric. If an NSAID must be prescribed, the lowest effective dose should be used and the renal function should be re-checked within 5-7 days of starting the drug.
2. **If the eGFR is below 30mls/min (CKD 4/5)** there is an increased risk of toxic side effects with all opioids due to drug and metabolite accumulation. Opioids should therefore be used with caution and should be monitored on a regular basis. Signs of opioid toxicity may include hallucinations, myoclonus, drowsiness or confusion.
3. When prescribing oral (**strong**) opioids, the immediate release forms are preferred. Long acting opioid preparations should be avoided (e.g. MST/MXL) as the metabolites accumulate in renal failure.
4. Parenteral **Alfentanil** or fentanyl are pharmacokinetically the safest analgesics to use in renal failure as the metabolites are non-toxic. The limitations are that they have a very short half life.
5. If a patient requires more than 3 stat subcutaneous doses of a strong opioid, consider starting a **continuous subcutaneous infusion of alfentanil.**
6. Once a patient is established on a regular stable dose of strong opioid, conversion to **transdermal fentanyl may be better tolerated.**

OPIOID ANALGESIA IN END STAGE RENAL DISEASE MANAGED WITHOUT DIALYSIS

DRUG	ESRD <15ml/min	Comments
Paracetamol	Recommended	Max 3g/24 hrs if GFR <10
Codeine/ Dihydrocodeine	Not recommended	
Tramadol	Use with caution	50mg bd maximum dose
Morphine	Not recommended	If used, start 2.5mg PO 4-12 hrly (i.e increase time between doses)
Diamorphine	Not recommended	If used, start 2.5mg sc 4-12 hrly (i.e increase time between doses)
Buprenorphine	Limited evidence	Use with caution
Fentanyl	Recommended	Consider reduce starting dose by 25-50%, start prn 25mcg sc 4 hourly
Alfentanil	Recommended (not prn)	CSCI only. Alfentanil 1mg = Oral morphine 30mg
Oxycodone	Limited evidence	Use with caution, start 1mg to 2.5mg PO 4-12 hrly

Seek Specialist Advice for People Managed with Haemodialysis or Peritoneal Dialysis

ADJUVANTS

GABAPENTIN	
eGFR (ml/min)	**TOTAL DAILY DOSE (mg/day)**
≥80	900 - 3600
50-79	600 - 1800
30-49	300 - 900
15-29	150 - 600
<15	150 - 300

PREGABALIN	
eGFR (ml/min)	**TOTAL DAILY DOSE (mg/day)**
≥60	150 - 600 (bd/tds)
≥30 - <60	75 - 300 (bd/tds)
≥15 - <30	25 - 150 (bd/od)
<15	25 - 75 (od)

QUICK GUIDE	RENAL FAILURE - PAGE 2
Reference	Merseyside and Cheshire Palliative Care Network Audit Group Guidelines on Prescribing in Renal Failure

ANTI-DEPRESSANTS

Prevalence of depression high in those with CKD 5 (14-30%)

Unclear whether anti-depressants are effective in CKD 3-5 - limited evidence, there is some evidence from small trials showing SSRI's safe in advanced CKD/ESRF

Drug pharmacokinetics of anti-depressants are altered in renal impairment

- Fluoxetine and Citalopram need no dose adjustment
- Mirtazapine - start at 15mg, increase carefully

ANTI-EMETICS, SEDATIVES AND ANTI-SECRETORY

ANTI-EMETICS:

- Haloperidol is the drug of choice for nausea in patients with renal failure, but if eGFR is less than 10ml/min the dose should be reduced (250 micrograms to 500 micrograms PO or SC).
- Levomepromazine is a useful alternative anti-emetic.
- Cyclizine should be avoided due to the risk of hypotension / tachyarrythmias.
- Metoclopramide should be avoided due to the increased risk of extrapyramidal reactions.

SEDATIVES:

- Midazolam metabolites accumulate in renal failure. Patients may be more sensitive to the effects of midazolam. The lowest effective dose should be used.
- Uraemia may cause or contribute to agitation in the dying phase.
- Consider the use of Haloperidol if the patient is suffering from delirium rather than agitation/anxiety.

ANTI-SECRETORY:

- Glycopyrronum is the drug of choice for managing secretions. It accumulates in renal failure and a **dose reduction of 50% is recommended** i.e 100 micrograms SC prn.
- Hyoscine hydrobromide has an increased risk of causing drowsiness and paradoxical agitation.

LOCAL INFORMATION
Important information for locality

Local Chemists (Out of hours)

Palliative Care Service

Other Services (Signpost)