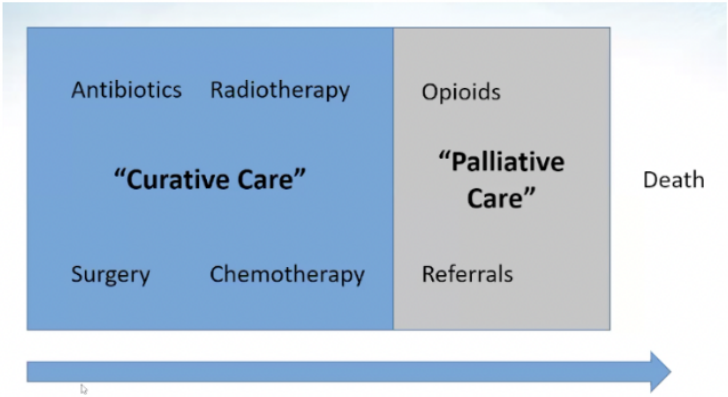
Ep 21 EOL Care - Dr Benjamin Hooi

Prognostication of "Gen Med" Patients? 2:10

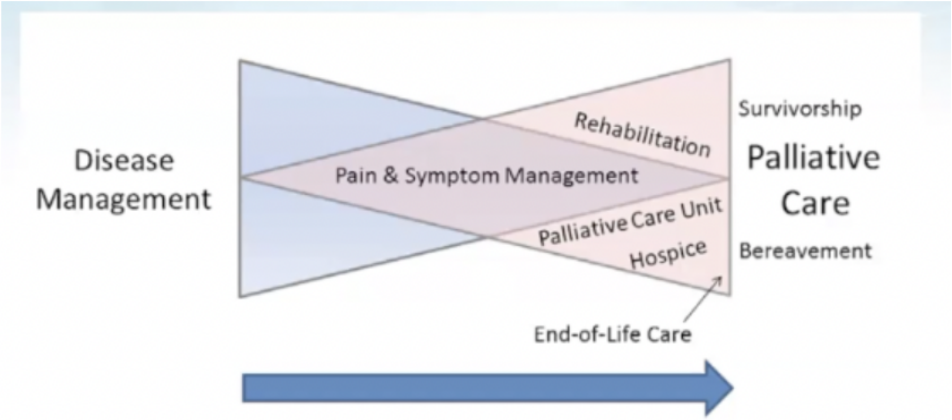
- Much uncertainty for predictable prognostication
- Surprise question: Would you surprise if this patient were to pass away in the next 1 year? – Trigger advance care planning
- A different kind of surprise question – Would you be surprised if the patient passes away this admission

What should we do when we aren't certain of the trajectory of the patient? 5:15

- Parallel planning: Curative and palliative care should be carried out concurrently, with alignment of patient's goals of care
- Old Model – An "either or" approach; problem that patients may deteriorate and fail to get appropriate palliative care

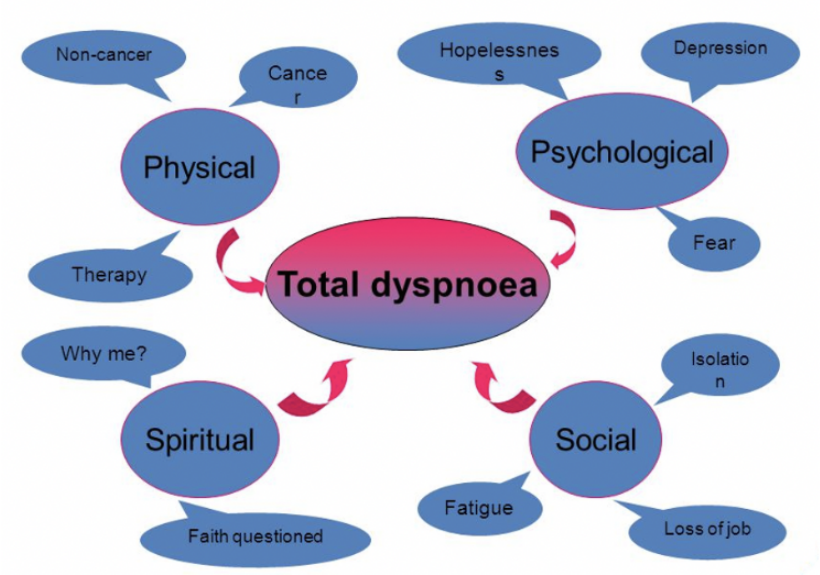


- New Model: The Bow Tie Palliative Care Enhanced Model



  - An overlapping continuum with a gradual shift in emphasis depending on the patient's disease trajectory
  - This model takes into account that some patients do turn around

How should we assess for dyspnea? 12:45



- In the general medicine population, breathlessness is often the commonest distressing symptom in EOL
- Beyond the physical discomfort, there is often a significant element of fear and anxiety
- Speak to breathless patients slowly and gently
- Concept of total dyspnea:
- Medical assessment: Orthopnea/PND, Associated symptoms (cough, wheeze)
- Impact on function:
    - Some patients may intentionally limit their activity because of breathlessness, and hence in their present states may not feel breathless
    - Patients may struggle with showering as breath-holding becomes a challenge
- Examination
    - SOB is not all about the respiratory rate – can be breathing fast but be comfortable, and can be breathing slowly but effortfully; as such, respiratory rate should not be the sole trigger for serving or withholding opioids
    - Important to document these descriptive features for future comparison of assessment
- Documentation of assessment in EOL patients

From this…	To this…
• Uncommunicative	• Uncommunicative
• H S1S2	• Tachypnoeic, RR 32/min
• L bilateral crepitations	• Significant usage of accessory muscles
• A SNT	• Bilateral crepitations, no wheeze
• Calves supple	• No rattle/secretions
• Mild pedal oedema	

How do managing dyspnea? 21:07

- Non-pharmacological
  - Positioning: Leaning forward position (even in bedbound patients)
  - Fan/fresh air – Mediation of trigeminal receptors
  - Oxygen
- Pharmacological
  - Treat underlying cause: Bronchodilate if wheezing, diuretics if overload
  - Symptomatic medications
    - § Opioids – *Dosing for opioid naïve patients*
      - SC Morphine 1mg 4H PRN
      - SC Morphine 10-20mcg 2H PRN – typically given if there is renal (eGFR < 30) or liver impairment (cirrhosis, extensive hepatic metastases) because doses may accumulate with repeated dosing
      - *Document: "For SOB. Inform Dr if RR < 12" – rather than "administer if RR > XX and hold off if RR <YY" because RR isn't the sole indicator of SOB, and we don't want opioids to be held off inappropriately*
    - § Benzodiazepines (especially if there is a component of anxiety)
- Opioids and Respiratory Depression: Literature actually suggests relatively low rates of respiratory depression in careful opioid administration

What should we do if patients are not responding to an initial dose of opioids? 30:09

- **Always assess the patient shortly after the administration of the opioid - ~ 30 minutes later with SC administration**
- When starting at low doses, the dose level may not be sufficient
- While morphine is often ordered as 4H PRN, this does not mean that a next dose of morphine can only be given 4 hours later
- Morphine titration in a breathless patient
  - SC 1mg morphine given > reassess in 20-30 mins > if still breathless, can give another dose of morphine
  - If breathlessness assessed to be ongoing, can consider converting to an infusion
    - § Determine effective dose – e.g. 2 x 1mg boluses given = 2 mg
    - § Divide effective dose by 4 (because anticipated duration of action 4H); *for fentanyl divide dose by 2*
    - § 2mg / 4 = 0.5mg/hr
    - § Max cap of ~ 1mg/hr morphine infusion and 20mcg/hr fentanyl infusion as an initiation dose
  - If SOB anticipated to be intermittent (e.g. aspiration), PRN dosing may be suitable
- Patients with severe metabolic acidosis may not respond that well to opioids

How do we assess for and manage terminal delirium? 40:33

- Assess for cause of delirium; identify easily reversible conditions like constipation and urinary retention
- Non-Pharmacological

- Reassurance
- Familiar faces at the bedside
- Re-orientation
- Avoiding restraints

· Pharmacological
- First Line: SC Haloperidol 1mg 6H PRN
- Second Line: SC Midazolam 1mg 6H PRN (may cause paradoxical agitation)

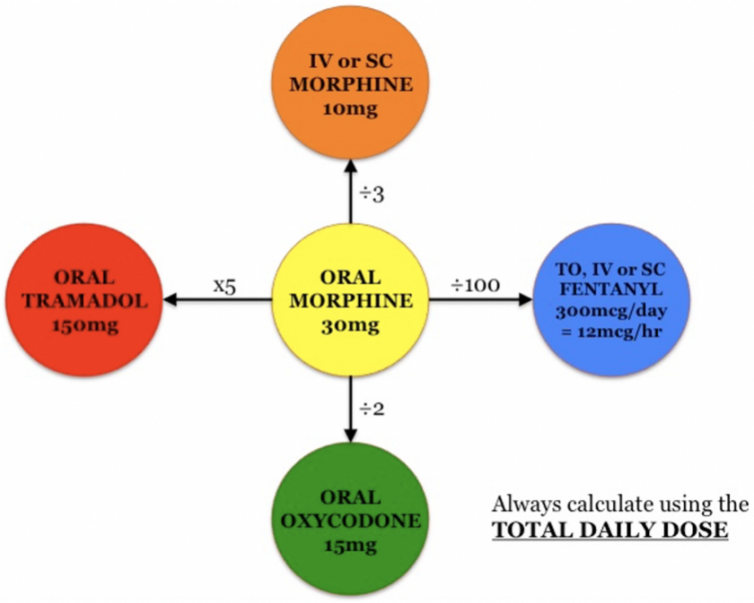
How do we manage noisy breathing and secretions? 43:15

· Non-Pharmacological
- Re-positioning
- Reducing volume of feeds
- GENTLE suctioning
- Reassurance – noisy breathing is often more troubling to family and observers than to the patients themselves

· Pharmacological
- Anti-cholinergics (Hyoscine) – start at SC Buscopan 20mg 6H PRN (higher than usual 10mg dose used for abdominal cramps)

How do we convert between different opioid agents? 46:28

· Opioid conversion chart



· https://www.duke-nus.edu.sg/lcpc/resources/sg-pall-ebook-disclaimer/sg-pall-ebook - Contains an opioid calculator

· Converting 50mg TDS of tramadaol to SC morphine
- Total daily dose 150mg total
- Convert to PO morphine (150mg/5) = 30mg morphine totally daily dose
- Convert to SC fentanyl (30mg/100) = 300mcg total daily dose

    - Convert to infusion (300mcg/24) = 12.5mcg/hour
- Fentanyl Patch
    - Lowest dose: 12mcg/hour infusion (some people use an off label use of cutting into half)
    - Takes 12 hours to work because it needs to make a SC depot (hence will need to overlap for these 12 hours when starting a patch)

What are the resources available? 52:20

- SG Pall Ebook
- For NUH clinicians: Intranet, GAP (Goals and Preferences) tool, Advance Care Planning (Preferred Plan of Care)

What are the community services available for our patients? 55:13

- Palliative Day Care Services
- Palliative Home Care Services
- Inpatient Hospice Services
- Hospital Palliative Care Services
- Subacute Palliative Care Services
- Caregiver Services

From SG Pall Ebook

NUH Inpatient EOL Pathway 56:15

- Recent initiative to improve EOL care in general medicine patients
- Focuses on key aspects that should be assessed, discussed and documented