

PALLIATIVE CARE EMERGENCIES

Palliative study group

April 2006

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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

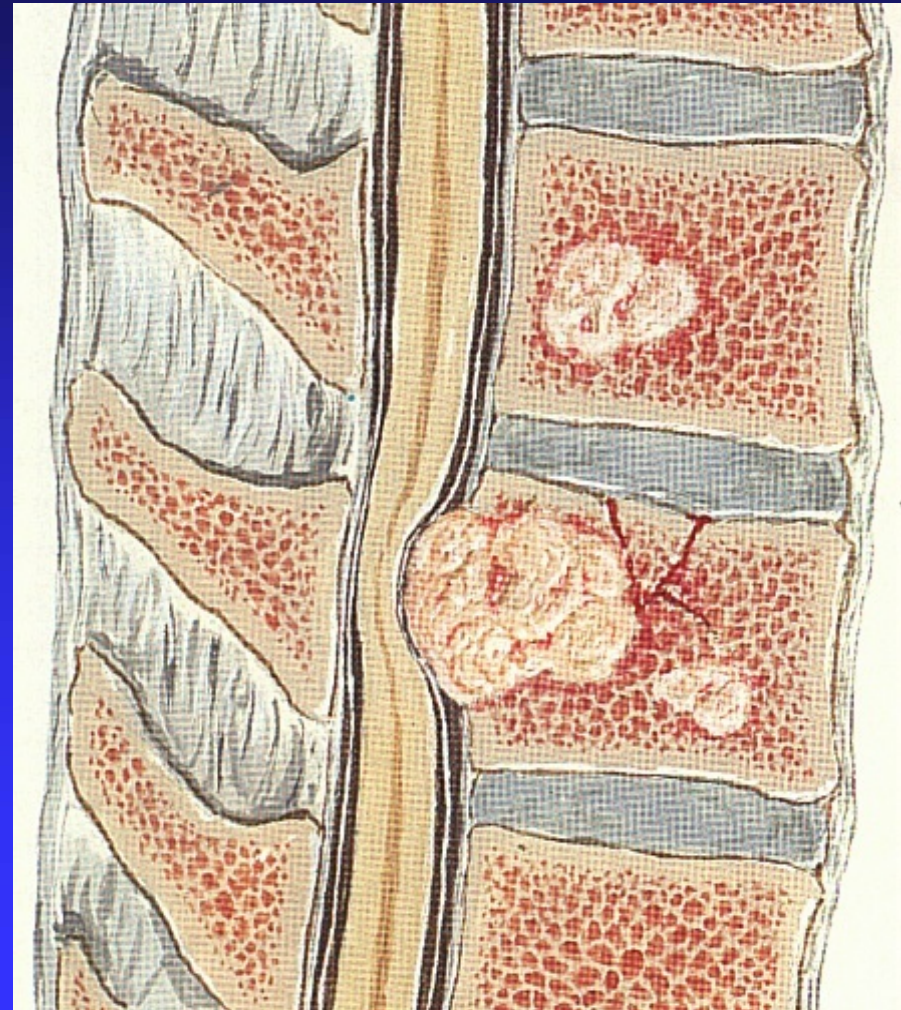
Increased intracranial pressure

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

L	MOTOR	REFLEX	SENSORY
C 2 - 4	Breathing		Occiput C2, Thyroid area C3, Suprasternal notch C4
C 5	Shoulder shrug		Below clavicle
C 6	Elbow flexion	Biceps	Thumb
C 7	Elbow extension	Triceps	Index finger
C 8	C8-T1 finger flexion		5 th finger
	T1-12 intercostal and abdominal		T4 nipple line T10 umbilicus

Level	Motor	Reflex	Sensory
L1-2	Hip flex		Inguinal area
L3	Hip adduc'n		Medial thigh
L4	Hip abduct'n	Patellar	Knee
L5	Foot dorsi-flexor		Lat calf
S1		achilles	Lat foot
S2-4			Perianal area

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

Lancet 2005

- RCT trial of 101 selected patients
 - ◆ Radiation + steroids
 - ◆ Surgery + steroids \pm radiation

Ability to walk after Tx

surgery arm 84%

radtx arm 57%

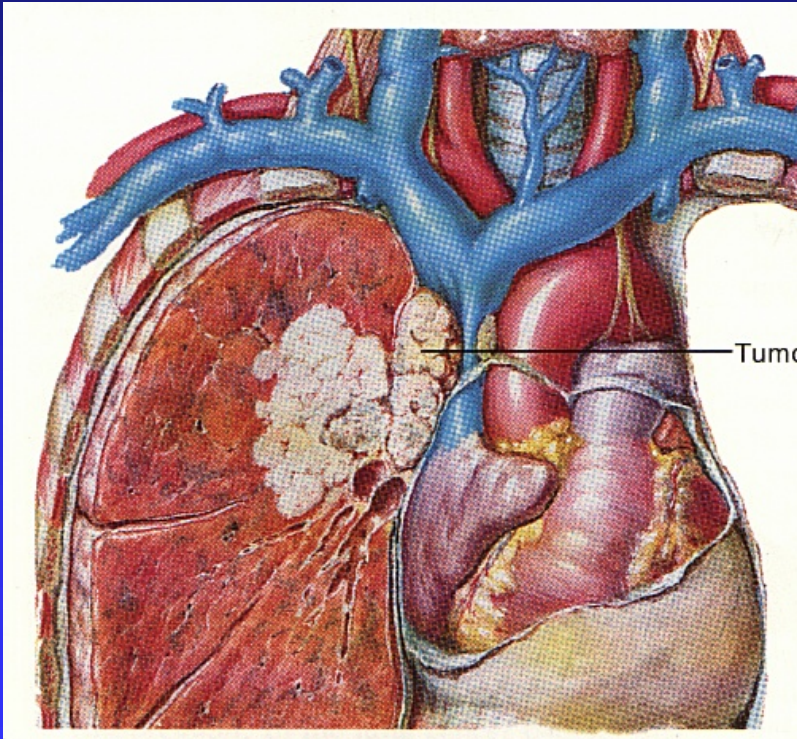
Regained ability to walk

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 SVC/O)

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 Ca^{++} and 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
 - ◆ Clodronate 1500 mg SQ in 500 cc N saline over 4 – 6 hrs
 - ◆ Zoledronate (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