# PALLIATIVE CARE GUIDELINES: CONSTIPATION MANAGEMENT

# Principles:

- Constipation refers to the passage of small, hard faeces infrequently and with difficulty.
- Stool frequency varies considerably in the normal population and an understanding of the patient's usual bowel habit is essential for management.
- Constipation is often overlooked despite being an important symptom that can cause distress and complications for many patients. Aim to anticipate and prevent constipation, especially when prescribing regular opioids.
- If evidence of bowel obstruction see separate guideline.

#### **Assessment:**

- Take a clinical history of the constipation. This should include the patients current bowel pattern compared to their normal, associated symptoms of constipation (e.g. abdominal pain, nausea, PR bleeding), any dietary changes and a list of current medications.
- Perform an abdominal examination including digital rectal examination unless the patient is too weak or likely to suffer undue pain or bleeding as a result.
- · Request any appropriate investigations.

### Management:

- Good holistic care requires a combination of general non-clinical measures and advice, investigation and treatment of any underlying cause(s) and appropriate symptomatic treatment(s). All three aspects of care are important and ideally should occur concurrently, however for certain patients the underlying cause of the constipation may be unclear. Management for these patients should focus on improving symptoms and quality of life whilst regularly reassessing.
- Most patients respond best to a combination of a softening and stimulant laxative.

#### General measures

- Encourage fluid intake
- Increase fibre in diet. Consider vegetable oil or margarine (1 tablespoon at breakfast) and/or dried crushed paw-paw seeds
- Encourage exercise/ ambulation where possible
- Assess and manage any pain appropriately

# Treat underlying cause(s)

- History, examination and investigations should focus on finding or excluding underlying causes for constipation. Common causes include:
  - o Medication e.g. opioids, anticholinergics
  - o General body weakness/ immobility
  - o Reduced food intake and/ or dehydration
  - o Low residue diet
- Reverse/ treat any underlying cause(s) identified appropriately

# **Treatment**

(Start with one laxative and titrate dose according to symptoms before adding a second. Often a combination of two laxatives will be required, e.g. bisacodyl and liquid paraffin)

# Oral medication:

- Bisacodyl 5-15mg nocte (start with 5mg nocte and titrate up)
- Liquid Paraffin 10mls od (increase to bd if required)

#### Rectal measures:

- Rectal measures are sometimes necessary but should never replace prescription of an appropriate oral laxative
- If hard faecal mass present at digital rectal examination manual removal of faeces may be required
- Glycerine suppositories one suppository PR od









# PALLIATIVE CARE GUIDELINES: DELIRIUM (ACUTE CONFUSIONAL STATE) MANAGEMENT

## **Principles:**

- Delirium is a clinical syndrome, typically acute in onset that involves abnormalities of thought, perception and fluctuating levels of consciousness.
- Both hyperactive and hypoactive forms of delirium have been identified and patients may exhibit features of either.
- Delirium is common in patients with advanced disease, especially the elderly and those approaching end
  of life.

#### **Assessment:**

- Take a full history including MMSE. Often a collateral history is required from the patient's caretaker.
- Examine the patient thoroughly looking for signs of an underlying cause and request any appropriate investigations e.g. CBC, RFTs, urinalysis.

# Management:

 Good holistic care requires a combination of general non-clinical measures and advice, investigation and treatment of any underlying cause(s) and appropriate symptomatic treatment(s). All three aspects of care are important and ideally should occur concurrently, however for certain patients the underlying cause of the delirium may be unclear. Management for these patients should focus on improving symptoms and quality of life whilst regularly reassessing.

0		
General	measi	ires

- Ensure patient safety and optimise environment
- A care taker should remain with the patient
- · Remove any objects that could be harmful
- Correct any sensory impairments, e.g. inadequate lighting
- Ideally the environment should be familiar and not over stimulating
- Educate the family regarding delirium and provide support both emotionally and psychologically.

# Treat underlying cause(s)

- History, examination and investigations should focus on finding or excluding underlying causes for delirium.
- · Common causes include:
  - Medications e.g. Opiate toxicity, anticholinergics, hypnotics
  - o Infections
  - Urinary retention
  - Constipation
  - o Metabolic abnormalities e.g. renal impairment,↑Ca²+, dehydration
  - o Cerebral metastases or other intracranial event
  - Alcohol or drug withdrawal

#### **Treatment**

#### Antipsychotics

#### First line:

 Haloperidol 1.25-5mg up to tds po or sc

#### Second line:

- Chlorpromazine 25-50mg up to tds po or sc OR
- Risperidone 2mg po od (increased by 1mg daily to maximum of 6mg daily)

## Benzodiazepines:

(Generally not recommended for delirium unless it is related to alcohol withdrawal, however can be used second line for patients with an agitated delirium in addition to haloperidol or chlorpromazine)

Diazepam 5-10mg nocte po or sc









# PALLIATIVE CARE GUIDELINES: BREATHLESSNESS MANAGEMENT

# **Principles:**

- Breathlessness (dyspnoea) is a distressing symptom experienced by many patients with advanced disease.
- It is a subjective experience and should not be confused with tachypnoea that is an objective clinical sign.

#### **Assessment:**

- Take a full, holistic history from the patient and complete a clinical examination.
- Order any appropriate investigations e.g. CXR, CBC.

#### Management:

 Good holistic care requires a combination of general non-clinical measures and advice, investigation and treatment of any underlying cause(s) and appropriate symptomatic treatment(s). All three aspects of care are important and ideally should occur concurrently, however for certain patients the underlying cause of the breathlessness may be unclear. Management for these patients should focus on improving symptoms and quality of life whilst regularly reassessing.

General measures	<ul> <li>Reassure the patient – breathlessness can be extremely frightening, and is exacerbated by anxiety. Explore the patient's fears and concerns.</li> <li>Breathing exercises and relaxation techniques are often beneficial and should be taught to the patient:         <ul> <li>Explain that their breathing will improve if they slow it down. Show them how to slow their breathing by pursing their lips as if they were going to whistle when they breathe out.</li> <li>Teach the patient to breathe with their diaphragm rather than the top of the chest by putting one hand on their chest and one on the top of their abdomen so they can feel where they are breathing from. The hand on the abdomen should move more if they are breathing with their diaphragm.</li> </ul> </li> <li>Find the most comfortable position for the patient (usually sitting up).</li> <li>Ensure good ventilation – open windows and/ or use a fan. Loosen any tight clothing.</li> <li>Conserve energy by limiting or reducing activities.</li> </ul>
Treat underlying cause(s)	<ul> <li>History, examination and investigations should focus on finding or excluding underlying causes for breathlessness.</li> <li>Reverse/ treat any underlying cause(s) identified appropriately.</li> </ul>
Symptomatic treatment	<ul> <li>Low dose morphine e.g. 2.5-5mg po 4 hourly can improve symptoms of breathlessness (if already on morphine for pain control, increase the dose by 20% and advise on taking breakthrough doses as required).</li> <li>Diazepam 2.5-5mg po up to tds. This can be very helpful when the breathlessness is associated with significant anxiety or panic attacks.</li> <li>Consider oxygen if hypoxic (however there is no evidence to support the use of palliative oxygen in patients with normal oxygen saturations).</li> <li>Regular nebulised saline 0.9% may be helpful for patients with sticky bronchial secretions.</li> </ul>









# PALLIATIVE CARE GUIDELINES: END OF LIFE **CARE MANAGEMENT PART 2: PRESCRIBING**

## **Principles:**

- Most patients find taking medication a burden especially towards the end of life.
- Focus on giving medication that will improve the patient's quality of life and discontinue any unnecessary medications, e.g. anti-hypertensives.

#### **Assessment:**

- If the patient is unable to swallow choose an appropriate route to give necessary medications e.g. via NG tube, parenteral or PR.
- Subcutaneous (SC) is recommended when the enteral route is not possible e.g. patient has bowel obstruction. It is preferred over intravenous and intramuscular access due to its reduced trauma and pharmacokinetics.
- If repeated injections are anticipated or experienced a butterfly needle can be inserted and used as a route for regular SC injections.

## Management:

- Common symptoms encountered towards the end of life include pain, agitation, nausea and excessive respiratory secretions. Management of these symptoms is highlighted below.
- Consider prescribing medications pre-emptive to symptoms arising, also referred to as anticipatory prescribing. This can avoid delays in administration but must also be assessed on a case by case basis.
- Morphine concentrations can vary between establishments depending on the preparation used remember that SC morphine is twice the potency of oral morphine.

Symptom	Enteral Route	Subcutaneous Route	
Pain	Morphine 5 – 7.5 mg 4hrly	Morphine 2.5 – 5 mg 4hrly	
Morphine dose will depend on the patient, clinical problem and previous opioid use. If the patient is already taking opioids $1/6^{th}$ of 24 hour oral dose can be given orally PRN or $1/12^{th}$ of the 24 hour oral dose can be given SC PRN.			
Nausea and Vomiting	Haloperidol 2.5mg od titrated to bd	Haloperidol 2.5mg od titrated to bd	
Anxiety or Agitation	Diazepam 5-10mg od titrated to tds	Diazepam 5mg od titrated to tds	
Excessive bronchial secretions		Hyoscine butylbromide 20mg od titrated to tds	
Anti-secretory medication should be given when symptoms first occur and will be less helpful if given later.			
Issues of Hydration and Nutrition	<ul> <li>Patients should eat and drink as they wish and take sips of water as long as they are able.</li> <li>Families should be educated that it is normal for patients to lose their appetite, sense of thirst and stop feeding towards the end of life. They should not feed patients if they are no longer able to swallow as this may cause choking and</li> </ul>		

- Intravenous fluids at this stage will not prolong life and will not prevent thirst. Over hydration may contribute to distressing respiratory secretions or generalised oedema and are generally discouraged; good regular mouth care is the best way to keep the patient comfortable.
- Intravenous dextrose for calorie supplementation is unlikely to be of benefit.
- If there is a reduced level of consciousness patients should be not be fed due to the risk of aspiration and artificial nutrition is generally discouraged at the end of life.









# PALLIATIVE CARE GUIDELINES: END OF LIFE CARE MANAGEMENT PART 1: GENERAL MEASURES

# **Principles:**

- At the end of life goals of care change to prioritise comfort and quality of life.
- Listening to the patient and their family is paramount. Empowering families with basic nursing skills and knowledge to care for their loved one can bring union, peace and comfort at an otherwise difficult time.

#### **Assessment:**

- Clinical signs found towards the end of life may include:
  - o Patient becomes bedbound and is increasingly drowsy or in a semi-conscious state
  - o Minimal oral intake; patient not managing oral medication and sips of fluid only
  - o The patient's condition is deteriorating rapidly, e.g. day by day or hour by hour
  - o Breathing becomes irregular +/- noisy (death rattle)
  - o Changes in skin colour and/ or temperature

## Management:

- Exclude/ treat any reversible causes of the patient's deterioration such as dehydration, infections, drug toxicity and/ or biochemical abnormalities.
- Good holistic care requires a combination of general non-clinical measures and advice, investigation and treatment of any underlying cause(s) and appropriate symptomatic treatment(s) which may or may not include anticipatory prescribing (ref. Part 2)

#### **General measures**

# Comfort Nursing Care

- Keep the patient clean and dry.
- Regularly clean the mouth with a moist cloth wrapped round a spoon (ref. Mouth Care Guideline).
- Prevent and manage pressure sores (bed sores) appropriately.

Pressure sores arise when an area of skin is placed under too much pressure for a prolonged period of time often as a result of immobility such as in bedbound patients. Remember that pressure sores can occur in numerous conditions and settings, not just end of life. The recommendations below can be applied regardless of the prognosis of the patient and underlying diagnosis.

- Check the patient's skin regularly looking for early signs of pressure sores such as skin discolouration.
- Patients should be turned regularly (at least every two hours) and soft cushioning placed beneath common pressure areas such as the heels.
- Avoid positioning patients directly on pressure ulcers or bony prominences.
- Optimise nutritional status which will assist healing.
- Discourage smoking; this can prevent healing by reducing oxygen levels in the blood.
- Manage any associated pain (ref. Pain Guideline) and infection (ref. Wound Management Guidelines). Topical antibiotics are recommended over systemic treatments for infected pressure ulcers unless there is evidence of underlying osteomyelitis.
- If severe the patient may need a surgical review for consideration of debridement.

Discontinue
Interventions that
are not providing
symptomatic
benefit

- The benefit versus burden should be assessed for all interventions.

  o Always ask "will this test change my management plan or the outcome for the patient?"
- Interventions such as venepuncture, vital signs monitoring and frequent blood glucose tests are generally discouraged unless they will influence patient management and overall quality of life.
- Intravenous dextrose for calorie supplementation is unlikely to be of benefit.

Psychological, Social and Spiritual Needs

- The end of life is an emotional time for all involved and requires health care professionals to be considerate and compassionate. Take time to listen to the concerns of the patient and their family: break bad news sensitively.
- Encourage the family to be present, holding a hand or talking to the patient even if there is no visible response the patient may be able to hear even if they cannot respond.
- Consider spiritual support.
- Consider the best place of death for the patient and their family, would discharge home be best?









# PALLIATIVE CARE GUIDELINES: FUNGATING WOUNDS MANAGEMENT

## **Principles:**

- Fungating wounds can cause social isolation and low self esteem. However, with the appropriate support the majority of patients and their family members can manage even the most difficult of wounds.
- Good treatment manages all aspects of wound care including exudates, malodour and pain as well as promoting the emotional well being of the patient and family.

#### Assessment:

- Take a history from the patient and examine the wound.
- Consider the potential for serious complications such as catastrophic haemorrhage.
- Explore the psychological, social and spiritual effects the wound has on the patient and family.

## Management:

Good holistic care requires a combination of general advice, wound treatment and appropriate symptomatic
treatment(s). All three aspects of care are important and ideally should occur concurrently, however
for certain patient's treatment of the wound itself may be limited due to e.g. advanced disease status.
Management for these patients should focus on improving symptoms and quality of life whilst regularly
reassessing.

General n	neasures	<ul> <li>Clean the wound regularly (at least daily) using a simple salt solution (dissolve 1 teaspoon of salt per pint of cooled boiled water – this is approximately equivalent to 0.9% saline).</li> <li>Apply clean dressings daily. These can be made from local materials.</li> <li>Protect the normal skin around the wound with barrier creams.</li> </ul>
Treat underlying cause(s)		<ul> <li>Consider what treatment options are available. Local or systemic treatment may be possible and could include surgery, radiotherapy and/ or chemotherapy.</li> <li>Liaise with the appropriate colleagues to organize such treatments</li> </ul>
Sympton	natic treatmen	it
Pain	General constant pain	<ul> <li>Ensure that the pain is not caused by infection or dressings. Prescribe appropriate analgesia (see separate pain guideline).</li> </ul>
	Pain with dressing changes only	<ul> <li>Soak dressings off with a simple salt solution.</li> <li>Give an extra dose of analgesia 30mins before dressing change.</li> </ul>
Malodour	+/- Exudate	<ul> <li>Prescribe non-enteric coated metronidazole tablets. These should be crushed and the powder applied directly to the wound when changing the dressing, ideally daily.</li> <li>For foul smelling PV discharge use metronidazole pessaries or non-enteric coated metronidazole tablets inserted PV.</li> </ul>
Infection	Systemic upset or cellulitis	<ul> <li>Continue management above</li> <li>AND</li> <li>Prescribe an appropriate antibiotic (may need to be give parenterally).</li> </ul>
Bleeding	Mild	<ul> <li>Avoid trauma especially when changing dressings that should be soaked off with a simple salt solution.</li> </ul>
	Moderate to severe	<ul> <li>Consider palliative radiotherapy, surgery or chemotherapy</li> <li>Consider adding tranexamic acid tablets po 500mg-1g tds</li> </ul>









# PALLIATIVE CARE GUIDELINES: MOUTH CARE **MANAGEMENT**

## Principles:

- Good mouth care is a vital part of palliative care; it not only improves comfort but helps maintain a patient's ability to eat, drink and communicate effectively.
- All patients should have regular screening for mouth complications.
- High risk patients, e.g. those with oro-pharyngeal disease, receiving head and neck radiotherapy or immunocompromised patients should be given advice about mouth care preemptive to symptoms arising.

#### **Assessment:**

- Take a full, holistic history from the patient and examine the mouth looking for signs of dryness, coating, ulceration, infection or tumour.
- Order any appropriate investigations e.g. mouth swab particularly for patients with persistent or recurrent symptoms.

#### Management:

Good holistic care requires a combination of general non-clinical measures and advice, investigation and treatment of any underlying cause(s) and appropriate symptomatic treatment(s). All three aspects of care are important and ideally should occur concurrently, however for certain patients the underlying cause of the oral symptoms may be unclear. Management of these patients should focus on improving symptoms and quality of life whilst regularly reassessing.

#### **General measures**

- Patients should maintain a moist mouth by sipping fluids regularly throughout the day. If the patient is unable to swallow they should rinse their mouth regularly with a simple saline or bicarbonate solution (add 1 teaspoon of salt or bicarbonate to a glass of warm water and stir well to dissolve).
- Brush teeth and clean tongue at least twice daily using a small soft toothbrush and toothpaste.
- Advise patients to suck fresh cold pineapple cubes once or twice daily; this can help lift debris from the tongue.
- Adjust foods to aid eating e.g. soft foods with lots of sauce/ gravy and avoid too many sugary foods and drinks.
- Advise regular application of lip balm or 'Vaseline' to dry cracked lips.
- Review the patient's medications and adjust as appropriate; certain drugs can exacerbate oral symptoms e.g. anticholinergics cause a dry mouth.

# Specific oral problems

#### Ketoconazole 200mg od for 7 days **OR** Fluconazole 200mg od for 7 days. Candidiasis Oral morphine 4hrly (for dose refer to pain management guideline). Patients should hold the Painful Mouth morphine in their mouth and use as a mouthwash for at least 30 seconds before swallowing. Analgesic and antiseptic gel (e.g. bonjela): apply topically to mouth ulcers 4hrly. Has limited use for patients with generalised oral pain. Assess carefully for evidence of infection and treat appropriately. Mucositis +/o For gingivitis or anaerobic lesions (often associated with significant halitosis) treat with met-Ulceration ronidazole mouthwash. This can be made by mixing 50mls of intravenous metronidazole with 450mls of water (50mls of water can be replaced with juice or other flavouring if required). Educate patients to use this solution tds as a mouthwash for 1 minute before spitting out. Increase the frequency of mouth cleaning with a saline solution, up to hourly in severe cases. For severe cases of mucositis or aphthous ulceration consider a course of steroids. Prescribe Dexamethasone 8mg orally od for 5 days and then review. Review the patient's management plan with the oncology or palliative care teams. If mucositis is secondary to chemo/radiotherapy the dose of treatment may need reducing or in severe cases a break in treatment may be advised to allow healing of the mucous membranes. Oral Acyclovir 200mg, 5 times a day for 5-10 days depending on severity. Herpes Simplex Treat lip ulcers with Acyclovir ointment: apply topically to lesions for 5-10 days.



Infection







# PALLIATIVE CARE GUIDELINES: NAUSEA AND VOMITING MANAGEMENT

# **Principles:**

• Nausea and vomiting is a distressing symptom that is common in the palliative care population however often underreported by patients.

#### Assessment:

- Take a full, holistic history from the patient and complete a clinical examination.
- Order any appropriate investigations e.g. CXR, CBC.

#### Management:

 Good holistic care requires a combination of general non-clinical measures and advice, investigation and treatment of any underlying cause(s) and appropriate symptomatic treatment(s). All three aspects of care are important and ideally should occur concurrently, however for certain patients the underlying cause of the nausea and vomiting may be unclear. Management for these patients should focus on improving symptoms and quality of life whilst regularly reassessing.

General measures	<ul> <li>Good frequent mouth care (see mouth care guideline)</li> <li>Patients should be encouraged to eat and drink as they wish. Regular sips of fluid and small low fibre meals are recommended over larger meals.</li> <li>Ensure the patient is adequately hydrated.</li> </ul>
Treat underlying cause(s)	<ul> <li>History, examination and investigations should focus on finding or excluding common underlying causes for nausea and vomiting.</li> <li>Reverse/ treat any underlying cause(s) identified appropriately</li> </ul>

# Treatment

- The choice of first line anti-emetic will be determined by the likely underlying cause of the nausea and vomiting (see below).
- Avoid combining drugs with similar mode of action or antagonistic effects e.g. prokinetics and anticholinergies.
- · Consider giving medication via a non-oral route (sc or iv) if actively vomiting or severe nausea.
- Prescribe the chosen antiemetic regularly.

Pattern	Causes	Suggested medication
Gastric stasis or delayed bowel transit time • Early satiety	<ul> <li>Medications, e.g. morphine</li> <li>Constipation</li> <li>Gastric outflow obstruction "squashed stomach syndrome"</li> </ul>	<ul> <li>Metoclopramide 10-20mg 8 hourly 30 mins before meals (same dose sc or iv)</li> </ul>
Metabolic disturbance or toxins  • Intractable nausea that is typically not relieved by vomiting	Metabolic:  Renal failure, liver failure, hypercalcaemia  Toxic:  Medications e.g. morphine  Chemotherapy +/- Radiotherapy	Haloperidol 1.25 -2.5mg nocte (po or sc)
<ul> <li>Raised intracranial pressure</li> <li>Typically worse in the mornings and often associated headaches</li> <li>Nausea typically not relieved by vomiting</li> </ul>	<ul> <li>Intracranial tumours</li> <li>Infections e.g. toxoplasmosis</li> <li>Meningitis (TB, cryptococcal)</li> <li>Malaria</li> </ul>	Dexamethasone 8-16mg od (caution in patients with untreated infections)
Bowel obstruction	If surgery ineffective, conservative management of malignant bowel obstruction can improve symptom burden – refer patient to MPCU	









# PALLIATIVE CARE GUIDELINES: PAIN MANAGEMENT FOR ADULTS

## **Principles:**

- Pain is what the patient says it is and can have physical, psychological, social and spiritual components.
- Aim to control pain quickly and safely. Regularly re-evaluate pain and monitor its response to treatment.
- Benefits and burdens alongside affordability and accessibility are important factors in the choice of analgesic.

#### **Assessment:**

Evaluate the cause of the pain using a holistic history, thorough examination and appropriate investigations.
 Pain severity should be assessed using an appropriate pain evaluation tool such as the hand scale below.













no hurt hurts little bit

hurts little more hurts even more hurts whole lot

hurts worse

#### Management:

- Good holistic care requires a combination of general non-clinical measures and advice, investigation and treatment of any underlying cause(s) and appropriate symptomatic treatment(s). All three aspects of care are important and ideally should occur concurrently, however for certain patients the underlying cause of the pain may be unclear. Management for these patients should focus on improving symptoms and quality of life whilst regularly reassessing.
- Pain management is based on the WHO analgesic ladder.
- Medications should be given regularly throughout the day and orally unless contraindicated.
- Patients started on a regular opioid should have a laxative co-prescribed unless contraindicated

	Pain persisting increasing	or
Pain persisting or increasing	Pain decreasing	Strong-opoid ± non-opoid ± adjuvants
Pain decreasing	Weak-opoid ± non-opoid ± adjuvants	Step 3 Severe pain
Non-opoid ± adjuvants	Step 2 Moderate pain	
Step 1 Mild pain	The WHO Analgesic Ladder	

Step	Analgesics	Comments	Adjuvants
Step 1 (non-opioid)	Paracetamol 1g 6 hourly or Diclofenac 50mg 8 hourly	Continue with step 1     analgesic when moving on to     step 2 and 3	Amitriptyline 12.5-25mg nocte for neuropathic pain (can be increased to
Step 2 (Weak Opioid)	Morphine 2.5-5mg 4 hourly during the day with a double dose at night or Codeine Phosphate 30-60mg 6 hourly or Tramadol 50-100mg 6 hourly	considered a step 2 analgesic and is recommended first line	<ul> <li>50-75mg if tolerated)</li> <li>Clonazepam 0.5-1mg nocte for neuropathic pain second line</li> <li>Dexamethasone 4-8mg od for swelling/ oedema e.g. liver capsular stretch</li> </ul>
Step 3 (Strong Opioid)	Morphine 7.5-10mg 4 hourly during the day with a double dose at night Increase the dose as required to control the patient's pain	renal impairment may require	Hyoscine Butylbromide (buscopan) 20mg qds for smooth muscle spasm     Diazepam 5-20mg nocte for painful skeletal muscle spasm









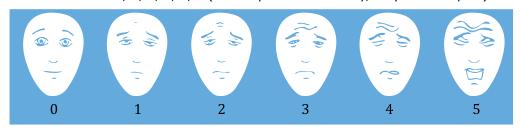
# PALLIATIVE CARE GUIDELINES: PAIN MANAGEMENT FOR CHILDREN

## **Principles:**

- Pain is what the child says it is and can have physical, psychological, social and spiritual components. No child should be withheld adequate and safe analgesia.
- Aim to control pain quickly and safely. Regularly re-evaluate pain and monitor its response to treatment.

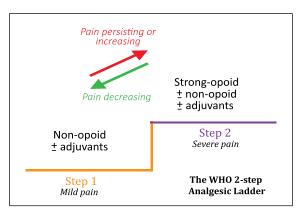
#### Assessment:

- Evaluate the cause of the pain using a holistic history, thorough examination and appropriate investigations.
- Pain severity should be assessed by using an appropriate pain evaluation tool such as the hands or faces scale below. Scores are from 0, 1, 2, 3, 4, 5 (0 = no pain and 5 = very, very much in pain).



#### Management:

- Good holistic care requires a combination of general non-clinical measures and advice, investigation and treatment of any underlying cause(s) and appropriate symptomatic treatment(s)
- Pain management for children is based on the WHO analgesic ladder using a two-step strategy
- Medications should be given regularly throughout the day and orally unless contraindicated.
- Patients started on a regular opioid should have a laxative co-prescribed unless contraindicated.



Step	Analgesics	Comments	Adjuvants
Step 1 (non-opioid)	<ul> <li>Infants from 1 to 3 months</li> <li>Paracetamol 10mg/kg every 4-6 hrs max 4 doses/day</li> <li>Children from 3 months to 12 years</li> <li>Paracetamol 10-15mg/kg every 4-6 hrs max 4 doses/day, max 1g at a time.</li> <li>Ibuprofen 5-10mg/kg every 6-8 hours</li> </ul>	Aspirin is rarely used in children	<ul> <li>Amitriptyline - children from 2-12 years, 0.2-0.5mg/kg (max 25mg) at night - increase if needed to max 1mg/kg twice a day</li> <li>Carbamazepine - 5-20mg/kg/day in 2 or 3 divided doses, increase gradually to avoid side effects.</li> <li>Diazepam (used for associated anxiety) o 1-6 years: 1mg/day in</li> </ul>
Step 2 (Opioid)	<ul> <li>Infants from 1 to 3 months</li> <li>Oral morphine - 0.08-0.2mg/kg every 4 hrs</li> <li>Children from 1 to 2 years</li> <li>Oral morphine - 0.2-0.4mg/kg every 4 hrs</li> <li>Children from 2 to 12 years</li> <li>Oral morphine 0.2-0.5mg/kg every 4hrs</li> </ul>	Titration: After a starting dose, the dosage should be adjusted to the level that is effective with a maximum dosage increase of 50% per 24 hours.	2-3 divided doses  o 6-14 years: 2-10mg/day in 2-3 divided doses  • Hyoscine Butylbromide  o 1month - 2 years: 0.5mg/kg po 8hrly  o 2-5 years: 5mg po 8hrly  o 6-12 years: 10mg po 8hrly  • Prednisone - 1.2mg/kg/day









# PALLIATIVE CARE GUIDELINES: MALIGNANT SPINAL CORD COMPRESSION

## **Principles:**

- Malignant spinal cord compression (MSCC) is defined as compression of part of the spinal cord through a
  malignant process such as direct tumour pressure, oedema, vascular disturbance or vertebral instability.
- It is most commonly seen in metastatic lung, breast, prostate cancer or myeloma.
- MSCC is a palliative care emergency requiring urgent assessment and management. Late diagnosis and/ or delays in treatment can result in paraplegia, loss of bowel/ bladder control, impaired quality of life and reduced survival.

#### **Assessment:**

- Take a full, holistic history from the patient and complete a clinical examination. Key signs and symptoms of MSCC include:
  - **Pain** Severe progressive back pain (particularly thoracic) +/- neuropathic or radicular pain. Pain is typically exacerbated by coughing, straining or lying flat. Pain usually precedes any sensory or motor deficit.
  - **Motor +/- Sensory Deficit** Reduced power and sensation primarily of the lower limbs but may effect upper limbs depending on the level of compression.
  - **Autonomic dysfunction** Bladder and/ or bowel disturbance (loss of sphincter control is a late sign with a poor prognosis).
- Order imaging investigations urgently ideally these should be done within 24 hours for patients with neurological symptoms
  - MRI is the gold standard though access and cost limit its use in Uganda. If MRI is available aim to image the whole spine as multiple levels of cord compression can occur.
  - o If MRI unavailable consider CT of the vertebral column.
  - Always consider plain x-rays of the whole spine but remember these may not show the compression.

#### Management:

• Good holistic care requires a combination of general non-clinical measures and advice, investigation and treatment of MSCC and appropriate symptomatic treatment(s). All three aspects of care are important and ideally should occur concurrently.

### General Pain should be assessed and managed using the WHO analgesic ladder (see pain management guidelines). measures Assess for concurrent problems such as pressure sores, bladder/ bowel incontinence and psychosocial distress. Remember to involve OT and physiotherapy in the management of these patients. High dose steroids should be commenced immediately with any clinical suspicion of Corticosteroids MSCC until a decision regarding treatment is made. Unless contraindicated prescribe Dexamethasone 16 mg stat po followed by 16mg once daily while treatment is being planned and implemented. Once radiotherapy treatment has started the dose should be reduced over 5-7 days and then stopped. Dexamethasone should not be taken after midday as it may cause insomnia. Consider monitoring blood sugars, especially diabetic patients. Advise patients to take after food to reduce the risk of gastric irritation. Radiotherapy is the definitive treatment for MSCC. If appropriate patients with MSCC Radiotherapy should be discussed with a radio-oncologist urgently for consideration of treatment. If there is complete paraplegia and loss of sphincter control, radiotherapy may improve pain control but is unlikely to restore function. Patients who are too frail or unfit for specialist treatment should not be transferred unnecessarily to a tertiary referral centre for radiotherapy.







