

Symptom Palliation In Lung Cancer

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There is an end to
cure;
there is no end to
care



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Issues in lung cancer

- One third of all cancer-related deaths are due to lung cancer.
- Approximately 40% of patients with NSCLC present at an advanced stage, including patients with metastatic disease and those with locally advanced disease with malignant pleural or pericardial effusion.
- The median survival of patients with untreated metastatic NSCLC is only 4-5 months, with a 1 year survival of only 10%.
- In SCLC, around 70% is seen in extensive stage, median survival is around 1 year.

Disease management

- Palliative RT
- Palliative Chemotherapy
- BSC

Symptom control

- Evaluation: Cause and factors
- Explanation: To the patient
- Management: Individualized treatment
- Monitoring
- Attention to detail: no unwarranted assumptions

Pain



Causes of pain

- Pain in lung is caused by :-
 - The cancer – primary or metastasis
 - Anticancer treatment
 - General illness & debility associated with disease
 - Concurrent disorders
 - Psychological

Mechanism of pain

- Nociceptive – tissue distortion or injury.
- Neuropathic – nerve compression or injury.
 - Superficial burning/stinging pain
 - Spontaneous stabbing/shooting pain
 - Deep ache.

Pain

■ Pleural Pain

- Cancer invading pleura
- Malignant pleural effusion
- Pneumothorax
- Side effect of pleurodesis.

■ Chest Wall Pain

- Local chest wall invasion by tumour
- Vertebral metastasis.
- Rib erosions
- Metastasis

Pain

■ Deep Visceral Pain

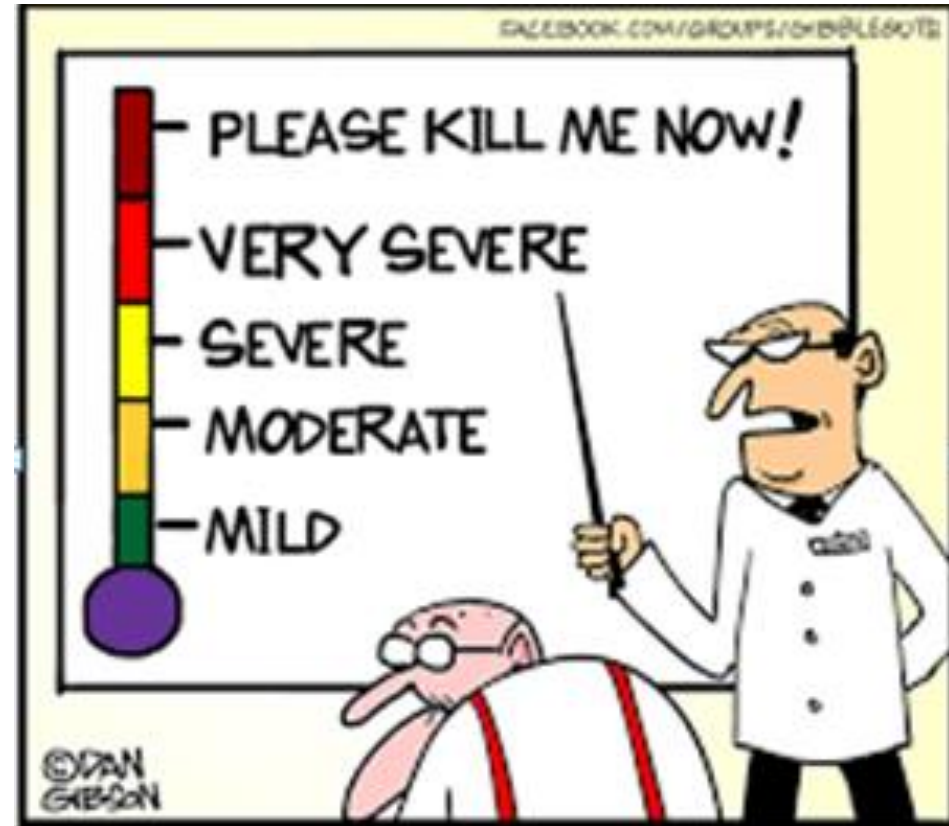
- Intrathoracic spread
- Hepatic metastasis.

■ Neuropathic Pain

- Intercostal nerve infiltration in vertebral erosion.
- Brachial plexus infiltration in Pancoast's tumour.
- Radiculopathy or spinal cord compression

Pain Assessment scale

- Visual Analogue Scale
- Numerical Rating Scale
- Verbal Descriptor Scale



In relation to this chart, how would you describe your pain?

Pain management

- Aim at progressive pain relief :-
 - relief at night.
 - relief at rest during the day.
 - relief on movement (not always completely possible)
- Analgesics should be given until the anti-cancer treatment is effective – several weeks.
- Modification of patient's life style – physiotherapist.

Pain Management

- The WHO Ladder :

- Effective in relieving pain for 90% of cancer patients.
- 75% of terminally ill patients.

W.H.O. PAIN LADDER

ASHISH SINGH,
MEDICOWESOME



STRONG OPIOIDS

Morphine, Oxycodone,
Diamorphine, Fentanyl

WEAK OPIOIDS

Tramadol, Codeine, Dihydrocodeine

SIMPLE ANALGESICS

Paracetamol, Aspirin, NSAIDS

Neuropathic pain

- Corticosteroids
 - Dexamethasone 4-8 mg OD.
- Tricyclic Antidepressants
 - Amitriptyline – 25-75 mg. HS.
- Anticonvulsants
 - Sodium Valproate – 200 –1000 mg.HS.
Carbamazepine – 200-1200 mg./day
- Antiarrhythmic
 - Mexiletine – 50-300 mg TDS.

Should we use Strong opioids !!!!

- Morphine does not cause respiratory depression.
 - Pain is physiological antagonist to the central depressant effect of morphine.
 - Psychological dependence (addiction) does not occur if morphine is used correctly.
- There is no maximum dose for morphine.
- Morphine should be given with a nonopioid.
- Starting dose 10-12 mg q4h – DD at night.
- If pain relief not satisfactory, increase by 50% of starting dose.
- Morphine and other strong opioids exist to be given
- Use laxatives, antiemetic, SOS prescription.

Dyspnea



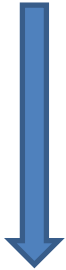
Dyspnea

- Breathlessness or dyspnea is the unpleasant awareness of difficulty in breathing
- Subjective
- Involves
 - perception of breathlessness
 - reaction of the patient
- Often intermittent - precipitated by exertion
- Associated with some degree of anxiety, which in turn will make the breathlessness worse (panic attack)

Dyspnea Cycle

INCREASED
RESPIRATORY RATE

BREATHLESSNESS



INCREASED ANXIETY



LACK OF UNDERSTANDING
+
FEAR OF DEATH



Dyspnea In Lung Cancer

Etiology

- Central causes

- Lymph nodes
- Growth itself

- Peripheral

- Volume loss
- Pleural effusion

- Associated factor

- COPD
- Cardiac failure
- Bronchiectasis
- ILD

Management

- **Correct the correctable**

- Infection

- COPD

- Pleural effusion

- **Non-drug treatment**

- Explore the anxiety of breathlessness

- Assure that in itself it is not damaging or life threatening

- Emphasise that patient will not die during an acute exacerbation

- Help the patient to adjust to loss of abilities & roles

Dyspnea Drug treatment

| | |
|-----------------|--|
| | |
| Bronchodilators | Salbutamol increases voluntary muscle strength |
| Morphine | Reduces the respiratory drive <ul style="list-style-type: none">■ Already on morphine for pain: Increase 30-50%■ Not on morphine 5-6mg q4-6hrs starting dose |
| Diazepam | <ul style="list-style-type: none">■ Anxious<ul style="list-style-type: none">■ 5-10mg stat & nocte; 2-5mg in the very elderly■ Reduce dose after several days if the patient becomes drowsy |
| Oxygen | <ul style="list-style-type: none">■ Should be discouraged unless dyspnea at rest<ul style="list-style-type: none">■ Several minutes before & after physical activity■ 4L/min via nasal prongs |

Cough



Cough

- Cough is the physiological reflex employed to expel particles & excess mucus from the trachea & main bronchus
- Irritation of other structures associated with the cough reflex:
 - pleura, pericardium, diaphragm
- Types of cough
 - Wet cough & patient able to cough effectively
 - Wet cough but patient too weak to cough effectively
 - Dry cough, i.e. nonproductive of sputum

Cough

➤ **Etiology**

- Cancer related
- Treatment related
- Comorbidity

Management

- **General symptomatic measures**
 - Avoid smoke, fumes
 - Atmospheric humidification
 - Nurse patient in position of least discomfort
- **Non drug measures**
 - Advise how to cough effectively
 - Postural drainage
 - Physiotherapy
- **Dry cough**
 - Soothing agents
 - Steam inhalation
 - Antitussives
- **With sputum**
 - Culture sensitivity guided antibiotics

Cough

➤ **Protussive**

- ❖ Topical mucolytics
 - Nebulised saline
 - Carbol
- ❖ Irritant mucolytics
 - Potassium iodide
- ❖ Chemical mucolytics
 - acetylcysteine

➤ **Antitussives**

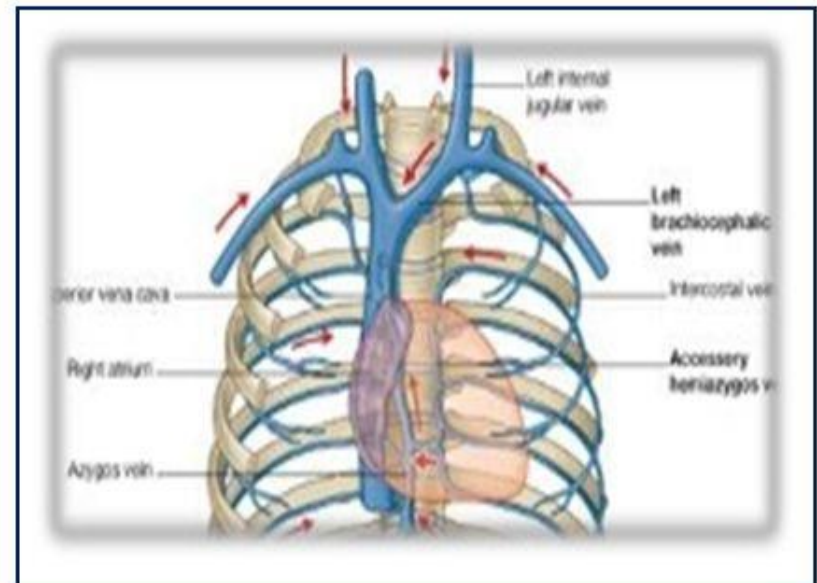
- ❖ Peripheral
 - Linctus
- ❖ Central
 - Opioids
- **Cough syrups**
 - Demulcent: Soothing agent
 - Reducing pharyngeal sensitivity

Superior Vena Cava Syndrome

SVC syndrome

Definition

- The ***clinical manifestation*** of obstruction of the superior vena cava, with severe reduction in venous return from the head, neck, and upper extremities



Pathophysiology

- SVC obstruction :
 - External compression
 - Invasion
 - Internal blockage: Thrombosis
- Causes: Lung cancer specific
 - Primary Lung lesion : Upper lobe, Central
 - LN metastasis : Mediastinal

SVCO - Symptoms

- Dyspnea
- Orthopnea
- Distension
- Facial/Neck swelling
- Dilated vessels
- Hoarseness of voice
- Headache
- Nasal congestion
- Hemoptysis
- Dizziness
- Syncope

Work Up

- Imaging : CECT Thorax , MRI , PET CT
- Biopsy and IHC : SCLC vs NSCLC vs others (lymphoma, germ cell tumor)
- Routine blood investigation
- ABG
- Serum Electrolytes

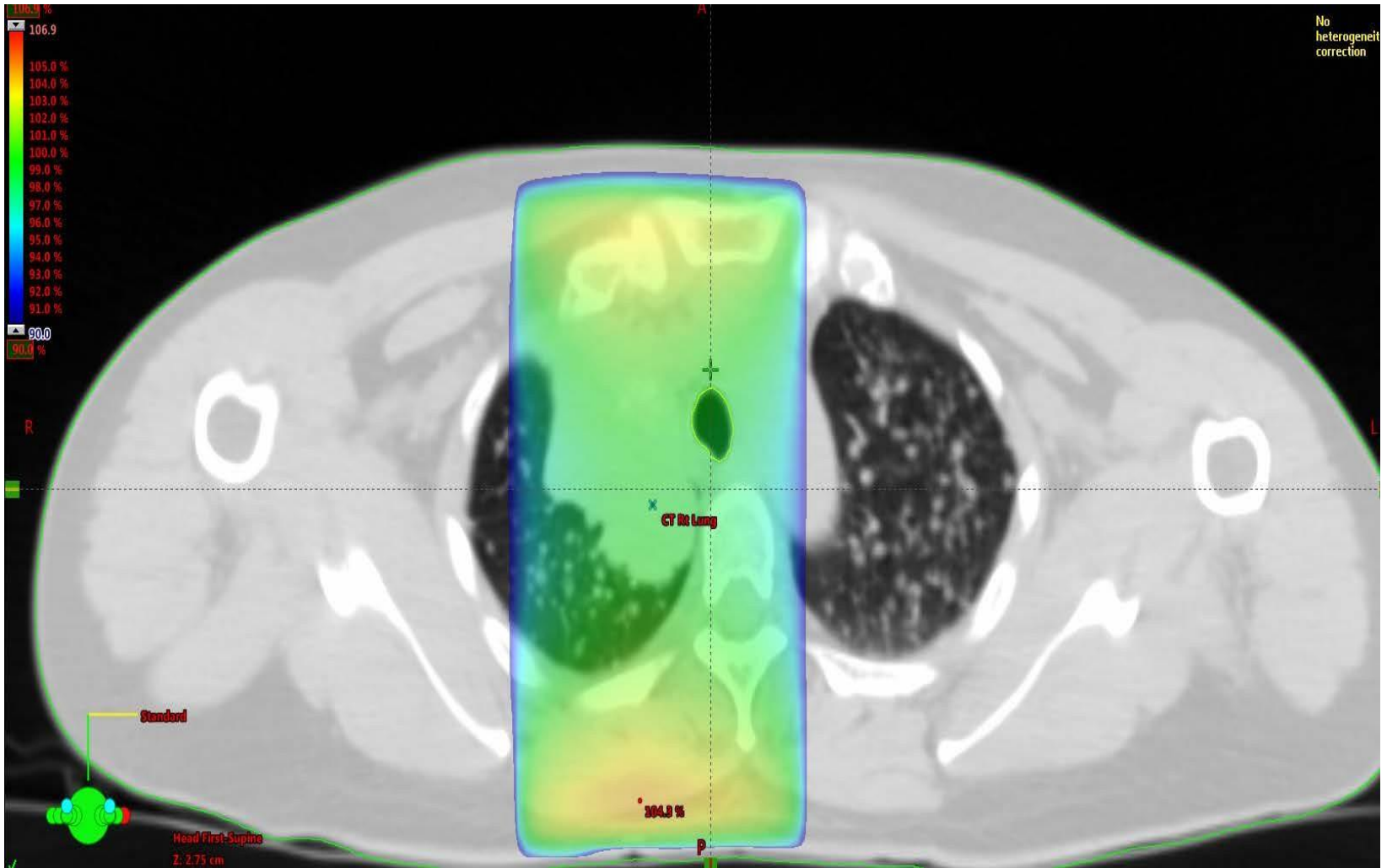
Prognostic Factors

- Dependent on
 - Histology : M/C with NSCLC, relatively more common with SCLC
 - Response to RT/Chemotherapy
- ❖ Small Cell lung cancer will shrink quickly (and often only temporarily)
- ❖ Non-Small lung cancer – relatively chemo and radioresistant

Treatment

- Secure airway, propped up position
- Steroids: Reducing tumor and airway edema
 - [8-24 mg dexamethasone loading f/b 4-6 mg q 6-8hr]
- Chemo – SCLC > NSCLC
 - Agent of choice
- Radiotherapy – NSCLC > SCLC
 - Dose, fractionation
- Interventional – Endovascular stent

SVCO Radiation plan



Summary

- Superior Vena Cava Obstruction
 - Symptoms are usually mild
 - Less of an emergency (but urgent tx needed)
 - Image and make diagnosis
 - +/- Anticoagulate, steroids and refer for definitive treatment

Thank You