PALLIATIVE CARE
EMERGENCIES
To heal often
To cure sometimes
To comfort always
Key issues:

Treat the symptoms
Treat the patient and family
Treat the problem
In palliative care emergencies rapid assessment, evaluation and management of symptoms due to malignancy is required.
In patients with advanced malignancy, factors to consider when assessing the patient include:-

1. The nature of the emergency prognosis, reversible
2. The general physical condition of the patient
3. Disease status and likely prognosis
4. Concomitant pathologies
5. Symptomatology
6. The likely effectiveness, cost and toxicity of treatments
7. Patients' and carers' wishes.
8. Can intervention maintain or improve quality of life
Major PC Emergencies

- Severe Pain
- Spinal Cord Compression (SCC)
- Superior Vena Cava Obstruction
- Hemorrhage
- Hypercalcaemia
- Pathological Fracture
- Drug Toxicity
- Chocking
SEVERE PAIN
Assessed and Managed as per the WHO Analgesic ladder.
BONE FRACTURES

• Bone metastasis are a common feature of advanced cancer, such as ca lungs, breast, prostate.

• Bone fracture may also be due to osteoporosis, minimal or no trauma, especially to weight-bearing bones such as femur or vertebrae.

SIGNS AND SYMPTOMS

Severe pain around the site
Deformed limb
Radiograph showing Fracture of the Femur
Assessment and Management

• **Analgesics** – NSAIDS, corticosteroids, Opioids, Adjuvants – carbamazepine, bisphosphates.

• **Immobilisation** where
• Internal or External fixation may be required
• Radiotherapy – it prevents further progression of bone metastasis, enhances healing and also reduces pain
• NB – Oral bisphosphates can be preventive in patients with ca likely to met to bones
Case Study:

- Mr. Njuguna has widespread bone mets from hormone resistant prostate cancer. He gets up to the bathroom, and collapses. He experiences severe pain in his left thigh, and can no longer weight bear.
1. Treat the symptom

2. Treat the Patient and the family

3. Treat Underlying Problem
1. Analgesics – Start with iv then switch to regular oral maintenance dose

2. Patient and Family
   Educate on problem and possible recurrence.
   Warn on risks
   Relieve symptom with analgesia
   May require some mild sedation
   Investigate
3. Treat Underlying Problem

Maintain analgesia
Surgery
Splinting/ traction
Bisphosphonates if appropriate
Radiate if appropriate
Rehab if appropriate
SPINAL CORD COMPRESSION

- This is the compression of the dural sac and its contents at the level of the cord. Direct compression due to:
  - Vertebral metastases
  - Para spinal mass
- Occurs in approximately 5% of patients with cancer. Lung, breast, and prostate cancer are the commonest causes but it occurs in other cancers
- Cord compression can be the initial presentation of cancer.
- Early detection and treatment is important. Delay in treatment may leave the patient paralyzed or without stool or bladder control.
- SCC levels - Cervical 15%, Thoracic 68%, Lumbar 19%. But many are multilevel
Magnetic resonance image showing patient with spinal cord compression at two different sites (arrows)
SIGNS AND SYMPTOMS

- Pain in 90% of patients. Central back pain, aggravated by movement, coughing, straining. Pain may worsen when patient is supine.
- Unilateral or Bilateral radicular pain due to nerve root irritation at the site of the vertebral involvement.
- Neurological deficit – progressive weakness and sensory loss, urinary retention and loss of bowel control.
- Examination – motor weakness, reduced muscle tone, sensory loss, reduced reflexes, reduced rectal tone

ASSESSMENT:
- MRI – when available, Myelography (CI in raised ICP), CT, Plain XRAY not reliable.
MANAGEMENT:

- Dexamethasone 10mg IV start then 4-10mg po qid
- Treat pain, if not resolving
  - look at drugs,
  - review diagnosis
- Radiation single dose or more commonly over 5 sessions
- Decompressive surgery
- Chemotherapy
- Regional anaesthetic blockade
SEIZURES:

• Seizures can be frightening and unpredictable.
• People attach significance to this events – bewitched
• Seizures (generalized or partial) occur in 10-15% of palliative care patients
• Most can be prevented.
• A prolonged seizure lasting more than 10min or one that doesn’t end needs urgent treatment.
• An advance care plan is needed if the patient wishes to avoid admission.
CAUSES

- primary or secondary brain tumors
- cerebrovascular disease
- epilepsy
- biochemical abnormalities (e.g., low sodium, hypercalcaemia, uraemia).
- Trauma, including subdural hematoma
- Infections - cerebral toxoplasmosis, meningitis, malaria, encephalitis
- Alcohol withdrawal.
GENERAL CARE

• Keep the patient safe and free from hazards
• Protect Airway – don’t place anything in the mouth
• Loosen tight clothing
• After seizure is over place patient in recovery position.
• Observe and record length and frequency of seizures.
• Support family and patient and address their fears and concerns
ASSESSMENT AND MANAGEMENT

• No treatment is needed for self-limiting seizure less than 5 minutes
• To stop prolonged seizures:
  – Diazepam 10mg given per rectum or IM, repeat in 10 minutes
  – Midazolam 5mg sc is available; may also be given buccally
  – Paraldehyde 5–10mls diluted in saline as a rectal enema
  – Phenobarbitol 200mg IM if patient not responding to diazepam

• To prevent seizures or reduce their intensity and frequency:
  – Phenytion 150–300mg daily and titrate gradually, watching for toxicity and drug interactions
  – Sodium valproate 600mg daily in divided doses and titrate to maximum 1500mg; this is the medication of choice when there is concern about drug interactions, including those in patients on ARVs
CHILDREN

- rectal **valium** dose would be:
  - If weight is unknown: <3years 5mg; >3years up to 10mg
  - If weight known: 0.5–1mg/kg up to a maximum of 10kg.
- **Clonazepam** (Rivotril) 0.02mg/kg per dose slow IV (max = adult dose of 1mg).
- **Phenobarbital** 20mg/kg IV or PO in neonates and 10mg/kg in infants and older children, then 4–6mg/kg/day IV, SC or PO.
- **Midazolam** 100mcg/kg SC over one minute, then if necessary 200–700mcg/kg over 24 hours by sc infusion.
- If available, paraldehyde 0.1–0.5ml/kg mixed with an equal amount of mineral oil in a glass syringe and administered rectally is an effective and safe drug for managing seizures in children who have not responded to the above measures, esp where are concerns around respiratory suppression.
SUPERIOR VENA CAVA OBSTRUCTION (SVCO)

- Superior vena cava obstruction (SVCO) is due to compression or invasion of the superior vena cava by mediastinal lymph nodes or tumor in the region of the right main bronchus. OR thrombosis as a result of compression.
- It is caused most commonly by carcinoma of the bronchus (75%) and lymphomas (15%).
- Cancer of the breast, colon, oesophagus and testis, account of the remaining 10%.
- SVCO is the partial or complete obstruction of blood flow through the superior vena cava into the right atrium.
- SVCO usually results in impairment of the venous return.
Extrinsic — tumor or node
Intraluminal thrombus
Direct invasion
Complication of central line
SIGNS AND SYMPTOMS

Symptoms are those of venous hypertension and include:-

- Breathlessness (laryngeal oedema)
- Headache (cerebral oedema),
- Visual changes
- Dizziness and
- Swelling of the face, neck and arms
  conjunctivae,
- Peri-orbital oedema,
  veins
- non-pulsatile dilated neck
  dilated collateral veins (chest and arms).
- Visual changes
- Unclear mind (muzziness)
- Cough
- Dysphagia.
- a sensation of drowning – common in tumours within the mediastinum,
  i.e. bronchial ca, ca breast and lymphoma.
Patient with SVCO showing typical signs

Without treatment, SVCO can progress over several days leading to death.

Prognosis is poor in a patient presenting with advanced SVCO unless the primary cancer is responsive to radiotherapy or chemotherapy.
ASSESSMENT & MANAGEMENT

- **ASSESSMENT:**
  - Examination may reveal engorged conjunctivae, peri-orbital oedema, dilated neck veins and the collateral veins on the arms and chest wall.
  - Late signs include; pleural effusions, pericardial effusion and stridor.

- **MANAGEMENT**
  - In advanced disease - relief of acute symptoms.
  - high-dose corticosteroids (e.g. dexamethasone 16mg PO/IV) and, if available, urgent radiotherapy.
  - treat dyspnoea with morphine (5mgs 4hrly) and/or a benzodiazepine.
  - teach the patient how to breathe slowly, stay calm & Raising the head of the bed
  - Consider prophylactic anti-convulsant
  - **Contact specialist oncology centre as a priority**
    - Intravascular expandable metal stent.
    - Lytic therapy if thrombosis
CHOCKING

• Choking is the inability to breathe as a result of acute obstruction of the pharynx, larynx or trachea.

• This can be due to local tumour or neurological swallowing difficulties, as well as a more general obstruction.

• In children, especially with a sudden onset of choking, think about foreign bodies!
ASSESSMENT & MANAGEMENT

- Acknowledge the patient’s and family’s fears.
- Discuss interventions truthfully with the patient and family.
- High-dose steroids may be useful to reduce the swelling around the obstructing tumour.
- Palliative radiation, if available, may also help.
- Midazolam 5mg sc can help to sedate the patient and reduce anxiety.
- Rectal diazepam can be used, especially in the community.
STRIDOR

• A stridor is a high-pitched sound of breathing in partial laryngeal or major-way obstruction.
• It is common in head and neck tumours or mediastinum.
• It causes exhaustion from laboured breathing and anoxia.

Causes

• Pressure on the upper airways by extrinsic compression caused by such things as enlarged lymph nodes or primary tumour in the lungs, head or neck
MANAGEMENT

• consider treatment with radiotherapy or tracheostomy if indicated.
• Discuss the possible events with the patient and their family.
• Offer sedation with morphine and benzodiazepines; 5–10mg morphine and 5–10mg diazepam given PO/SC/IV/PR depending on the patient’s condition.
• In hospital, and if facilities are available and the condition of the patient allows, consider:
  – Bronchoscopy
  – Chemotherapy
• In children,
  – dexamethasone high dose 0.5mg/kg 1V over 2 min
  – Nebulise children with adrenaline: 1ml of 1: 1000 added to 4mls of saline, with a min of 30 min between sessions.
  – Parenteral morphine and/or benzodiazepine if severe breathlessness (Note: oral/rectal diazepam works as fast as parenteral and so you can use injectable diazepam rectally.)
HAEMORRHAGE

Bleeding may be caused by underlying tumor, trauma, ulceration, inflammation, or a growth that erodes through a blood vessel

• Bleeding can be external or internal.
• Bleeding can be exacerbated by the coagulopathy associated with the disease or drugs – anti coagulation.
• Very frightening event for patient and carers.
• Haemorrhage is, however, often predictable and needs to be proactively managed.
• Epistaxis is particularly prevalent in children with haematological malignancies.
• At risk: FUNGATING TUMOURS AROUND MAJOR BLOOD VESSELS
PELVIC TUMOURS ESPECIALLY IF FISTULAE INTO VAGINA OR RECTUM.
HEAD AND NECK TUMOURS
MAJOR BLEEDING DISORDER
MANAGEMENT

• Use dark cloths to soak up the blood.
• Pack a bleeding nose with gauze. Adrenalin-soaked ribbon gauze may also help as it causes local vasoconstriction.
• Sucralfate may act as a local astringent to stop stomach bleed.
• Sedation if the patient is distressed.
• Support to patient and family.
• Radiotherapy bleeding tumours
• Systematic
  – Tranexamic acid 500 = 1000mg qid
  – Sulfacrate po / pr
  – Vitamin K if hepatic failure
• Massive hematemesis may require NG tube, suction
HYPERCALCAEMIA

• Hypercalceamia occurs as a result of increased osteoclastic activity (which releases calcium from bone) and decreased excretion of urinary calcium.
• This is attributed to locally active substance produced by bone metastases or by factors such as ectopic parathyroid hormone related protein (PTHrP) or cytokines, and occurs in 10% of the cancer population.
• Hypercalcaemia is the commonest life-threatening metabolic disorder in cancer patients.
• Occurs most frequently in myeloma, and in breast, renal, lung and thyroid cancer.
SIGNS & SYMPTOMS

• General malaise
• Nausea and vomiting
• Anorexia
• Constipation
• Bone pain
• Thirst and polyuria
• Polydypsia
• Severe dehydration
• Drowsiness
• Confusion and coma
• Cardiac arrhythmias.
ASSESSMENT & TREATMENT

• Plasma calcium concentration above 2.6 mmol/l
• Levels of > 4.0 mmol/l will cause death in few days if left untreated.
• 80% of hypercalcaemic patients with cancer survive less than one year.
• Review patient & family to treat of not to treat.
• Treatment of hypercalcaemia can markedly improve symptoms even in patients with advanced disease.
• The patient may be admitted for hydration and bisphosphonate therapy (e.g. disodium pamidronate 60–90mg in sodium chloride 0.9%, 500ml over 2–4hr). However, this treatment might not be available due to cost.
SPECIAL CONSIDERATION IN HIV & AIDS

• In HIV and AIDS the most common palliative-care emergencies are SCC (often due to TB), seizures due to infections, and overwhelming sepsis.
• Treatment for such emergencies is as above, with special consideration of anti-infection agents.
• Overwhelming sepsis in a patient with HIV and AIDS may not display the typical signs of fever.
• Intracranial or meningeal infection should be considered when there is a rapid decrease in the level of consciousness.
• Opportunistic infections may present with sudden deterioration or collapse.
• While the required facilities to manage some palliative care emergencies may be limited in some Kenyan settings, health workers should always endeavour to undertake impeccable assessment, communicate with the patient and the family, and do whatever they can for the patient.

• Clear thinking is crucial in handling emergency situations, and calmness and patient comfort are paramount.
QOL???????

• HOW IS IT DEFINED
  – BY US??
  – BY THE PATIENT??
If comfort care only

Reduce agitation
Treat pain/dyspnea etc..
Keep warm
support family, friends, and staff support
Treatment of underlying problem