Emergencies in Palliative Care

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Faculty/Presenter Disclosure

• **Speaker:** Dr. Ingrid de Kock

  Palliative Care Pain & Symptom

• **Relationships with commercial interests:**
  
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Mitigating Potential Bias

• None
Learning Objective

At the end of this session, you will be able to:
formulate a management plan for some common palliative care emergencies
What is an “Emergency” in Palliative Care?

• Death is expected in Palliative Care
• Focus on QoL
• Prolongation of life is often not possible

thus any condition that seriously threatens QoL

• Alternative term: palliative crises
Decision making in palliative emergencies

• Questions to consider in patients with advanced disease:
  – what is the problem?
  – can it be reversed?
  – should it always be reversed?

• Two tiered decision-making process:
  1. what is best technical solution to problem, and
  2. is it appropriate for this patient at this time, and does patient/decision maker agree?

Care Management Guidelines: Emergencies in Palliative Care
Factors to consider in managing palliative emergencies

- Wishes of patient and carers
- Nature of emergency situation
- General physical condition of patient
- Stage of disease and prognosis
- Other co-morbidities and symptoms
- Likely effectiveness and toxicity of available treatments

Which situations require immediate attention in palliative patients?

- Exsanguination/bleeding
- Spinal cord compression
- Uncontrolled seizures
- Asphyxiation/severe dyspnea
- Hypercalcemia
- Superior vena cava obstruction
- Opioid toxicity
- Agitated delirium
- Fractures
- Severe uncontrolled pain
- Uncontrolled vomiting
- Suicidal ideation
Exsanguination/bleeding

• Clinically significant bleeding in 6-10% of patients with advanced cancer. 3% of lung cancer patients have terminal massive haemoptysis; incidence in all cancer pts not known


• If massive bleed: short minutes until loss of consciousness

• Not painful, but terrifying to patient, family, staff

• Clear plan of action required
Causes of bleeding in cancer patients

**Anatomical:** local tumour invasion, e.g. H&N, lung, GI, bladder cancers

**Systemic:** bone marrow replaced by tumour bone marrow suppression DIC liver failure medications, e.g. anticoagulation complications, chemo-induced thrombocytopenia, NSAIDs/steroids concomitant diseases, e.g. hemophilia
Management of exsanguination/bleeding

**General measures:**

- anticipate in pts at high risk and treat underlying problem if appropriate and possible (palliative RT, interventional radiology)

- prepare family
Management of exsanguination / bleeding

*Specific measures:*

- Local eg. compression, packing

- Special techniques eg. RT, surgery, embolization

- Systemic eg. octreotide, tranexamic acid, (transfusions)

- “Exsanguination protocol”
Exsanguination protocol

“Dark towels to cover sheets”

“Midazolam 5mg sc stat and repeat 15min. prn until patient sedated”
Communication with pt & family re bleeding

- warn FAMILY re risk and discuss possible outcomes
  (preparing family outweighs possible distress/anxiety)

- discuss specific management

- advise family to apply pressure if surface bleeding to prevent spraying

- reassure re painlessness & effectiveness of management
Patient at home

- assess pt & family’s ability to cope
- prepare family
- instruct in use of midazolam
- prophylactic sc site
- refill syringes q monthly
- Home Care RN availability
- maintain airway with positioning
Malignant spinal cord compression (SCC)

- 5% of cancer patients in last 2 y of life; median survival at time of diagnosis: 6 mo
- Lung, breast, prostate cancer 15-20% of SCC, multiple myeloma, non-Hodgkin lymphoma, renal cell cancer 5-10%
- 85% extra-dural compression due to vertebral mets

Malignant spinal cord compression (2)

- Incidence of level of compression:
  - 10-15% cervical
  - 60-70% thoracic
  - 20-25% lumbosacral

- More than one level involved in 1/3 of pts

- Prompt diagnosis and treatment ESSENTIAL to prevent paralysis and treat pain

- High level of suspicion needed


Clinical presentation of SCC

1. Back pain:
   - first symptom in > 90% of cases
   - localized or radicular pain (sometimes “band” around chest)
   - may worsen with movement, cough, straining, lying down
   - can predate sensory changes by weeks/months

2. Weakness: 76%
   - ambulatory status at presentation is most important prognostic factor for neurological function

3. Sensory changes: 40-90%
   - numbness, tingling, loss of vibratory and position sense, loss of light, sharp or cold touch

4. Bladder / bowel dysfunction: 51%
   - Late symptoms
   - Urinary retention, constipation, loss of anal tone

Management of SCC

- Dexamethasone asap: loading dose 10 mg (iv if possible), then 16 mg / 24h until after diagnosis excluded OR taper after RT (add PPI)
- Urgent MRI
- RT asap for radio sensitive tumours: lymphoma, myeloma, breast, prostate, SCL Ca
- Consider surgery for unstable vertebrae, clinical progression despite RT, known radio resistant tumour (melanoma, sarcoma, renal cell carcinoma), BUT only if pt’s condition, prognosis, wishes warrant surgery. Surgery generally followed by RT

Outcomes of Treatment

- 70% of pts who were ambulatory at time of diagnosis will regain ability to walk
- 30% of pts with paraparesis will regain ability to walk
- 5% of patients with established paraplegia will regain ability to walk

THUS BE CLINICALLY VIGILANT FOR SCC
Uncontrolled seizures

Seizures lasting > 2 min

In 1% of pts with Ca

Causes:

- Brain tumour – primary (incidence of seizures 20-50 %) or mets (20 %)
- Meningeal involvement
- Metabolic
- Medications
- Previous epilepsy
Prevention of seizures

- Consider RT for brain mets, depending on pt wishes, life expectancy
- Newer modality is stereotactic surgery for solitary mets if appropriate
- Dexamethasone used for headaches and confusion in pts with brain tumours, might help prevent seizures
- If previous seizures, add anti-epileptic
- Treat reversible causes, e.g. hypercalcemia, severe opioid toxicity
Management of uncontrolled seizures

• Supportive - airway, etc.

• Medications:
  - midazolam 5 - 7 mg sc or im (faster onset), repeat q 10 – 15 min if seizures persist
  - lorazepam 2 – 4 mg sc, sl, repeat q 10 – 15 min if seizures persist

• Once under control, review current anti-epileptic meds or start on anti-epileptics

• If status epilepticus as terminal event, or pts unable to swallow, consider phenobarbitone 30-240 mg/day sc in 3-4 divided doses

• Occasionally palliative sedation required if terminal event

Airway obstruction / severe dyspnea

Causes:

- Primary tumours in mediastinum (i.e. lung Ca, thymoma) or tumour of H&N
- Mets (esophageal, renal, breast, or thyroid Ca)
- Lymphangitic carcinomatosis
- Pulmonary embolism
- Pulmonary vessel occlusion (encasement)
- Infections
- Effusions (pleural, pericardial)
- RT-damage
- Preexisting conditions
Severe dyspnea

- Subjective; tests do not correlate with sensation of breathlessness
- If severe can cause great anxiety and fear of suffocating
- Most often multifactorial; mechanism poorly understood
- Up to 80% of pts experience SOB in last 24 h of life
- Up to 70% of cancer pts will have SOB during course of disease
- Airway compromise or obstruction develops in approx. 20-30% of pts with lung cancer during course of disease

Management of airway obstruction/severe dyspnea

- Validate experience and reassure pt
- Treat underlying cause(s) if possible and appropriate (metal stents, RT)
- Simultaneously control symptom

1. Non pharmacological:
   - sit at 45°
   - open window or fan
   - meditation/relaxation therapy
   - humidified air
   - keep staff, family, pt calm

2. Medications:
   - oxygen for hypoxia only
   - opioids – start lower than for pain
   - bronchodilators for bronchospasm
   - dexamethasone
   - sedation (discuss early)

Hypercalcemia

• 10% of all Ca pts; poor prong. sign (50% of pts die within 1 month)

• Commonly associated: breast and multiple myeloma 40-50%, NSCL, H+N, esophagus, gynecological, renal cell Ca

• Etiology: (mechanism varies with each malignancy)
  – PTH-related protein – induced humoral hypercalcemia of malignancy (80%)
  – local osteolysis from bone metastasis (19%)
  – lymphoma-associated calcitriol production (<1%)
  – ectopic PTH secretion (<1%)

• May recur in up to 40% of cases
Clinical presentation of hypercalcemia

- General: fatigue, anorexia, bone pain, n+v, constipation, confusion, polydipsia, polyuria
- Neurological: seizures → coma → death
- Cardiac dysrhythmias

Laboratory indices

- Corrected Ca\(^{2+}\) = measured Ca\(^{2+}\) + [(40 - alb.) \times 0.02]

- Ionized Ca\(^{2+}\)

- Consider treating if Ca\(^{2+}\) > 2.65 mmol/l (general condition, prognosis, wishes); treatment varies with severity
Hypercalcemia

1. 40 – albumin = Y

2. measured Ca $^{2+}$ X.XX mmol/L + 0.(2Y)
   \[\text{corrected Ca}^{2+}\]
Management of hypercalcemia

- Hydration (for mild hypercalcemia might be adequate treatment)

- Calcitonin (only if severely symptomatic)

- Bisphosphonates – effective in up to 90% first time treated pts; risk of osteonecrosis of jaw (very rare)

- Other (uncommonly used) medications:
  denosumab, glucocorticoids, gallium nitrate, mithramycin
Hypercalcaemia

Bisphosphonates:

- Clodronate (900) - 1500 mg in 200 – 500 ml N/S given sc over 4 h.
- Pamidronate (60) - 90 mg in 500 ml N/S given IV over 2-3 h.
- Zoledronate – 4 mg in 50 ml N/S given iv over 15-30 min.
Superior vena cava obstruction

Causes:

- Pressure from tumour or lymphadenopathy
- Invasion of vessel wall
- Thrombosis, including implantable intravenous devices

If no tracheal stenosis, SVCO generally not life threatening
Superior vena cava obstruction

Clinical:
- ↑ SOB, headache, anxiety, confusion, cough, hoarseness (uncommon), dysphagia, chest/shoulder pain
- progressive facial edema
- distended neck/thoracic veins
- cyanotic face

Investigations:
- CXR
- CT most useful
Management of superior vena cava obstruction

- Supportive - oxygen, elevate head
- Treat SOB and anxiety
- Steroids
- LMWH if thrombus
- RT / chemo
- ± Stenting

Further references/resources

• Emergencies in Palliative Care, 2010  
  www.dhhs.tas.gov.au/palliativecare

  www.albertahealthservices.ca

• Noble S, Noble M. Emergencies in palliative care. MEDICINE 43:12, 722-25


Palliative Care Early and Systematic (PaCES) – Colorectal Cancer

Dr. Jessica Simon and Camille Bond

On behalf of the PaCES collaborative
Drs. Ayn Sinnarajah, Patricia Tang, Marc Kerba, Sharon Watanabe, Amy Tan, Xiaofu Zhu et al.
Synopsis

1. What issue are we working on?
More, better, earlier palliative care (PC) supports for patients with advanced colorectal cancer

2. What help do we need from provincial palliative care tumour team to succeed?
- “Sponsoring” approval of pathway content and resources through CCA
- Connecting with local oncology and family med change agents and palliative champions
Objective

Increase the number of patients receiving earlier Pall Care by 20%

To Improve patient outcomes and health system efficiencies
Stakeholders

- Patient & Family Advisors
- Cancer Control Alberta (GURU, GI Tumor Lead)
- Palliative Zonal Leaders
- AHS Community Leaders
- Senior Vice President
- Covenant Health
- AHS Analytics / C-MORE
- EQ-5D unit
- Primary Care
- Universities of Alberta & Calgary
- Health Technology Assessment
- Alberta Health
- Health Quality Council of Alberta
- SCN (Seniors, Primary Care, Cancer)
Summary

Where we are now

Some palliative care Late in illness for some patients

Where we want to be

Better palliative care early in illness for all patients

The PaCES project seeks to improve the lives of people living with advanced cancer through implementing a pathway for early palliative care approaches and services.

The provincial palliative care tumour team is integral to achieving this goal.