PALLIATIVE CARE EMERGENCIES

TOPICS TO BE COVERED

• Malignant spinal cord compression (MSCC)
• Hypercalcaemia
• Superior vena cava obstruction (SVCO)
• Pathological Fracture
• Haemorrhage

MSCC - INCIDENCE

• Occurs in 5-10% of all patients with advanced cancer
• Compression occurs at more than one level in 20% of all cases
• Most prevalent in breast, lung, prostate cancers and lymphoma.
LEVEL OF COMPRESSION

- Cervical – 10%
- Thoracic – 70%
- Lumbar – 20%
CLINICAL FEATURES

• Early detection and treatment is essential

• Pain >90%
• Weakness >75%
• Sensory level >50%
• Sphincter dysfunction >40%

Most patients will experience pain several weeks or months before they experience any other symptom of malignant spinal cord compression.

SIGNS AND SYMPTOMS

• Pain/tenderness in the middle or top of back or neck
• Severe pain in lower back that gets worse or doesn’t go away
• Back pain, exacerbated by coughing, sneezing or going to the toilet
• Numbness, weakness in arms or legs
SIGNS AND SYMPTOMS

- Changes in sensation, for example pins and needles or electric shock sensations
- Numbness in the area around the back passage (the saddle area)
- Not being able to empty or control bowel or bladder
- Erection problems in men

INVESTIGATIONS

- History and clinical findings – including neurological assessment
- MRI is the investigation of choice
- A plain X-ray shows vertebral metastases and/or collapse in 80% of cases
- CT with myelography may be helpful if MRI is contra-indicated
- A bone scan is not likely to yield additional information

MANAGEMENT

- Administer 16mg Dexamethasone IV/IM/O stat and continue dose daily
- Urgent same day referral to Oncologist
- Urgent same day MRI
- Radiotherapy within 24hrs
- Surgery may be considered appropriate for some patients
REHABILITATION

- Rehab should commence immediately following radiotherapy +/- surgery
- Progression of cord compression is not related to mobility – walking won’t make it worse
- Bed rest should be avoided
- Physio and OT services should provide intensive rehab to achieve maximum potential mobility

HYPERCALCAEMIA

Definition:
- Hypercalcaemia is defined as a serum corrected calcium level (CoCa) above the upper limit of normal
- Any type of cancer with or without skeletal metastases may be associated with hypercalcaemia
- However, more than 80% of patients with cancer related hypercalcaemia have skeletal metastases
- The extent of bony disease does not correlate with the level of hypercalcaemia

HYPERCALCAEMIA

- It is the most common palliative care emergency. It can be easily missed.
- It occurs in 20% of all cancers
  - Myeloma
  - Lung cancer
  - Breast cancer
  - Kidney
  - Head and neck
  - Prostate
SYMPTOMS

• Thirst
• Fatigue
• Lethargy
• Mental dullness
• Weakness
• Anorexia
• Constipation
• Polyuria

SYMPTOMS

• Nausea and vomiting
• Dehydration and cardiovascular collapse
• Ileus
• Delirium
• Drowsiness
• Coma

INVESTIGATIONS

• Look for the causes of all the symptoms – they are all symptoms of cancer itself
• Bloods including
  • Co Ca >2.8mmols is abnormal
    >4 mmols is life threatening
  • U&Es, FBC, LFTs, Thyroid Function and Glucose
MANAGEMENT

• Consider whether treatment is appropriate
• Admission to hospital
• Rehydrate with IV fluids (N. Saline)
• IV Bisphosphonates
• Continue IV fluids for 48hrs
• Re check Co Ca levels at 2 and 5 days post treatment
• Re check Co Ca and U&E’s every 3 weeks thereafter

SUPERIOR VENA CAVA OBSTRUCTION

DEFINITION
The superior vena cava is a large vein that carries deoxygenated blood from the upper half of the body to the right atrium of the heart.
Obstruction occurs when the flow of blood to the heart is stopped within the vein. The walls of the SVC are thin so can easily be squashed/compressed.

SUPERIOR VENA CAVA OBSTRUCTION

• Most cases of SVCO are caused by an underlying cancer. The cancer itself may be pressing directly on the SVC, or it may have spread to the lymph nodes nearby which become swollen.
SUPERIOR VENA CAVA OBSTRUCTION

Incidence
• 90% of cases are caused by cancer (10% by blood clots)
Of the cancer cases:
• 75% of those associated with lung cancer
• 25% due to Non–Hodgkins Lymphomas, and other cancers.

SIGNS AND SYMPTOMS

Often a gradual onset
• Shortness of breath (due to swelling around trachea)
• Swelling of face, neck, arms and hands
• Cough
• Dilated superficial veins of arm & neck
• Headache – or sensation of fullness of the head
• Stridor (inspiratory distress)
• Hoarseness
• Dysphagia
• Red complexion to the face
• Visible / prominent veins to the chest
DIAGNOSIS

- Clinical examination
- Chest X Ray (if appropriate)
- CT, ultrasound may be performed

TREATMENT

- Dexamethasone 16mg
- Needs urgent review for consideration of treatment options:
  - radiotherapy (effective in 60% cases)
  - stent insertion
  - chemotherapy
- Consider Oramorph to treat the respiratory distress (laboured breathing)
TREATMENT

Consider
• Analgesia
• Diuretics
• Reassure and inform patient and family
• Patient position for comfort measures

PATHOLOGICAL FRACTURE

• A non trauma related break to a bone
• Caused when a pre existent pathological bone lesion (metastases commonly) weaken the bone to the extent that it fractures.
• It occurs most commonly in the long bones but can occur at any point where bone metastases are present.

Humerus
PATHOLOGICAL FRACTURE

Occurs most commonly in patients with primary
• Breast
• Ovary
• Prostate
• Myeloma
• But is not restricted to these types of cancer.

SIGNS AND SYMPTOMS

• Pain and tenderness
• Reduced movement in the affected limb
• May be a limb deformity
• Loss of mobility
• If vertebral collapse – may be neurological signs.
• For some people it can be the symptom that they first present with
MANAGEMENT

Prevention

• It is advisable to refer patients for an orthopaedic opinion before the fracture has occurred if the position of the metastases suggests they are at high risk.
• These patients would benefit from a MDT discussion.

MANAGEMENT

Further fractures may occur therefore
• Educate patient and family
• Involve Physio and OT where appropriate for rehabilitation, education and aids for reduction of risk of fractures and maintenance of independence.

• Treat the symptoms i.e. pain
• Surgical fixation is the treatment of choice
• If the patient is too unwell for surgery then an external brace may be fitted
• Long term bisphosphonates may reduce the incidence and help with pain control
• Radiotherapy may be an option for treatment of the bone metastases
HAEMORRHAGE

- Occurs in 6-10% of people with advanced cancer.
- An escape of blood from a ruptured blood vessel.
- Internal, where there is no sign of bleeding outside of the body.
- External, where there is visible loss of blood from the body.

HAEMORRHAGE

Caused by

- External erosion of major vessel. Could be from a fungating wound.
- Haemoptysis – coughing up blood
- Haematemesis – vomiting blood
- Rectal bleed
- Abnormal blood pathology affecting blood clotting.

HAEMORRHAGE

Most common cancers that may result in haemorrhage are:

- Head & Neck cancer
- Lung cancer
- Upper gastro intestinal cancer
- Haematological cancers
- Colo-rectal cancer
MANAGEMENT OF HAEMORRHAGE

• Surgery
• Cauterisation
• Drugs eg Tranexamic acid, vitamin K
• Dressings / wound packing / pressure
• Radiotherapy
• Blood products
• IV fluids

HAEMORRHAGE

• If a patient is close to death, it is often appropriate to regard severe haemorrhage as a terminal event and not to intervene with resuscitative measures.
• Consideration and support must be given to family/carer/professionals.
• It is important to prepare the patient and their family for this possibility.
  -green towels
  -midazolam

CASE STUDY

• Joan is 63 years old and has cancer of the breast with mets in her spine.
• She had a mastectomy and radiotherapy on diagnosis 7 years ago and is now receiving palliative chemo.
• Joan's husband phones you for advice as he is concerned she is increasingly tired, struggling to mobilise and experiencing problems with altered bowel habits. He also mentioned she is muddled at times and has a poor appetite.
CASE STUDY

- What are your thoughts and concerns?
- How would you assess?
- What, if would you do?
- What are the differential diagnoses?

CONCLUSION

- Although many of our patients may never experience a palliative care emergency, for those who do it is vital that we recognise and manage these effectively to reduce distress and complications.
- If you feel a patient has any of these problems, escalate your concerns as a matter of urgency and document your concerns.

QUESTIONS?