Palliative care in Ca Lung & Esophagus

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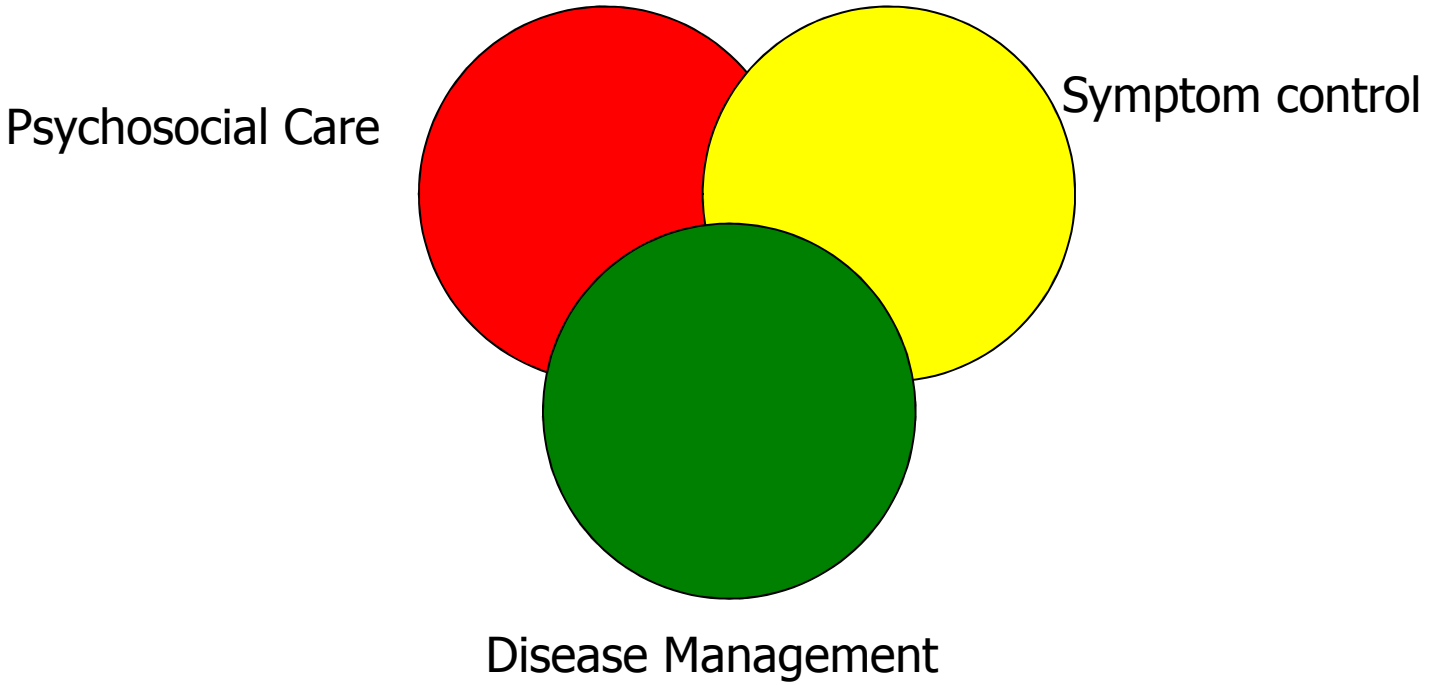
Palliative Care

- "Palliative" is derived from the Latin word Pallium , a cloak.
- In PC the symptoms are "cloaked" with treatments whose primary aim is to promote comfort.
- Palliative Care is "low tech and high touch" .
- When cure is not possible, as often it is not, the relief of suffering is the cardinal goal of medicine

Palliative Care

- Palliative Care is the active total care of patients with life-limiting disease and their families by a multiprofessional team, when the disease is no longer responsive to curative or life prolonging treatment.
- Focus of care is the relief and prevention of suffering and the quality of life.
- Control of pain, of other symptoms, and of psychological, social and spiritual problems is paramount.

Palliative Care



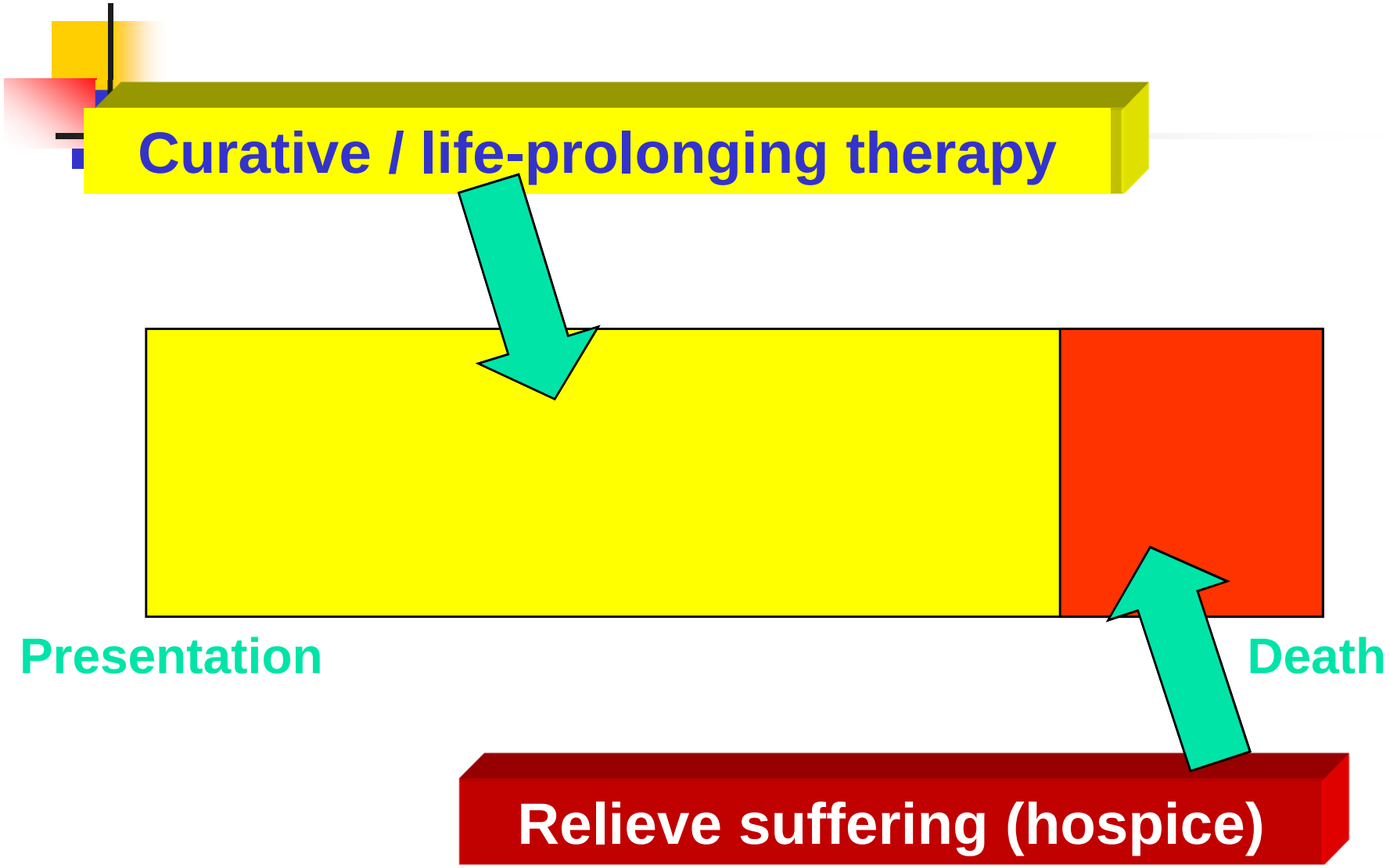
Palliative Care

- Affirms life and regards dying as a normal process.
- Neither hastens nor postpones death.
- Provides relief for patients from pain and other distressing symptoms.
- Integrates psychological, social and spiritual aspects of care so that patients may come to terms with their own death as fully and constructively as they can.
- Offers a support system to help patients live as actively and creatively as possible until death, thereby promoting autonomy, personal integrity and self esteem.
- Offers a support system to help families cope during the patient's illness and in bereavement.

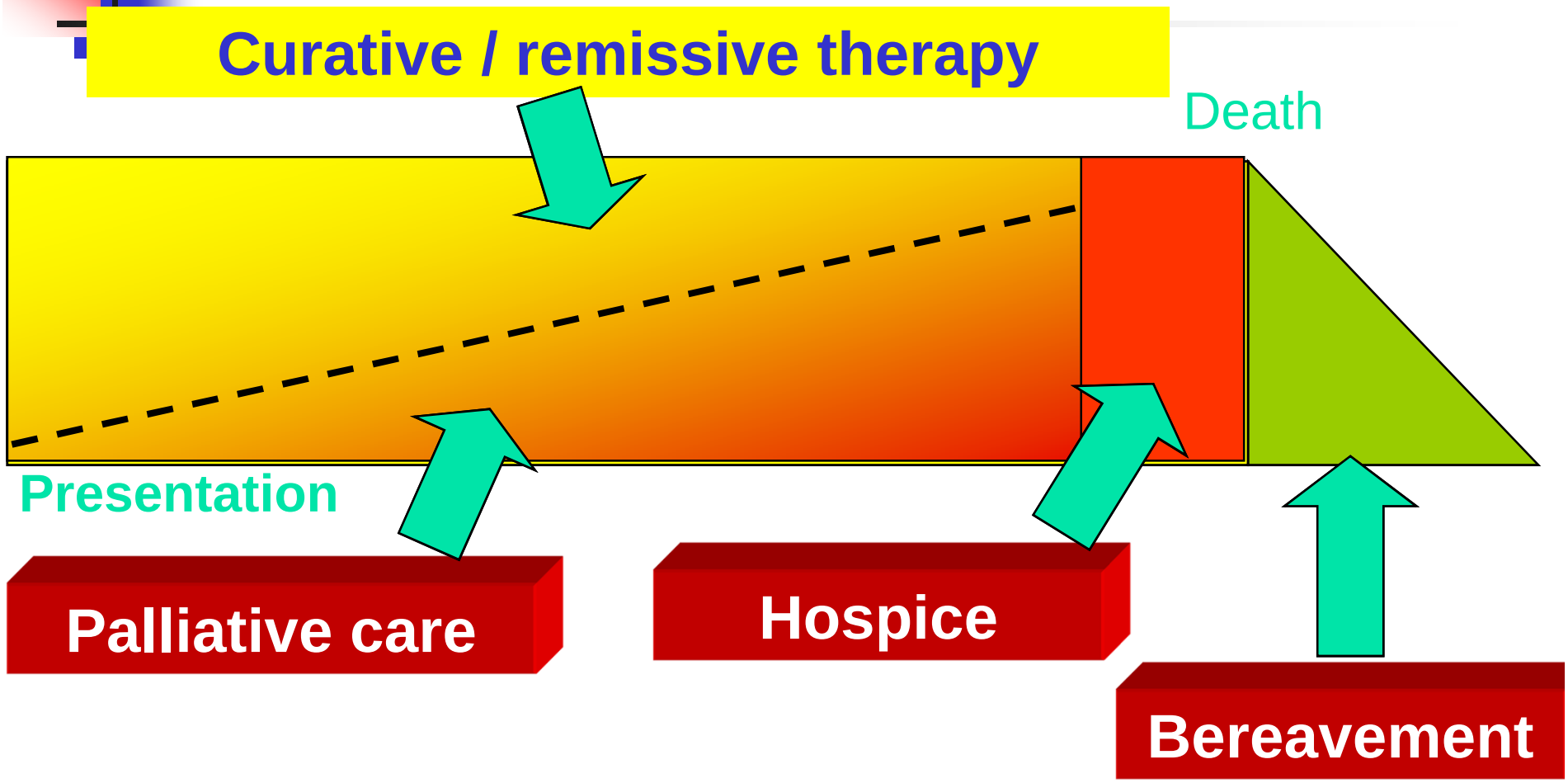
General aspects

- When should it start?
- Who can practice palliative care?
- What are the Challenges?
  - Acceptance
  - Realistic goals
  - Continuous adaptation
  - Supporting families
  - Dearth of research

A dichotomous intent



The interrelationship of therapies with curative and palliative intent



Lung cancer

Issues in lung cancer

- One third of all cancer-related deaths are due to lung cancer, which accounts for more deaths each year than breast, prostate, and colon cancer combined.
- 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 1year survival of only 10%
- In SCLC, around 80-90% will be seen in extended disease stage, median survival is around 1 year.

Disease management

- Lung Cancer Palliation:
  - Performance Scale
  - Comorbidities
  - Patients wish
- Palliative CCT
- Palliative RT
- BSC

Palliative CCT

- The use of chemotherapy in the treatment of metastatic NSCLC is palliative in nature. The benefits of therapy for stage IV NSCLC are to:
  - A) cause an objective tumor response;
  - B) decrease symptoms;
  - C) improve quality of life, and
  - D) improve survival.
- The risks associated with chemotherapy are:
  - toxicities associated with therapy;
  - treatment-related deaths;
  - increased costs and inconvenience of treatment, and
  - increased hospitalization time.

It's a 2 edged sword ,
To be used with proper judgement

What we expect?

Reference	Regimen	Patients[a]	Responses (%)	MS (mos)		1-yr Survival (%)		p Value
				CTX	BSC	CTX	BSC	
Rapp[30]	CAP	150	15	6.1	4.2	21	10	0.01
	PV		25	8.1		22		
Woods[31]	PV	201	28	6.8	4.3	NR	NR	NS
Buccheri[98]	MACC	175	8	8.0	5.0	27	17	0.01
Cellerino[99]	CEP/MEC	128	21	8.5	5.0	32	23	NS
Leung[100]	PE	119	21	12.4	8.7	53	30	0.05
Cartei[101]	PCM	102	25	8.5	4.0	39	12	0.0001
Cullen[102]	MIC	359	31	6.9	4.8	28	18	0.009
Perrone[103]	Vin	161	20	6.2	4.8	27	5	0.04
Ranson[104,105]	Pac	157	15	6.8	4.8	31	28	0.045

[a] Treated and control patients; CTX, chemotherapy; BSC, best supportive care; MS, median survival.
Chemotherapy regimens: CAP, cyclophosphamide, doxorubicin, cisplatin; PV, cisplatin, vindesine; MACC, methotrexate, doxorubicin, cyclophosphamide, CCNU; CEP, cyclophosphamide, epirubicin, cisplatin alternating with MEC, methotrexate, etoposide; CCNU, cisplatin, etoposide; PCM, cisplatin, cyclophosphamide, mitomycin C; MIC, mitomycin C, ifosfamide, cisplatin; Vin, vinorelbine; Pac, paclitaxel.
NR, not recorded; NS, not significant.

QOL issues

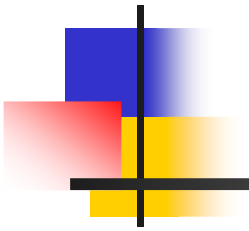
Reference	Treatment	Patients	OR (%)	MS (mos)	Symptomatic Improvement (%)				
					Cough	Hemoptysis	Dyspnea	Pain	Anorexia
MRC-LCWP[9]	Radiotherapy	369	30	6.4	60	84	61	78	67
Cullen[5]	MIC	272	56	9.8	70	92	46	77	58
Ellis[6]	MVP	120	32	5.0	66	NR	59	60	NR
Anderson[20]	Gemcitabine	332	20	8.1–9.2	44	63	26	32	29

OR, overall response; MS, median survival; NR, not recorded; MIC, mitomycin C, ifosfamide, cisplatin; MVP, mitomycin C, vinblastine, cisplatin.

Symptomatic improvement occurs in 61% of those who
benefit after the first cycle of chemotherapy and in 96% after the second.
Therefore if no improvement has occurred by that point it is unlikely to do so

Symptom control

- Symptom management can be encapsulated in the acronym "EEMMA"
- Evaluation: diagnosis of each symptom before treatment
  - based on probability & pattern recognition
- Explanation: to the patient before treatment
- Management: individualised treatment
  - Correct the correctable; use non-drug as well as drug treatment
- Monitoring: review of the impact of the treatment
- Attention to detail: no unwarranted assumptions
  - Ass-u-me means to make an ass of u and me



Pain

Causes of pain

- Pain is what the patient says hurts.
- Pain is caused by :-
  - The cancer – 85%
  - Anticancer treatment – 17 %
  - General illness & debility associated with disease – 9%
  - Concurrent disorders – 9%
- Note : In 15% of these patients none of their pain was caused by the cancer itself.

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 erosin.
  - Brachial plexus infiltration in Pancoast's tumour.
  - Radiculopathy or spinal cord compression in epidural deposits.
  - Post-thoracotomy syndrome

Pain

- Distant Metastasis :
  - Bone metastasis frequent cause of pain
  - Vertebral pedicle – unilateral nerve root pain.
  - Vertebral body collapse – root pain & paraplegia/tetraplagia.
  - Spinal cord compression – pain exacerbated by coughing, sneezing, straining etc.
  - Hepatomogaly – pain due to traction of hepatic ligaments.

Pain Assessment

- **Visual Analogue Scale :**

  Instruction : mark on the line below how strong your pain is

  no pain _____ worst possible pain

- **Numerical Rating Scale**

  Instruction : on a scale of 0-10, how strong is your pain ?

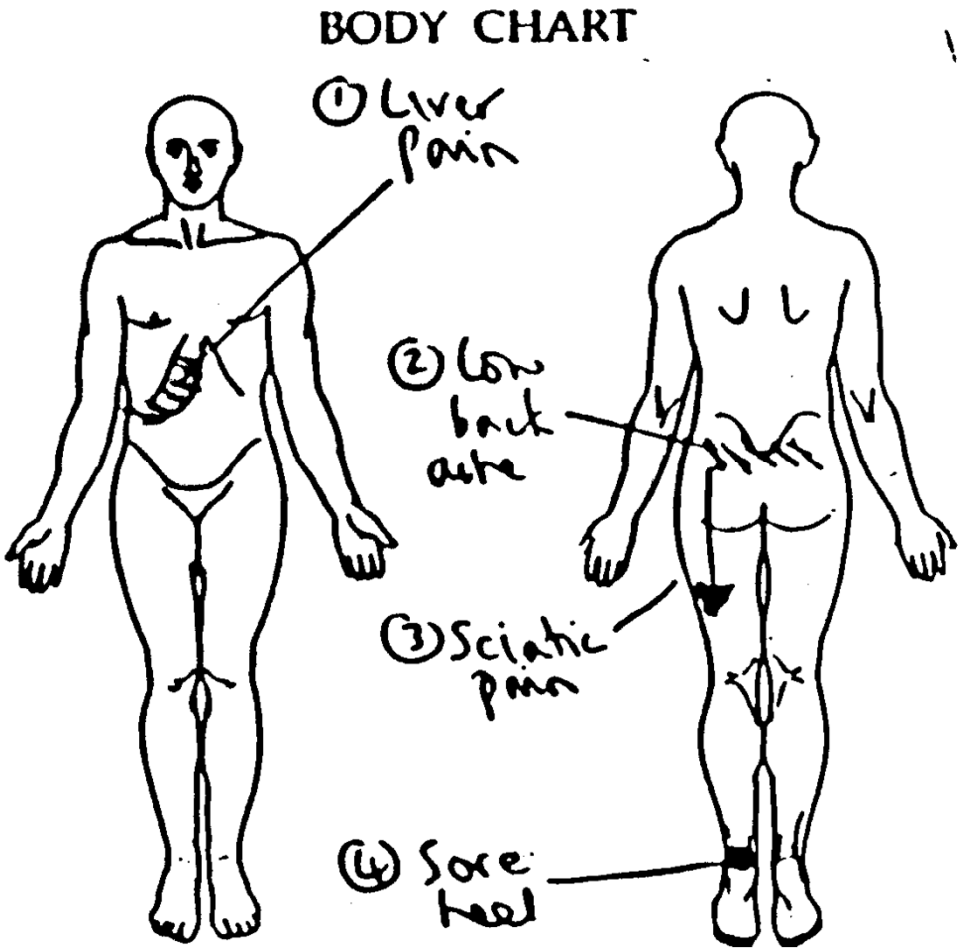
  no pain – 0 1 2 3 4 5 6 7 8 9 10 = worst pain possible

- **Verbal Descriptor Scale**

  Instruction : which word best describes your pain?

  None Mild Moderate Severe Excruciating

Pain assessment



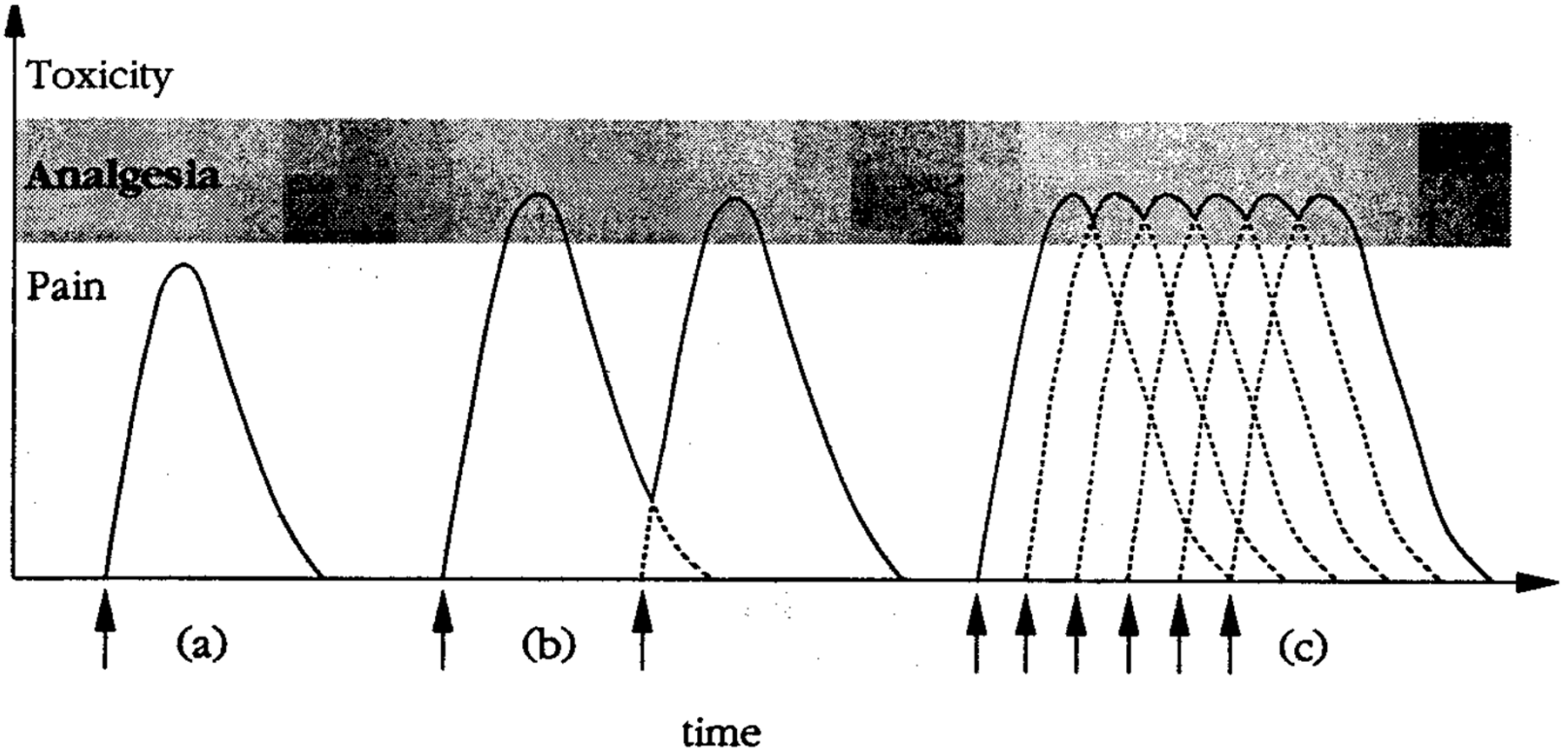
Pain management

- 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.

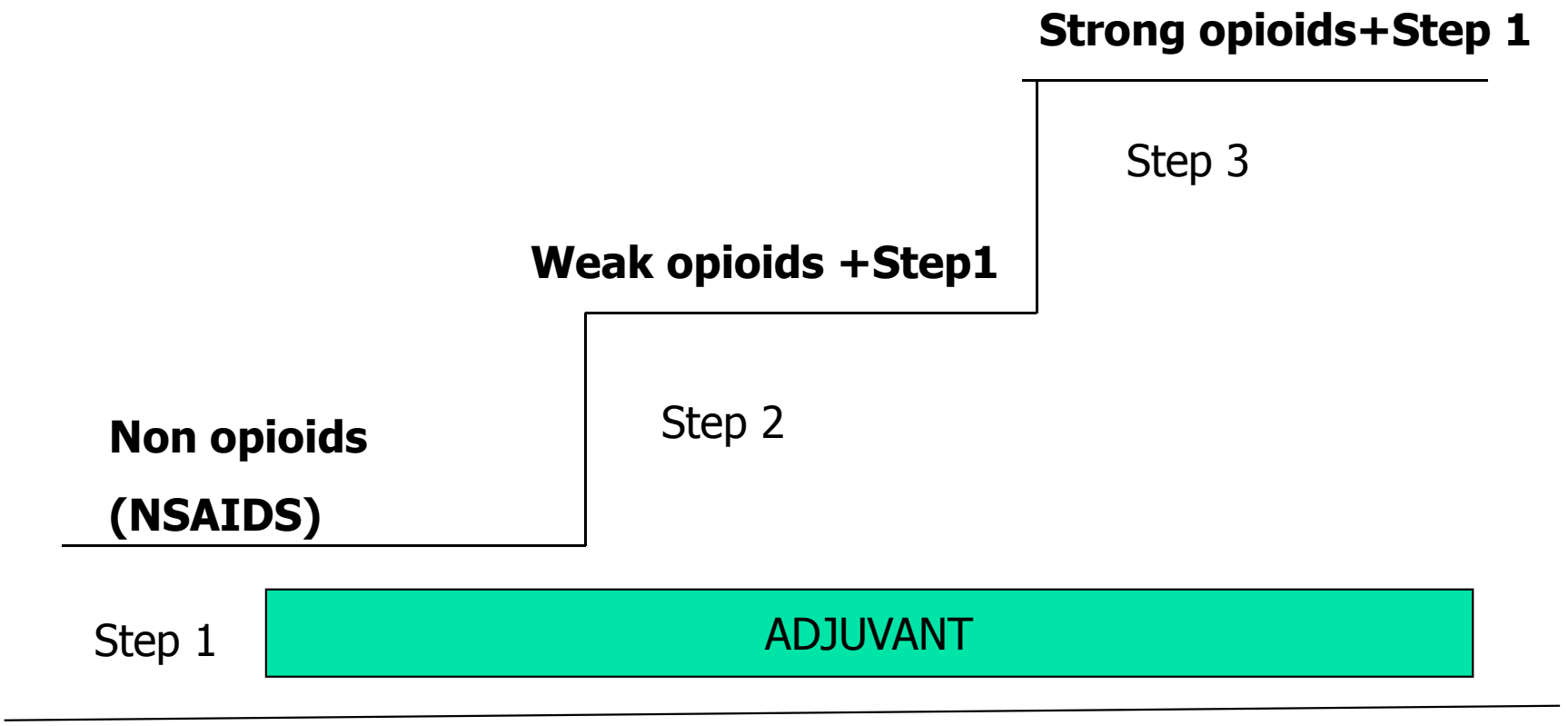
Treatment for pain

- The WHO Ladder :
  - Effective in relieving pain for 90% of cancer patients.
  - 75% of cancer patients who are terminally ill.
- The five essential concepts :
  - By the mouth.
  - By the clock.
  - By the ladder.
  - For the individual.
  - Supervision.

Drug scheduling



WHO Ladder


Strong opioids+Step 1
Step 3
Weak opioids +Step1
Step 2
Non opioids
(NSAIDS)
Step 1
ADJUVANT

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.
- Use laxatives, antiemetic, SOS prescription.

Strong opioids

- Morphine and other strong opioids exist to be given, not merely to be with held.

- Their use is dictated by therapeutic need, not by brevity of prognosis.

  - Morphine
  - Fentanyl
  - Buprenorphine

(X) Pentazocine

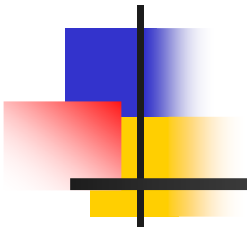
(X) Pethidine

Transdermal fentanyl

- Intolerable adverse effects of morphine.
- Four strengths : 25,50,75 & 100 micro gm./hr. for 3 days.
- Start on 25 micro gm./hr.
- Divide 24 hours oral morphine dose by 3 and choose nearest patch strength.
- From 4 h morphine – continue dose for 12 hr.
- Apply patch to dry, non-inflamed, non-irradiated, unshaven, hairless skin on arm or trunk.

Neuropathic pain

- Exploit WHO Ladder.
- 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
- Antiarryhythmic
  - Mexiletine – 50-300 mg TDS.



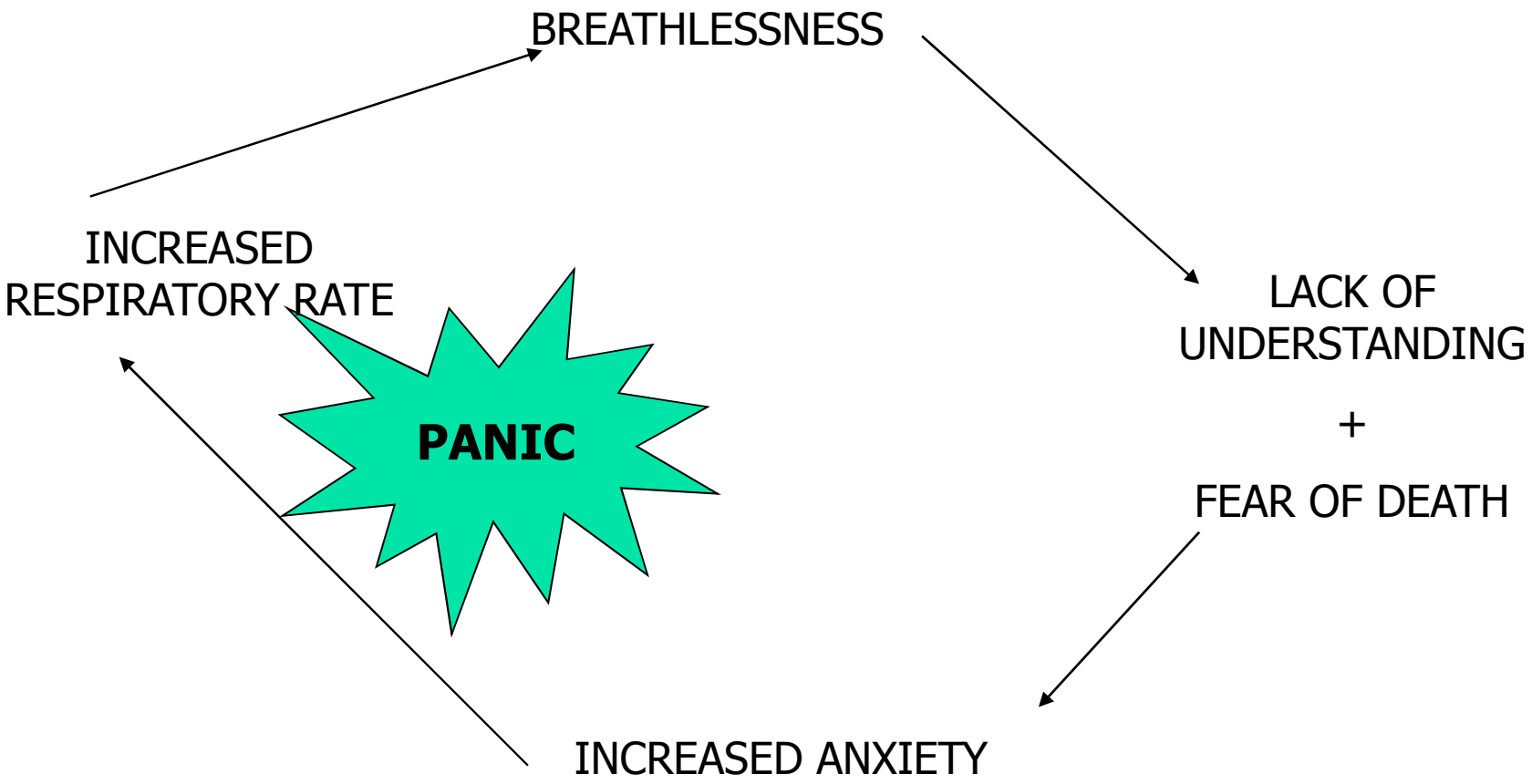
Dyspnea

Dyspnea

- Breathlessness or dyspnea is the unpleasant awareness of difficulty in breathing
- Dyspnea, like pain, is subjective and involves both the perception of breathlessness and the reaction of the patient to it.
- Often intermittent - precipitated by exertion, bending forward, just talking
- Restricts activity, loss of independence, frustration
- Dyspnea is always associated with some degree of anxiety, which in turn will make the breathlessness worse (panic attack)
    - Brought on by activity
    - During the attack the patient is convinced that he is going to die

Dyspnea

Breathlessness is a common trigger for panic



Dyspnea

- Causes
  - Central causes
    - Lymph nodes
    - Growth itself
  - Peripheral
    - Volume loss
    - Pleural effusion
  - Treatment related
  - Comorbidity

Dyspnea

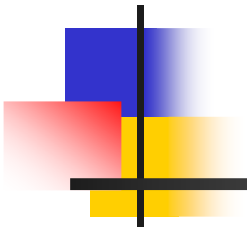
- Correct the correctable
  - Infection
  - COPD
  - Pleural effusion
- Non-drug treatment
  - Explore the anxiety of breathlessness
  - Assure that in itself it is not damaging or life threatening
  - Emphasise that patient will not die during an acute exacerbation
  - Help the patient to adjust to loss of abilities & roles

Dyspnea

- General measures
  - Activity pacing, i.e. eat, rest, wash, rest, dress, rest
  - Sit to do tasks, e.g. washing, shaving
  - Help with housework
  - Fan over face
  - Ensure cross ventilation
  - Calm environment
  - Avoid tight clothes
- Physiotherapy

Dyspnea

- Drug treatment
  - Bronchodilators may help & should be tried,
    - Salbutamol increases voluntary muscle strength
  - Morphine reduces the respiratory drive
    - If on morphine for pain increase the dose by 30-50%
    - If not on oral morphine 5-6mg q4-6hrs is a good starting dose
    - Nebulised morphine is no better than nebulised saline
  - Diazepam if the patient remains very anxious
    - 5-10mg stat & nocte; 2-5mg in the very elderly
    - Reduce dose after several days if the patient becomes drowsy
  - Oxygen should be discouraged unless dyspneic at rest
    - 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

- Causes
  - Cancer related
  - Treatment related
  - Comorbidity
- Management depends on the cause & therapeutic goal
  - Wet cough, pt too weak to cough effectively → antitussive
- General symptomatic measures
  - avoid smoke, fumes
  - atmospheric humidification
  - nurse patient in position of least discomfort

Cough

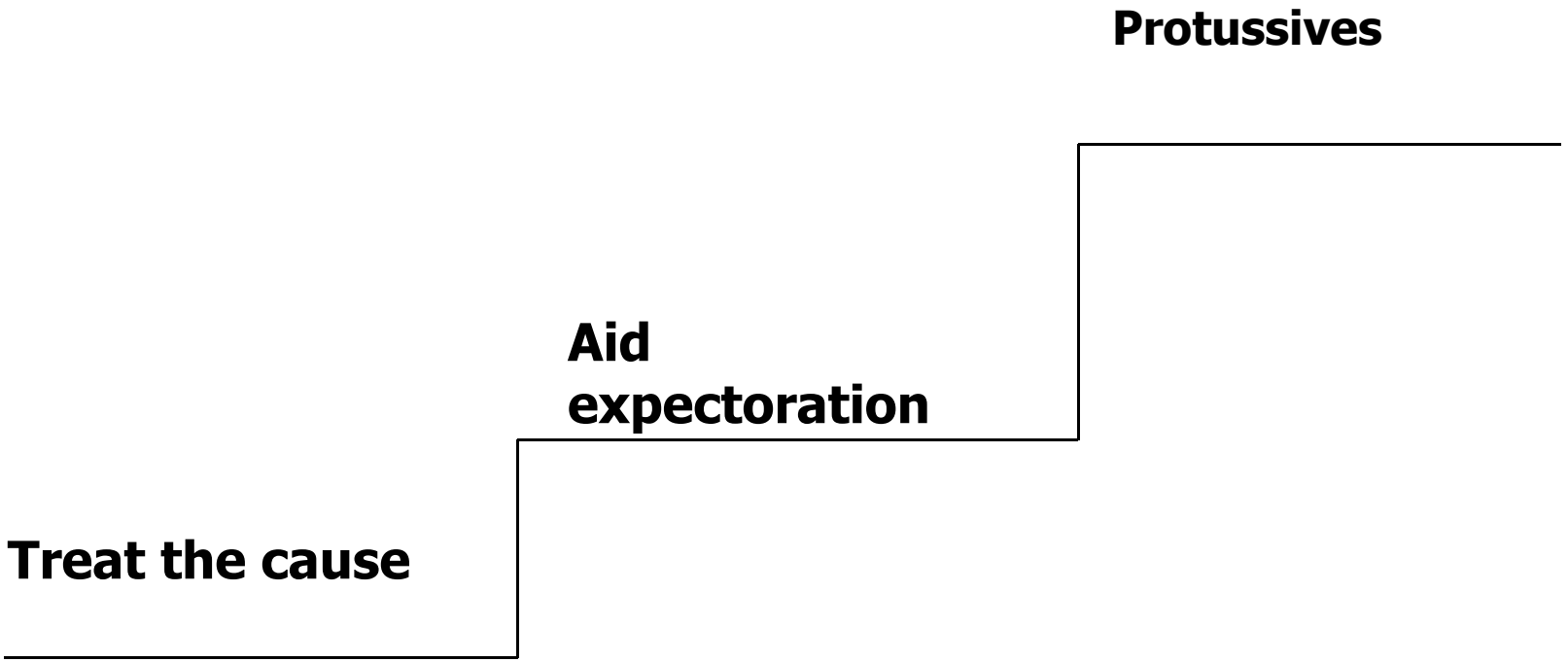
- Non drug measures
  - Advise how to cough effectively
  - Postural drainage
  - Physiotherapy
- Dry cough
  - Soothing agents
  - Steam inhalation
  - Antitussives
    - Weak opioids
- With sputum
  - Culture sensitivity guided antibiotics

Correct the correctable
IMP- never use cough suppressants in infections

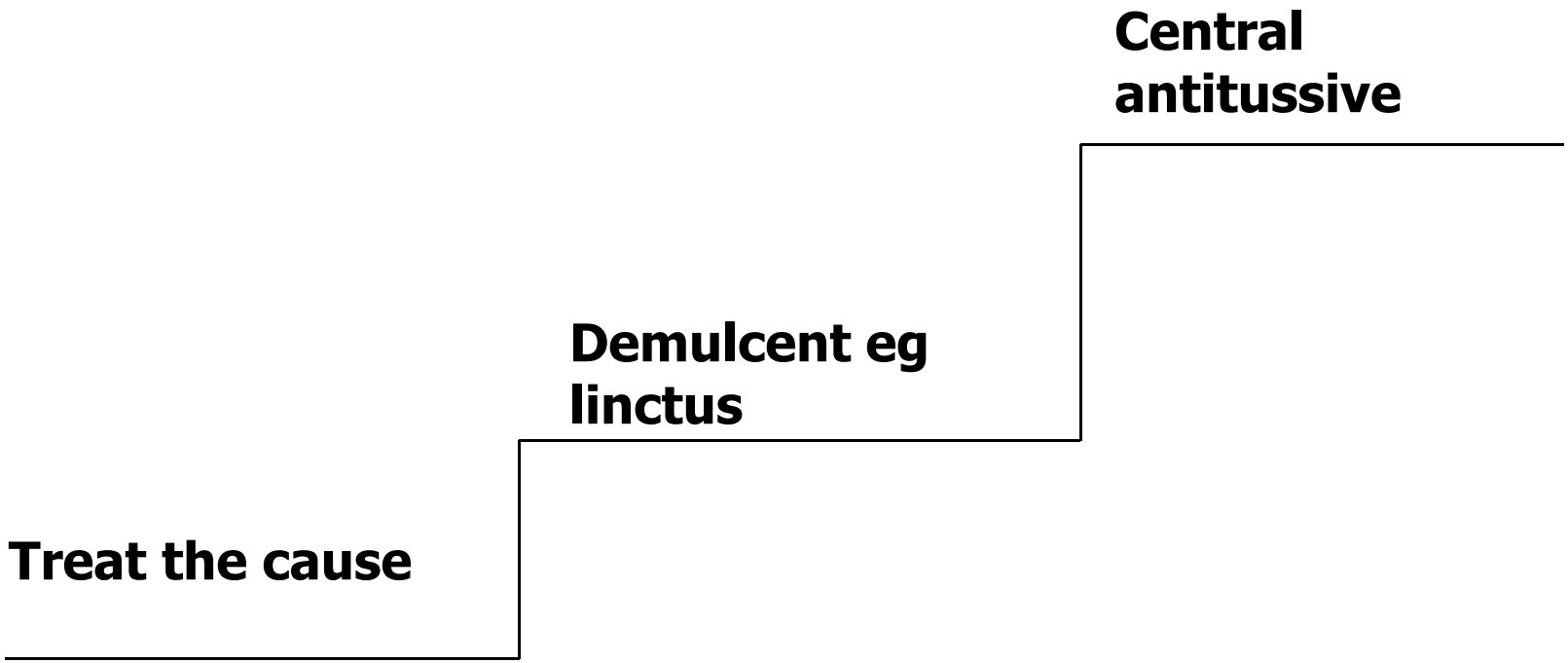
Cough

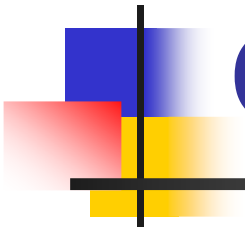
- Protussive
  - Topical mucolytics
    - Nebulised saline
    - Carbol
  - Irritant mucolytics
    - Potassium iodide
  - Chemical mucolytics
    - acetylcysteine
- Antitussives
  - Peripheral
    - Linctus
  - Central
    - Opioids
- Cough syrups
  - Demulcent (soothing) vehicle is most important
    - It acts by reducing pharyngeal sensitivity

Wet cough



Dry cough





Ca Esophagus

Issues in ca esophagus

- It has been estimated that for every 100 patients presenting with esophageal cancer, 50 will be considered inoperable. Among the 50 who are considered operative candidates, 30 will be potentially resectable.
- Ultimately, only 18 of these patients will undergo a potentially curative resection
- 5-year survivals ranging between 0% -10%

Most of the patients are treated with palliative intention

Many of those (Advanced stage) treated with radical intention will have Dysphagia either due to recurrence or due to stricture

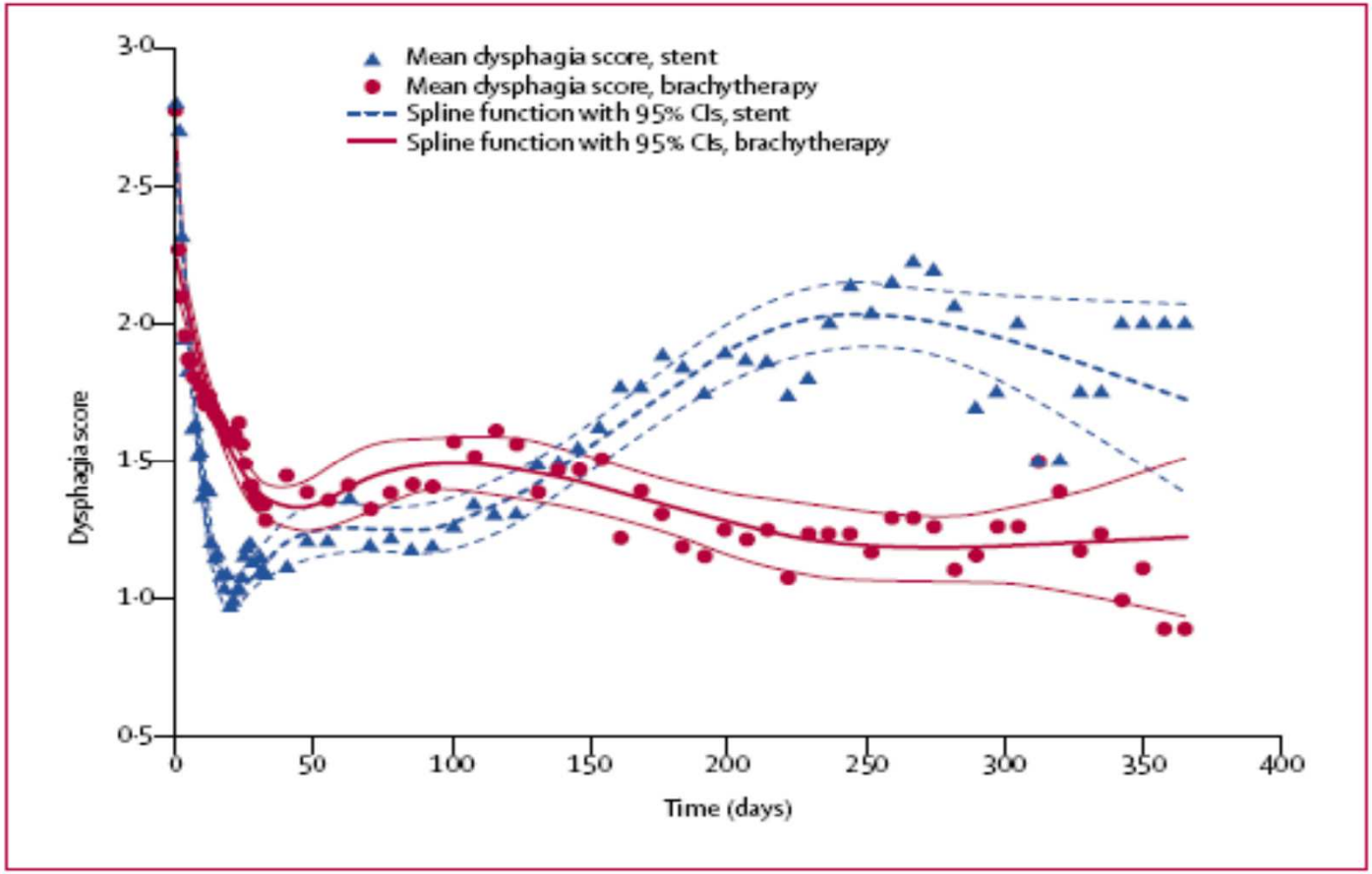
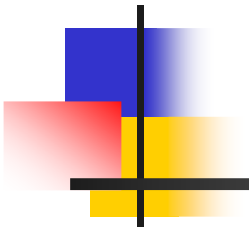


Figure 2: Dysphagia scores

	Brachytherapy (n=101)	Stent placement (n=108)	p*
Total complications†	**21 (21%)**	**36 (33%)**	**0·02**
Major complications†	**13 (13%)**	**27 (25%)**	**0·02**
≤7 days			
Perforation	1	2	..
Fever	1	1	..
Severe pain	0	2	..
(Aspiration) pneumonia	1	1	..
>7 days			
Perforation	1	0	..
Fever	1	0	..
Haemorrhage	5	14	..
Fistula formation	3	3	..
Severe pain	1	1	..
Pressure necrosis	0	3	..
Pre-stenotic dilation	0	1	..
Minor complications†	**8 (8%)**	**16 (15%)**	**0·08**
Mild retrosternal pain	5	9	..
Gastro-oesophageal reflux	1	5	..
Radiation oesophagitis	1	0	..
Candida or infestation	1	2	..
Persistent/recurrent dysphagia†	**43 (43%)**	**43 (40%)**	**0·81**
Tumour persistence	18	0	..
Tumour regrowth	26	16	..
Stent migration	3‡	18	..
Food-bolus obstruction	5	16	..
Fracture of stent	0	2	..
Oblique-position stent	1‡	0	..

*Log-rank test for time to first complication. †More than one complication arose in some patients. ‡Some patients randomly assigned to brachytherapy later received a stent for various reasons.

Table 2: Complications and persistent or recurrent dysphagia, after brachytherapy and stent placement

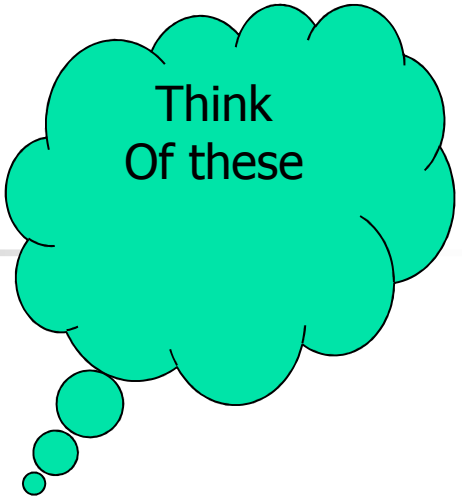


Dysphagia

Dysphagia

- Dysphagia is difficulty in transferring liquids or solids from the mouth to the stomach
- Causes
  - Cancer related
  - Treatment related
  - Comorbidity

Dysphagia

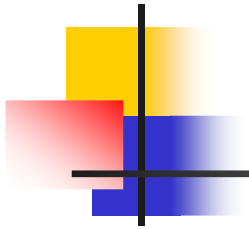


- **Evaluation**
  - Extent of dysphagia
  - Factors which worsen dysphagia
    - Old age
    - Lack of time to eat
    - Missing teeth
    - Poor
    - Environment (Uninteresting)
    - Tepid food
    - Insufficient staff to help
    - Drowsiness
    - Withdrawal (depression, fear)
    - Dry mouth (anxiety)

Management

- Is a complete obstruction present?
  - Parenteral nutrition is rarely appropriate in the last weeks or days of a person's life.
  - Endoscopic dilatation of the obstruction relieves dysphagia in over half of patients but, in malignant obstructions, improvement generally lasts less than 2 weeks
  - Endoscopic dilatation is therefore used mostly as a short-term measure before radiation or intubation
  - Endoscopic lasers, endoscopic photodynamic therapy are other options

In these patients with treatment median survival is 4-6 months



- Is mucosal infection or a dry mouth present?
  - Look for candidasis, herpes (these can contribute too)
  - Look at the drugs (anticholinergic drugs, opioids)
- Is pain affecting swallowing?
- Is anti-cancer treatment indicated? (Intraluminal therapy)
- Is aspiration causing troublesome symptoms?

Positional changes

Rules for feeding

Posture

Make sure that you are sitting comfortably, head upright

Relax

Ensure you are in a calm frame of mind before eating or drinking

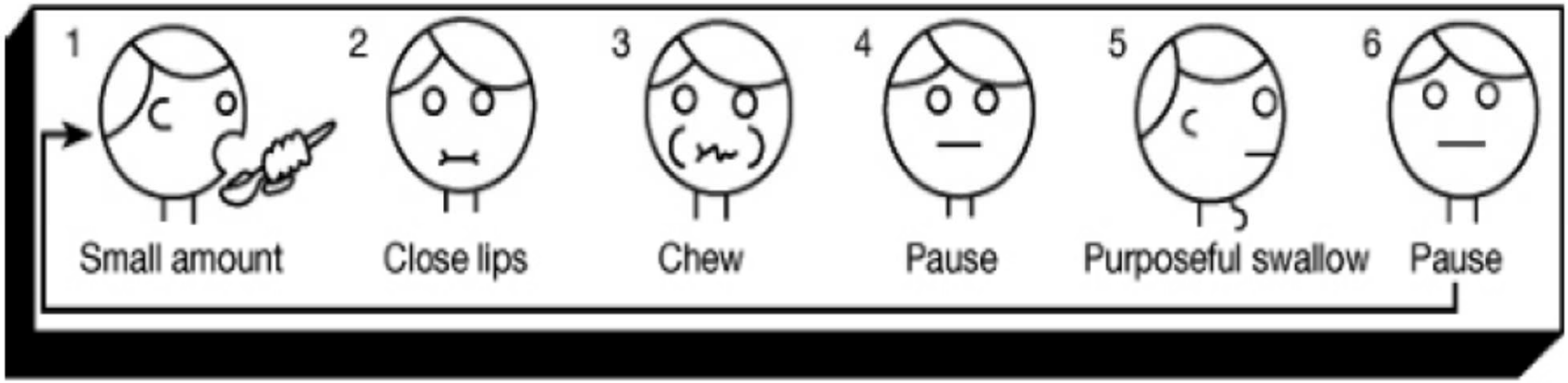
Do not talk

Be quiet before and while you eat and drink

Yawn

Before the meal, if your throat feels tight, try to yawn to ease the constriction

Feeding routine



Textures

It is worthwhile trying to avoid mixing fluids and solids

Take time

Do not hurry. Always stop eating if you feel tired. Have small regular meals, not one large one

At end

After the meal, drink small amount of water to swill your mouth out, also cough to make sure throat is clear

Sit

Remain sitting for at least half an hour after eating or drinking

Maintenance of feeding

- Endo-oesophageal intubation
  - Celestin tube
  - Expandable stent (20-30 times more expensive
- Transnasal Ryle's tube
- Feeding gastrostomy

- Indication
  - Dysphagia for semisolids & liquidized food
  - Acceptable quality of life for patient

Psycosocial care

- Important to involve the patient in decision making
- Never lie
- Don’t give false hope
- Explain to the family
- Tell them in advance what is likely to happen
  - Stop syndromes like he needs to eat to live
  - Blood transfusion might help
  - If not taking adequately then glucose drips
- Identify and address spiritual issues

The last 48 hrs

- Terminal phase
  - Don’t predict death
  - Sign and symptoms of death approaching
  - Participation of patient, family & friends
    - Seek patient’s wish about treatment when they are conscious
    - Where to die?
    - Relatives to decide how the body should be dealt with

Terminal breathlessness

- Patient often fear of suffocating to death. A positive approach is required
  - No patient should die with distressing breathlessness
  - Failure to relieve it is a failure to utelise drug treatment correctly
  - Give an opioid with sedative-anxiolytic eg morphine with midazolam
  - If pt becomes agitated or confused add haloperidol
- Explain aim of treatment and the gravity of the situation to the relatives

Death rattle

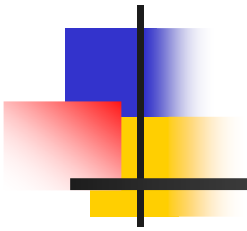
- Rattling noise produced by secretions in the hypopharynx oscillating in time with inspiration and expiration
- Seen in weak and close to death patients
- 30-50% of cases
- Distressing for the relatives

- Management
  - Non drug treatment
    - Explanation
    - Position (semi prone)
  - Drug treatment
    - Antimuscarinic drugs
    - Hyoscine hydrobromide additionally provides sedation and antiemesis(0.4-0.6 mg SC)

Reassure relatives that the noisy breathing is not causing any added suffering for the patient

Conclusion

- Palliative care is an attempt to re-establish the traditional role of the doctors and nurses.
  - to cure sometimes.
  - to relieve often.
  - to comfort always.
- Two essential qualities are a must :-
  - Humility - Willingness to listen to others
    - Avoid arrogance.
  - Perseverance - Commitment to meet the trust of patients and their families.



Thank you