PALLIATIVE CARE
EMERGENCIES

Palliative study group
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To heal often,
To cure sometimes,
To comfort always
- Treat the symptom
- Treat the patient and family
- Treat the problem, if possible and reasonable.
How is QOL defined???

.............Not by us!
It may require sensitive discussion.
If comfort care only

- Reduce agitation
- Treat pain/dyspnea etc..
- Keep warm if bp low.
- Support family, friends, and staff....yes, YOU
- Occasionally this will mean some treatment of underlying problem eg CHF
Recognizing them and treating them can improve comfort and reduce stress even if prognosis is not changed. Decisions to treat should be made with patient and family, if permitted. Consider distress treatment may cause. If difficult to decide if treatment will succeed plan to re evaluate with patient/ family after few hours to a couple of days.
Things we don’t want to miss!!

- Spinal cord compression
- Superior Vena Cava Syndrome
- Hemorrhage
- Hypercalcaemia
- Pathologic fracture
- Drug toxicity/side effects
Other emergencies

Seizures
Obstructive nephropathy
Cardiac tamponade
Tumor lysis
Febrile neutropenia
Hyperviscosity
Increased intracranial pressure
SIADH
Hypoglycaemia
SPINAL CORD COMPRESSION

- Compression of the vasculature with engorgement and edema, leading to ischaemia of cord
- Direct compression due to:
  - Vertebral metastases
  - Paraspinal mass
Time is of the essence- the risk of neurological damage is reduced by fast diagnosis and treatment. Delay reduces mobility thereby quality of life and life expectancy.
SCC levels

- Cervical 15%
- Thoracic 68%
- Lumbar 19%
- But many will have multilevel disease
Common causes of malignant SCC

- Prostate
- Breast
- Lung
- Myeloma
- Kidney
Signs and symptoms

- Increasing neck or back pain will have been the presenting feature in 90% of SCC, pain often worse in bed and with cough or strain.
- Weakness of extremities
- Sensory loss, light touch, pain and temperature
- Sphincter dysfunction / urinary retention
Assessment

- Altered reflexes
- Pain with straight leg raising
- Tingling in arms with flexing neck
- Weakness maybe unilateral at times
- Lax sphincter tone
- Reassess if suspicion high based on symptoms
## Exam findings

<table>
<thead>
<tr>
<th>L</th>
<th>MOTOR</th>
<th>REFLEX</th>
<th>SENSORY</th>
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</thead>
<tbody>
<tr>
<td>C 2-4</td>
<td>Breathing</td>
<td></td>
<td>Occiput C2, Thyroid area C3, Suprasternal notch C4</td>
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<tr>
<td>C 5</td>
<td>Shoulder shrug</td>
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<td>Below clavicle</td>
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<tr>
<td>C 6</td>
<td>Elbow flexion</td>
<td>Biceps</td>
<td>Thumb</td>
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<tr>
<td>C 7</td>
<td>Elbow extension</td>
<td>Triceps</td>
<td>Index finger</td>
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<tr>
<td>C 8</td>
<td>C8-T1 finger flexion</td>
<td></td>
<td>5th finger</td>
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<tr>
<td></td>
<td>T1-12 intercostal and abdominal</td>
<td></td>
<td>T4 nipple line  T10 umbilicus</td>
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<tr>
<td>Level</td>
<td>Motor</td>
<td>Reflex</td>
<td>Sensory</td>
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</tr>
<tr>
<td>L1-2</td>
<td>Hip flex</td>
<td></td>
<td>Inguinal area</td>
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<tr>
<td>L3</td>
<td>Hip adduc’n</td>
<td></td>
<td>Medial thigh</td>
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<tr>
<td>L4</td>
<td>Hip abduct’n</td>
<td>Patellar</td>
<td>Knee</td>
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<tr>
<td>L5</td>
<td>Foot dorsi-flexor</td>
<td></td>
<td>Lat calf</td>
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<tr>
<td>S1</td>
<td></td>
<td>achilles</td>
<td>Lat foot</td>
</tr>
<tr>
<td>S2-4</td>
<td></td>
<td></td>
<td>Perianal area</td>
</tr>
</tbody>
</table>
Investigate

- MRI is the preferred if available
- CT myelogram
Treatment

- If suspicion is high should start immediately with Dexamethasone, at least 10mg IV/SQ stat then 4mg po/iv/sq 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
RCT trial of 101 selected patients
- Radiation + steroids
- Surgery + steroids ± radiation

Ability to walk after Tx
- surgery arm 84%
- radtx arm 57%

Regained ability to walk
- surgery 62%
- radtx 19%

STUDY STOPPED
Superior Vena Cava Syndrome

- Extrinsic – tumor or node
- Intraluminal thrombus
- Direct invasion
- Complication of central line
Common cancers causing SVCO

- Lung
- Lymphoma
- Metastatic breast, esophagus, colorectal,
Frequency:

- Occurs in 3-8% of patients with lung cancer (SCLC and squamous cell) and lymphoma, and less frequently in breast and testicular cancer.
- Found most commonly with right sided lung tumors presenting with R sided symptoms (up to 10% will develop SVCO).
Clinical signs

- Early:
  - Periorbital edema, conjunctival suffusion, facial swelling. All more obvious in the morning and if patient stooped over or supine.
  - Cough, dyspnea
  - Dysphagia
  - Chest pain

- Later
  - Engorged neck and chest veins
  - Tachypnea
  - Plethora
  - Upper extremity edema
  - Cyanosis

- Severe
  - Headache, blurred vision, altered mental status, seizure, papilledema,
Assess and Investigate

- Clinical exam
- CXR
- CT or MRI
Management:

- Radiotherapy
- Chemotherapy
- Steroids
- Intravascular expandable metal stent.
- Lytic therapy if thrombosis
- Raising the head of the bed.
- Diuretic (transient help)
HEMORRHAGE

- Bleeding may be caused by 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.
Investigate and Treatment

- Investigate, in earlier stages workup may be warranted to identify site, bleeding diathesis.

- Treatment
  - **Radiotherapy** bleeding skin mets
    - hemoptysis
    - bowel
  - **Systematic** Tranexamic acid 500 = 1000mg qid
    - Sulfacrate po / pr
    - Vitamin K if hepatic failure
CATASTROPHIC BLEED

- Know who is at risk and prepare the family and patient
- Have parenteral opioids and sedatives on hand, and/or fentanyl sl
- Have dark towels and bedding available
- Massive hematemesis may require NG tube, cover the suction bottle

Who is at risk:

- FUNGATING TUMOURS AROUND MAJOR BLOOD VESSELS
- PELVIC TUMOURS ESPECIALLY IF FISTULAE INTO VAGINA OR RECTUM.
- HEAD AND NECK TUMOURS
- MAJOR BLEEDING DISORDER
HYPERCALCAEMIA

- Serum calcium, corrected >2.6.
- Suspect with certain cancers
  - Multiple Myeloma
  - Lung
  - Prostate
  - Renal cell
  - Breast
Hypercalcaemia

- 20-40% of cancer patients, most commonly in breast, lung, multiple myeloma, and leukemia
  - Due to boney mets, 2° to osteolysis releasing $\text{Ca}^{++}$ and $\text{PO}_4$.
  - Hormone related due to tumor excretion of PTH, prostaglandins or peptides affecting bone turnover.
  - Hormonal effecting renal tubular reabsorption and phosphate excretion.
Clinical signs

- Early signs but often not recognized
  .....nausea, lethargy, anorexia, thirst
- Then presents with confusion and
drowsiness, constipation, dehydration, non
specific pain
- Eventual cardiac arrhythmias
Treatment

- Review with patient and/or family to treat or not to treat
- Hydration and diuresis
- Bisphosphonates
  - Pamidronate 60 – 90 mg IV in 500 cc N Saline over about 4 hours may need to repeat in 4 weeks
  - Clodrinate 1500 mg SQ in 500 cc N saline over 4 – 6 hrs
  - Zolendrenate (if refractory to above)
- Calcitonin quick onset but short term relief
SEIZURES

- Occur in approx 20% of cerebral malignant involvement.
- secondary to
  - Brain mets
  - Metabolic or toxic disturbances
  - Vascular events
  - Infection
Investigation

Blood sugar stat
Cbc, lytes, BUN and creat, Ca and Mg,
LFT’s,
Cultures as appropriate.
Review medications.
CT head
LP
Management

Diazepam 5-10mg IV or IM or pr
  or
Lorazepam 1-2 mg IV or SQ
  and if persistent / repetitive

Phenytoin IV loading dose 15mg/kg over the first 24 hours followed by 300-400 mg /day
  IV solution cannot be delivered faster than 50mg /min

Phenobarbital 30 – 120 mg SQ tid
Pain crises / Respiratory crises

- Pathologic fracture
- GI bleed
- Ischaemic bowel
- Obstructed bowel
- Collapsed lung
Drug toxicity/side effect

- Respiratory depression caused by
  - Opioids… treat with naloxone.
  - Benzodiazepine… treat with Flumanzil

- Opioid toxicity
  - Hydrate
  - Rotate opioid
  - Manage agitation with neuroleptics
  - Manage myoclonus with benzodiazepine
Case study

Mr. F. 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.
Treat the symptom
Treat the symptom

- Fentanyl sl/iv is the fastest. Rapid dose escalation with careful monitoring of respiratory rate. Base frequency of administering on pharmacokinetics, double the dose until effective pain relief is found. Convert to regular dosing once pain is controlled.

- IV/SQ morphine or Dilaudid can be used instead of Fentanyl.
Treat the patient and family
Treat the patient and family

- Educate re potential problem
- Warn of inherent risks
- Relieve symptom with analgesia
- May require some mild sedation
- Investigate
Treat the underlying problem

......... Is it possible?

......... Is it reasonable?
Treat the underlying problem

- Maintain analgesia
- Surgery
- Splinting/ traction
- Bisphosphonates if appropriate
- Radiate if appropriate
- Rehab as appropriate
Remember

- Treat the symptom
- Treat the patient and family
- Treat the underlying problem

If and when the crises is resolved it is a good opportunity to review with the patient and family what to expect in future and to consider options in various scenarios