

# Managing End of Life Symptoms

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# Content

- Introduction
- Recognising the dying patient
- General management
- Common symptoms management

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- General management
- Common symptoms management
  - weakness/fatigue, pain, nausea and vomiting, seizure, dyspnea, terminal delirium, “death” rattle

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# End of life

- Comprises hours, days, weeks or months before a person dies
- In UK, it encompasses last year of life

# For this talk, our focus...

- Last hours and days of life

# Introduction

- Important to recognise the terminal phase of illness and accurate prognostication regarding death
- It involves identifying the actively dying patient
- Difficult yet important to recognise

# Importance

- Allows for realistic expectations
- Provides opportunity to plan for care at life's end
- Avoid poor symptom management
- Prevent suboptimal psychosocial and spiritual care for dying patients and their families



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# Recognising Dying Patient

- Never an easy task
- Tendency to be over-optimistic in estimates of patient survival
- The prognostic estimates communicated to patients may be even more optimistic
- Many patients and caregivers may avoid accepting and processing bad news

## Identifying the actively dying patient

Profound progressive weakness
Bed-bound state
Sleeping much of the time
Indifference to food and fluids
Difficulty swallowing
Disorientation to time, with increasingly short attention span
Low or lower blood pressure not related to hypovolemia
Urinary incontinence or retention caused by weakness
Oliguria
Loss of ability to close eyes
Hallucinations involving previously deceased important individuals
References to going home or similar themes
Changes in respiratory rate and pattern (Cheyne-Stokes breathing, apneas)
Noisy breathing, pooling of airway secretions
Mottling and cooling of the skin due to vasomotor instability with venous pooling, particularly tibial
Dropping blood pressure with rising, weak pulse
Mental status changes (delirium, restlessness, agitation, coma)

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# Common signs and symptoms

- Becoming bedbound
- Change in the level of consciousness
- Indifference to food and fluids
- Inability to take oral medications

# Other signs and symptoms

- Hallucinations involving previously deceased important person
- References to going home or similar themes
- Mottling and cooling of the skin due to vasomotor instability with venous pooling, particularly tibial
- Mental status changes (delirium, restlessness, agitation, coma)

# Certain signs are particularly suggestive of death within days

- Alterations in breathing
- Decreased urine output
- Nonreactive pupils
- Decreased response to verbal or visual stimuli
- Inability to close eyelids
- Drooping of the nasolabial folds

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# GENERAL MANAGEMENT

- End of life management poses unique challenge to the physician
- Assessing end-of-life expectations and determining goals of care with the patient and family is critical
- Be open about any change in the preference and goals of care



# GENERAL MANAGEMENT

- Focus on comfort orientated goals
- Review current medications and therapies
- Stop unnecessary medications/procedures/monitoring
- Connect with family
- Switch essential medications to non oral route

# Non oral routes of medication administration

- **Many non-oral routes** for medication administration
- Differ in their availability across care settings
- Different level of acceptance by the patient and family
- Limited to administration of certain drugs
- In general, the least invasive route of administration should be chosen

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# COMMON SYMPTOMS MANAGEMENT

- Weakness/Fatigue
- Pain
- Nausea and vomiting
- Seizure
- Dyspnea
- Terminal delirium
- “Death” rattle

# WEAKNESS/FATIGUE

Due to

- increasing overall burden of disease
- diminishing functional reserved
  
- Decreased tolerance for physical activity

Provide suggestions on practical approaches to address the changes

- Creating space for care on an accessible level
- Providing a portable toilet (commode), urinal, or bedpan
- Assistive equipment may be needed
- Prevent falls with bed confinement

# WEAKNESS/FATIGUE

- Prevent pressure injury
- Advice on patient's personal hygiene such as bathing or help with toileting
- Recognizing that these tasks may be socially uncomfortable

# PAIN

- Total Pain concept
- Holistic assessment and comprehensive management is needed
- Good pain management has significant impact on physical, psychological, social, and spiritual well-being



# PAIN

- Many patients suffer from untreated pain at the end of life
- It is the right of the patient to get treated
- Moral duty and legal obligation of the clinician

# PAIN

- Know how the patients prioritize pain control and alertness
- Increasingly getting sedated might be a concern
- Taking social-cultural factors into consideration

# PAIN

- Opioids are the mainstay of treating pain
- Short-acting oral/sublingual opioid is used
- Sustained release opioids are generally stopped in the dying phase, as they may accumulate excessively
- Some patients may become increasingly sedated as they enter the dying process and no longer need these medications

# NAUSEA AND VOMITING

- A common distressing symptoms in advanced cancer
- Affecting up to 70% of patients in the last few months of life
- Identify the underlying cause
- Causes: opioid-related, medication-related, gastroparesis, malignant bowel obstruction
- Managed based on patient characteristics and underlying illness

# NAUSEA AND VOMITING

- For patients with opioid-related nausea, opioid rotation is an appropriate choice
- For patients with gastroparesis, metoclopramide is a reasonable first choice
- For patients with malignant bowel obstruction, symptomatic improvement may be seen with glucocorticoids, octreotide, and anticholinergics

# NAUSEA AND VOMITING

- For nausea without an identifiable cause, offer haloperidol
- Lower dose for elderly patient
- Dosage recommendation: 1 mg orally or 0.5 mg SC/IV every six to eight hours as needed

# SEIZURE

- Occasionally occur as a new symptom at the end of life
  - Patients with brain metastases or other neurologic injury that results in a new seizure focus
- For those who are imminently dying, **parenteral lorazepam** can be used to control seizures and to prevent them over the next hours or days
- Dosage recommendation: 1 mg SC/IV every four to six hours as needed

# SEIZURE

- For patients with a known seizure disorder, effective anticonvulsants should be continued as long as the patient is able to swallow medication
- May need to switch to non-oral routes of medication
- Individualized plan should be in place
- IV or SC lorazepam, rectal diazepam, or rectal or SC phenobarbital



# DYSPNEA

- Dyspnea=Breathlessness=Shortness of breath
- *Subjective breathing discomfort comprising qualitatively distinct sensations with variable intensity* -American Thoracic Society
- Common in advanced cancers
- Worsen as death approaches

# DYSPNEA

- Total dyspnea -“a complex set of interactions between physical, psychological and emotional factors that are further modulated by an individual's past experiences, expectations and fears for the future”



# DYSPNEA

## Positions to relieve the symptoms

- Sitting upright in chair: arms supported on chair arms or cushions
- High side lying: lying on side, rolled well forward to let abdomen incline forward onto bed
- Back straight, either supported by chair, or leaning forward to reposition diaphragm



# DYSPNEA

- Fan therapy -which uses a fan to blow air toward the patient's face
- Underlying mechanism that reduce dyspnea is unclear
  - Direct stimulation of the face, nasal mucosa, or pharynx
  - Changes in the facial temperature by cooling

# DYSPNEA

## Role of oxygen

- Routine administration of oxygen to patients who are near death is **not** supported by clinical evidence
- The use of oxygen is restricted to **dyspneic patients who are hypoxemic or shows sign of respiratory distress**

# DYSPPNEA

- If oxygen is used, nasal cannula are preferred
- Oxygen masks are uncomfortable and restrictive and interfere with patient communication
- Not a benign intervention
- Associated with nasal dryness, nasal irritation or nose bleed

# DYSPNEA

- Opioids can be given
- For **opioid-naïve** dying patients with dyspnea: start with morphine 2mg sublingually/SC every two hours as needed
- For patients who have been on **chronic opioids**: start with a dose that is 10 to 15 percent of the basal daily requirement of opioid and offered every two hours
- Consider dose increment if the patient still seems to be dyspneic

# TERMINAL DELIRIUM

## DSM-5 Criteria for Delirium

A. A disturbance in attention (i.e., reduced ability to direct, focus, sustain, and shift attention) and awareness (reduced orientation to the environment)

B. The disturbance develops over a short period of time (usually hours to a few days), represents a change from baseline attention and awareness, and tends to fluctuate in severity during the course of a day.

C. An additional disturbance in cognition (e.g., memory deficit, disorientation, language, visuospatial ability, or perception).

D. The disturbances in Criteria A and C are not explained by another preexisting, established, or evolving neurocognitive disorder and do not occur in the context of a severely reduced level of arousal, such as coma.

E. There is evidence from the history, physical examination, or laboratory findings that the disturbance is a direct physiological consequence of another medical condition, substance intoxication or withdrawal (i.e., due to a drug of abuse or to a medication), or exposure to a toxin, or is due to multiple etiologies.



# TERMINAL DELIRIUM

- Hyperactive form manifest as agitation, confusion, restlessness, and/or day-night reversal
- Hypoactive form of delirium may present with decreased psychomotor activity
- Moaning, groaning, and grimacing may accompany the agitation and restlessness and may be **misinterpreted** as physical pain

# TERMINAL DELIRIUM

- It is important to identify and eliminate any specific causes
- Correctable causes: pain, bladder distension, physical discomfort
- Non-verbal patient poses challenge to identify the cause
- For most patients, it is not possible to find a reversible cause

# TERMINAL DELIRIUM

- Support the family
- Haloperidol is used standard therapy
- Dose reduction for older or very frail adults
- Dosage recommendation
  - 1 to 2 mg of oral haloperidol or 1 mg SC/IV with
  - repeat doses every two hours until settled
  - every six to eight hours as needed
  - titrated against symptoms

# TERMINAL DELIRIUM

- Alternative therapies include olanzapine or risperidone
- Oral dissolving formulation available
- However, the regular oral formulation is available in a lower dose
- For patients who can take oral medications, lower dose is started
- Dosage recommendation :olanzapine 2.5 mg  
:risperidone 0.25 mg

# TERMINAL DELIRIUM

- Lorazepam is added for patients with persistent agitated delirium despite the use of haloperidol (or other antipsychotic)
- Dosage recommendation: 1 mg orally or 0.5 mg SC/IV every four to six hours as needed

# 'DEATH' RATTLE

- Troublesome airway secretions
- **Loss of the ability to swallow** due to weakness and decreased neurologic function
- **Secretions from the tracheobronchial tree accumulate** as the gag reflex and reflexive clearing of the oropharynx decline
- The buildup of saliva and oropharyngeal secretions may lead to gurgling, crackling, or rattling sounds with each breath

# 'DEATH' RATTLE

- Distressing symptom for some caregivers and loved ones
- Address these concerns-discuss and reassurance that this is part of the natural dying process

# 'DEATH' RATTLE

- Discontinuing non-essential IV fluids or enteral feedings
- Positioning the patient on their side-may move the secretions out of the airway
- Gentle oropharyngeal suctioning
- Avoid deep suctioning



# 'DEATH' RATTLE

## Pharmacological measures

- Glycopyrrolate (0.2 mg SC every four to six hours)
- Hyoscine butylbromide (20 mg every four to six hours)

# SUMMARY

- ‘Helping patients to write their final chapter’
- Care involves identification, prognostication and symptoms management of the dying patients
- Not forgetting those that patients leave behind

# REFERENCES

1. Ali-Melkkilä T, Kanto J, Iisalo E. Pharmacokinetics and related pharmacodynamics of anticholinergic drugs. *Acta Anaesthesiol Scand* 1993; 37:633.
2. Prommer E. Anticholinergics in palliative medicine: an update. *Am J Hosp Palliat Care* 2013; 30:490.
3. Wee B, Hillier R. Interventions for noisy breathing in patients near to death. *Cochrane Database Syst Rev* 2008; :CD005177.
4. Heisler M, Hamilton G, Abbott A, et al. Randomized double-blind trial of sublingual atropine vs. placebo for the management of death rattle. *J Pain Symptom Manage* 2013; 45:14.
5. Campbell ML, Yarandi HN. Death rattle is not associated with patient respiratory distress: is pharmacologic treatment indicated? *J Palliat Med* 2013; 16:1255.
6. van Nordennen RT, Lavrijsen JC, Vissers KC, Koopmans RT. Decision making about change of medication for comorbid disease at the end of life: an integrative review. *Drugs Aging* 2014; 31:501.
7. Garfinkel D, Mangin D. Feasibility study of a systematic approach for discontinuation of multiple medications in older adults: addressing polypharmacy. *Arch Intern Med* 2010; 170:1648.
8. Hui D, Dev R, Bruera E. The last days of life: symptom burden and impact on nutrition and hydration in cancer patients. *Curr Opin Support Palliat Care* 2015; 9:346.
9. Powell B. Managing breathlessness in advanced disease. *Clin Med (Lond)*. 2014 Jun;14(3):308-11

9. Mezey M, Dubler NN, Mitty E, Brody AA. What impact do setting and transitions have on the quality of life at the end of life and the quality of the dying process? *Gerontologist* 2002; 42 Spec No 3:54.
10. Hallenbeck J. Palliative care in the final days of life: "they were expecting it at any time". *JAMA* 2005; 293:2265.
11. Harman SM. Palliative care: The last hours and days of life. In: UpToDate, Connor RF (Ed), Wolters Kluwer. (Accessed on Jun 8, 2024.)
12. Davis MP, Hallerberg G, Palliative Medicine Study Group of the Multinational Association of Supportive Care in Cancer. A systematic review of the treatment of nausea and/or vomiting in cancer unrelated to chemotherapy or radiation. *J Pain Symptom Manage* 2010; 39:756.
13. Kako J, Kobayashi M, Oosono Y, Kajiwara K, Miyashita M. Immediate Effect of Fan Therapy in Terminal Cancer With Dyspnea at Rest: A Meta-Analysis. *American Journal of Hospice and Palliative Medicine*®. 2020;37(4):294-299. doi:10.1177/1049909119873626
14. Butow PN, Clayton JM, Epstein RM. Prognostic Awareness in Adult Oncology and Palliative Care. *J Clin Oncol* 2020; 38:877.

**THANK YOU**