

Palliative care is specialized medical care for people living with a serious illness.

WHAT IS
PALLIATIVE CARE

The goal is to improve quality of life for both the patient and the family.

Palliative care is provided by a specially-trained team of doctors, nurses and other specialists who work together with a patient's other doctors to provide an extra layer of support.

Palliative care is based on the needs of the patient, not on the patient's prognosis.

It is appropriate at any age and at any stage in a serious illness, and it can be provided along with curative treatment.

Palliative care sees the person beyond the disease. It is a fundamental shift in health care delivery.

CAPC, 2023, About Palliative Care

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WHAT IS PALLIATIVE CARE...

Palliative care specialists improve quality of life for the patients whose needs are most complex.

Working in partnership with the primary physician, the palliative care team provides:

- Time to devote to intensive family meetings and patient/family counseling
- Skilled communication about what to expect in the future in order to ensure that care is matched to the
 qoals and priorities of the patient and the family
- Expert management of complex physical and emotional symptoms, including complex pain, depression, anxiety, fatigue, shortness of breath, constipation, nausea, loss of appetite, and difficulty sleeping
- Coordination and communication of care plans among all providers and across all settings

CAPC, 2023, About Palliative Care

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WHAT IS PALLIATIVE CARE

- Palliative Care Improves Care Quality While Lowering Costs
- Studies consistently show improvements in both quality measures and resource utilization once palliative care is introduced.
- Robust palliative care services lead to strong financial performance across many parameters.
- Palliative care reduces variable costs per day.
- Palliative care reduces length-of-stay
- Palliative care reduces re-admission rates and penalties

APC. (2023, August 26). The Positive Financial Impact of Hospital Pallative Care.

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WHAT IS PALLIATIVE CARE

- Palliative care teams working in hospitals:
 - Improve patient and family satisfaction with care
 - Reduce 30-day readmission rates
 - Reduce ICU utilization
 - Can save 9–25% of costs for each inpatient stay through a mixture of shorter length of stay and reduced cost per day.

CAPC. (2023, August 23). The Value of Palliative Care. https://www.capc.org/the-case-for-palliative-care/

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WHAT IS PALLIATIVE CARE

- Is palliative care the same as end-of-life (hospice) care?
 - No, but like hospice, palliative care refers to relieving the symptoms of an incurable medical condition.
 - Its focus is on easing stress and improving overall quality of life.
 - Unlike hospice palliative care can benefit people at any stage of a serious illness. Hospice is reserved for pt's who are at end of life and are choosing against aggressive medical care, but rather to focus on comfort alone.

Cleavland Clinic. (2023, August 23). Palliative Care.

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WHAT IS PALLIATIVE CARE

- People with various conditions receive palliative care. Among many others, these conditions include:
 - Amyotrophic lateral sclerosis (ALS).
 - Alzheimer's disease.
 - Cancer.
 - COVID-19.
 - Chronic obstructive pulmonary disease (COPD).
 - Heart disease.
 - HIV & AIDS.
 - Kidney disease.
 - Liver disease.
 - Lung disease.
 - Multiple sclerosis (MS).
 - Parkinson's disease.
 - Stroke

Cleavland Clinic. (2023, August 23). Palliative Care.

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• Dyspnea • Pain • Secretions • Delirium • Fever • Nausea

AT THE end of life IN THE HOSPITAL Many of the SL meds are in dissolvable Can manage symptoms with both non SETTING, WE use both IV and SL routes tabs or liquid concentrates, so even if pharmacologic interventions and for meds. There are times where the patient IS NON-RESPONSIVE (not pharmacologic interventions. patient's no longer have an IV and we able to swallow pills), they can still need to use the SL route alone. receive these meds. ENTERAL opioids last longer than IV opioids in the body, so even though they take longer to work, they often provide more stable relief of symptoms like pain and dyspnea. SYMPTOMS 9/3/20XX Presentation Title 9

DYSPNEA

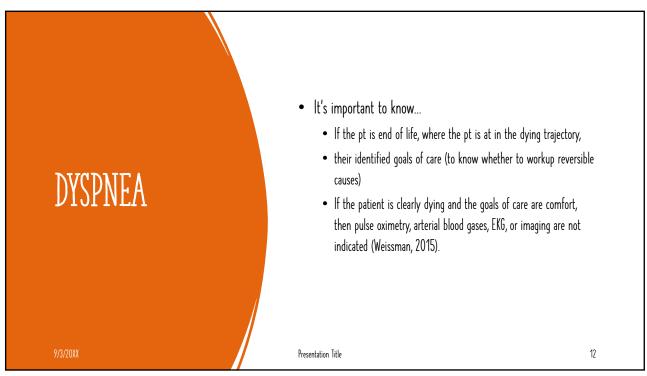
- Dyspnea is defined as a subjective sensation of difficulty breathing.
- The causes of dyspnea include a wide spectrum of serious lung or heart conditions, anemia, anxiety, chest wall pathology, electrolyte disturbances or even urinary retention or constipation (Weissman, 2015).

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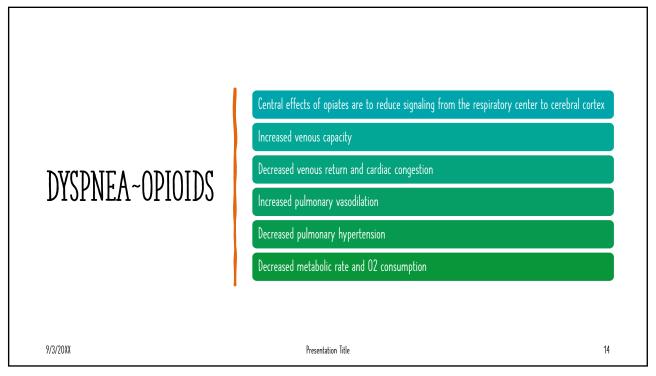


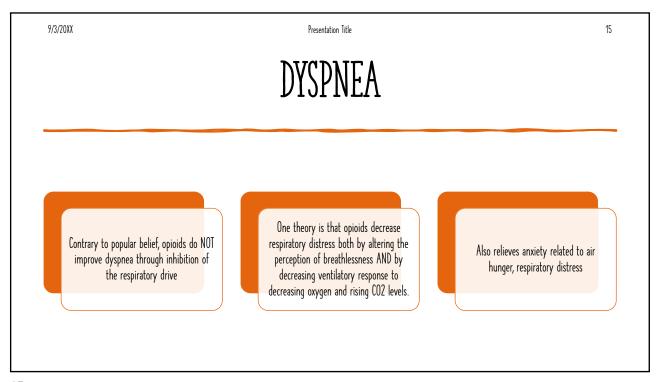
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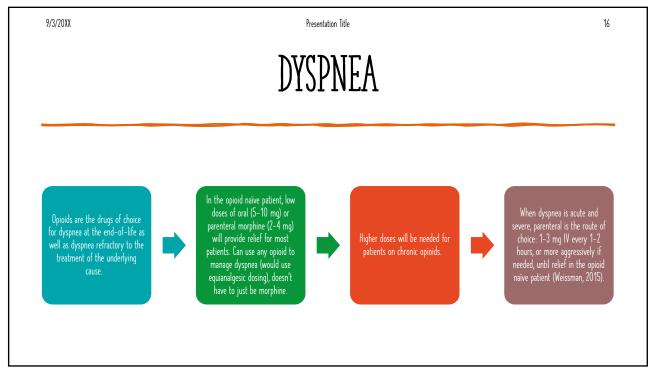
Treatment... Positioning (sitting up) Increasing air movement via a fan or open window, Use of bedside relaxation techniques are all helpful. Treatment with oxygen. Not always helpful. When in doubt, can do a therapeutic trial, based on symptom relief. There is little reason to go beyond 4-6 L/min of oxygen via nasal cannula in the actively dying patient (Weissman, 2015).

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DYSPNEA

- Treatment with other non opioid meds...
 - Anti-tussives can help with cough
 - Anti-cholinergics will help reduce secretions
 - Anxiolytics (e.g. lorazepam) can reduce the anxiety component of dyspnea.
 - Other agents that may have specific disease modifying effects include diuretics, bronchodilators, and corticosteroids (Weissman, 2015).

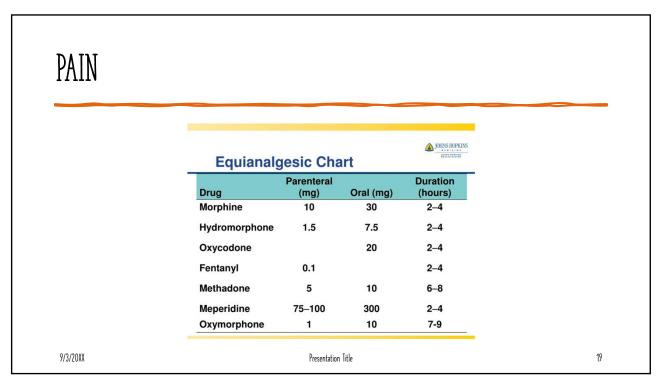
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Physical suffering or discomfort caused by illness or injury.

Common with certain diagnoses, like cancer.

Less common in stroke and other neurological disorders at the end of life.



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Constipation - need proactive laxative use Nausea/vorniting - consider treating with dopamine antagonists and/or PROKINETICS Urinary retention Itch/rash - try antihistamines, however not great success Dry mouth Respiratory depression - uncommon when titrated in response to symptom Drug interactions - especially with benzos and other sedating medications Neurotoxicity (OIN): delirium, myoclonus → seizures. Higher risk with patients who are dehydrated, with renal failure or insufficiency.

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SECRETIONS

As consciousness decreases in the dying process, patients lose their ability to swallow and clear oral secretions. Air moves over these pooled secretions resulting in noisy ventilation.

While there is no evidence that patients find this 'death/inspiratory rattle/gurgle' disturbing, evidence from bereaved surveys suggests the noises can be disturbing to visitors and caregivers who may fear the patient is choking.

Death rattle can be a good predictor of near death in the terminally ill; one study indicated the median time from onset of symptoms to death was 16 hours (Bickel, 2022)

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NON PHARMACOLOGIC INTERVENTIONS FOR SECRETIONS

1

Discontinue or reduce IV fluid and enteral feeding

2

Gentle oropharyngeal suctioning may be used but avoid deep suctioning.

3

Reposition the body in a lateral position on either left or right side to facilitate drainage.

4

Reposition the body with head down and feet elevated (Trendelenburg position) for a few minutes to move fluid up into the oropharynx for ease of removal. Caution with increased risk aspiration. 5

Address family and caregivers with any fears and interpretations associated with the death rattle (Bickel, 2022).

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MEDS FOR SECRETIONS

- Muscarinic receptor blockers (anti-cholinergic drugs) are the most used medication class when pooled oral secretions are refractory to non-pharmacologic measures. They decrease mucous production due to anticholinergic properties. Examples include scopolamine, hyoscyamine, glycopyrrolate, and atropine.
- Their effectiveness over placebo has not been consistently established.
- Patients with noisy breathing from pulmonary disease or infections are less likely to respond to these medications.
- Common adverse effects are blurred vision, sedation, confusion, delirium, restlessness, hallucinations, palpitations, constipation, and urinary retention.
- The primary difference in these drugs is whether they are tertiary amines which cross the blood-brain barrier (scopolamine, atropine, hyoscyamine) or
 quaternary amines, which do not (glycopyrrolate). Tertiary amines which cross the blood-brain barrier are more apt to cause more CNS toxicity
 (sedation, delirium). They are also more likely to affect the heart rate or rhythm and tend to be less expensive (Bickel, 2022).

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MEDS FOR SECRETIONS

Drug	Route	Initial Dose	Onset	Duration	Clinical Pearls
scopolamine (hyoscine) hydrobromide	Transdermal patch	1.5 mg q72 hrs	~12 hrs (24 hrs to steady state)	72 hrs	Place 1-3 patches on hairless skin, typically behind ear. Scopolamine is highly sedating, so its use is limited to patients with a short prognosis (e.g. < 3-4 weeks)
scopolamine butylbromide	Sub-cutaneous (Sub-Q)	20 mg QID	1-2 hrs	4 hrs	
hyoscyamine	Oral (PO), sublingual (SL)	0.125 mg q 6 hrs prn	30 min	4-6 hrs	Also, highly sedating. Extended-release formulations available.
glycopyrrolate	PO	0.5–1 mg TID prn	30 min	2-4 hrs	Poor absorption limits oral use, IV/SC more costly and typically limited to inpatient settings; 5–10 times the cost of tertiary amine alternatives
glycopyrrolate	SubQ, IV	0.2-0.4 mg q 4 hrs prn	1 min	7 hrs	
atropine sulfate	SubQ, IV	0.1 mg q4 hrs prn	1 min	1 hr	Contraindicated in asthma due to excessive drying effect in bronchi. More robust literature to support use.
atropine sulfate 1% eye drops	2T	1 drop q4 hrs prn	30 min	2 hrs	

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DELIRIUM

The term "confusion" is not an accurate descriptive term-it can mean anything from delirium, dementia, psychosis, obtundation, or encephalopathy.

Delirium can be characterized by a *hyperactive/agitated* state, a *hypoactive* state, or a mixture of the two.

The hallmark of delirium is an acute change in mentation and attention with either disorganized thinking, easy distractibility, or a fluctuating level of consciousness. It is often accompanied by perception disturbances with illusions, delusions or hallucinations.

"Terminal delirium" is not a distinct diagnosis, although it is a commonly used phrase. It implies delirium in a patient in the final days/weeks of life, where treatment of the underlying cause is impossible, impractical, or not consistent with the goals of care (Weissman, 2015).

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DELIRIUM NONPHARMACOLOGIC TREATMENTS

Alter the sensory stimulation in the environment as needed: for example, it may be best to turn off the television if the sounds are distracting or confusing to the patient.

Ask relatives/friends/familiar people to visit and reorient the patient to the medical situation.

Perform frequent reminders of time/place/medical setting.

The ABCDE (Awakening/Breathing Coordination, Delirium monitoring and Early exercise/mobility) bundle has been used to prevent and manage delirium in ICU settings (Weissman, 2015).

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DELIRIUM PHARMACOLOGIC TREATMENTS

Hyperactive patients who are a danger to themselves or others (pulling out lines or tubes, striking caregivers, etc) despite behavioral and environmental modification, should be treated pharmacologically.

Notably, there is no evidence-based drug approach to this, and reasonable treatment options could include antipsychotics (especially if symptomatology includes hallucinations or delusions), or sedatives such as benzodiazepines or dexmedetomidine if prognosis is felt to be short.

If sedation is acceptable, or even the goal in a dying patient, a sedating dose of a benzodiazepine or a sedating antipsychotic is often used (Weissman, 2015).

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NAUSEA & VOMITING

- Nausea and vomiting is frustrating, painful and exhausting for both the patient and the family, and
 results in increased suffering.
- Very common in advanced illness. Nausea occurs in up to 70% of terminally ill; vomiting occurs in approximately 30%
- Etiology is complex, requiring careful assessment and therefore, appropriate treatment
- Can be acute, anticipatory or delayed
- Can be controlled in over 90% of patients

NAUSEA & VOMITING: ASSESSMENT

- Detailed history
 - Pattern, continuous, intermittent, w/ or w/o emesis, what makes it worse/better, current treatments, last BM, content or emesis (food, bile, feces), volume?
 - How distressing to patient? Intensity scale like pain
 - Patient's goal for comfort?
 - Any associated symptoms, i.e. anxiety, pain, cough, that may require simultaneous intervention?
 - Consider medical diagnoses & disease processes
 - Consider recent medical treatments (surgery, chemo, radiation, current medications)



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NAUSEA & VOMITING: ASSESSMENT

- General physical exam
 - Recent weight change
 - Fever/infection
 - Hydration status
 - Oral or pharyngeal infection or irritation
 - Check for bowel sounds: present, absent, hyper or hypoactive
 - Note any ascites, masses, distention
 - Perform digital rectal exam to r/o constipation or impaction
 - Any abdominal pain or discomfort?

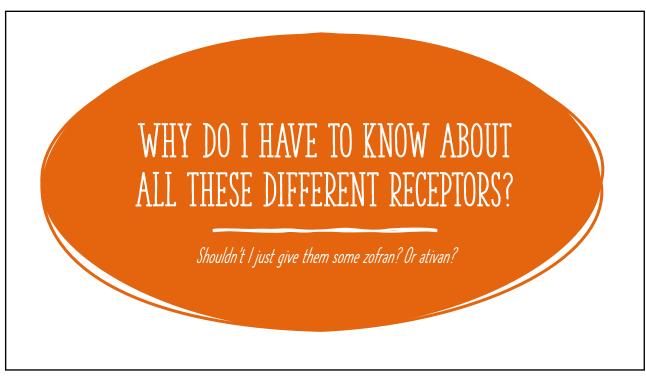
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NAUSEA AND VOMITING: ETIOLOGY Treatment selection according to underlying cause – the 11 "M's" of emesis:

- Metastases
- Meningeal involvement
- Movement
- Mental Anxiety
- Medications
- Mucosal irritation

- Mechanical obstruction
- Motility (constipation)
- Metabolic
- Microbes (infection)
- Myocardia (CHF, ischemia)

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DRUG CLASSES FOR NAUSEA AND VOMITING

- Butyrophenones
- Prokinetic agents
- Cannabinoids
- Phenothiazines
- Antihistamines

- Anticholinergics
- Steroids
- Benzodiazepines
- 5-HT3 receptor antagonists

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NAUSEA & VOMITING: PHARMACOLOGIC MANAGEMENT

Treat

Treat potentially reversible causes and/or exacerbating factors (drugs, pain, constipation, hypercalcemia, anxiety, cough)

Cause

Cause of nausea/vomiting is often multifactorial, requiring more than one agent. 1/3 of patients will need more than one anti–emetic

Review

Review the dose of the anti–emetic every 24 hours. If little or no benefit after 24--48 hours despite optimizing the dose, re–evaluate the possible cause

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NAUSEA & VOMITING: COMMONLY EFFECTIVE PHARMACOLOGIC AGENTS

- Stimulation of CTZ
 - Dopamine antagonists: HALDOL IS THE MOST POTENT. Also Compazine, Thorazine, Droperidol, Torecan, Phenergan, Reglan
 - Serotonin antagonists: Zofran, Kytril, Anzemet
- Gastric Stasis
 - Prokinetic: Metoclopramide (Reglan): acts in the gut to antagonize D2 and stimulate 5HT4 receptors. At high doses, blocks 5HT3 receptors in the CTZ and gut.
- Constipation: Laxatives/Stool Softeners: Sennakot, Enemas/Suppositories

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NAUSEA & VOMITING: COMMONLY EFFECTIVE PHARMACOLOGIC AGENTS

- Bowel Obstruction
 - Corticosteroids: Dexamethasone
 - Antisecretive agents: Hyoscyamine, Octreotide (Sandostatin)
 - Gastric decompression
 - Surgery-if appropriate. Bowel obstructions in end stage disease can be managed medically
- Increased Intracranial Pressure
 - Corticosteroids: Dexamethasone
 - Anticholinergics: Meclizine

NAUSEA & VOMITING: COMMONLY EFFECTIVE PHARMACOLOGIC AGENTS

- Motion/dizziness
 - Antihistamines: Benadryl, Vistaril
 - Anticholinergics: Hyoscyamine, Scopalamine, Meclizine
- Hypercalcemia
 - Hydration
 - Bisphosphonates
- Anxiety
 - Benzodiazepines: Lorazepam (Ativan) NO STRONG ANTIEMETIC ACTION OUTSIDE OF THIS

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OTHER TREATMENTS

Atypical Antipsychotics: ZYPREXA

(Olanzapine) a thiobenzodiazepine usually prescribed to treat delirium

- Acts on dopamine, histamine, anticholinergic, and serotonin (5HT) receptors to result in a greater therapeutic index, fewer side effects, fewer drug interactions
- Besides treating nausea, can also improve anorexia and weight loss
- Start at 5mq, usually at bedtime due to drowsiness.
- Increase to 10mg within 5–7 days. Can continue to increase weekly by 5mg to max of 20mg QD $\,$

Davis, M.P., Khawam, E., Pozuelo, L., Lagman, R. Management of symptoms associated with advanced cancer: olanzapine and mirtazapine. Expert Rev. Anticancer Ther. 2(4), 365–376 (2002).

NAUSEA & VOMITING: NON-PHARMACOLOGIC MANAGEMENT

Complementary Therapies

Acupuncture/Acupressure: Relief-Band

Relaxation

Distraction

Clinical Hypnosis

Aromatherapy: oranges

• Food and Eating Pattern Interventions

6-8 small meals instead of 3 large ones

Avoid strong odors

Eat food at cool rather than hot temperatures

Keep head raised for at least 1 hour after eating

Eat slowly

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FEVER

- Increased body temp, very common at end of life.
- Peripherally, it induces myalgias and arthralgias.
- Pyrogens/pyrogenic cytokines are produced by infection, inflammation, trauma/tissue necrosis, and tumors.
- Drugs can induce fever through various metabolic and immune responses as well as by mimicking endogenous pyrogens, inflicting direct tissue damage and interfering with heat loss.
- Common drugs in palliative care settings which cause fever include antibiotics, anti-psychotics (neuroleptic malignant syndrome) and opioid withdrawal.
- Fever associated with brain injuries is common, perhaps due to direct hypothalamic injury (Strickland, 2015).

FEVER-NON-PHARMACOLOGICAL INTERVENTIONS

- Cooling blankets, ice packs, sponging, and fans.
- While these can bring down body temperature, they are noisy, labor-intensive, and distract family and other caregivers from more meaningful interactions at the death-bed (Strickland, 2015).

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FEVER-PHARMACOLOGIC TREATMENTS

Discontinue any non-essential drugs if drug-induced fever is suspected.

Antipyretic. Acetaminophen 650–1000mg* PO/PR/IV q4–6 hours PRN (maximum dose 4 g/day*) is considered first line given its low side effect profile. NSAIDs (oral, IV, rectal, subcutaneous) are also effective. Naproxen 250mg* q12hrs is particularly effective in neoplastic fever, and possibly diagnostic when infection is ruled out.

Antibiotic therapy has been shown to be inconsistently useful in alleviating fever symptoms in terminally ill patients. While evidence is unclear as to the utility of providing antibiotic therapy, discussions should address their use as a potential treatment that may or may not improve symptoms and prolong life/delay death; time-limited trials can be appropriate.

Glucocorticoids (oral, IM, IV) are also reported to be effective, however most of the data supporting their use exist in the neurological and head injury literature (Strickland, 2015).

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END OF LIFE

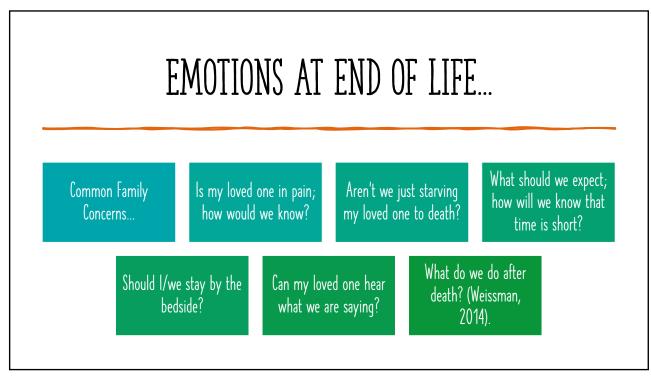
Virtually all dying patients go through a stereotypical pattern of symptoms and signs in the days prior to death.

This trajectory is often referred to as "actively dying" or "imminent death".

Prompt recognition of this trajectory is key for clinicians to provide the most appropriate interventions for both the patient and family (Weissman, 2014).

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Early • Bed bound • Loss of interest and/or ability to drink/eat • Cognitive changes: increasing time spend sleeping and/or delirium Middle • further decline in mental status to obtundation (slow to arouse with stimulation; only brief periods of wakefulness) Late • Death rattle - pooled oral sections that are not cleared due to loss of swallowing reflex • Coma • Fever - usually from aspiration pneumonia • Altered respiratory pattern - periods of apnea, hyperpnea, or irregular breathing • Mottled extremities (Weissman, 2014).



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GOALS OF CARE

- ASSESS KNOWLEDGE AND UNDERSTANDING OF ILLNESS AND/OR PROGNOSIS
 - HAS ANYONE SPOKEN TO YOU ABOUT WHAT TO EXPECT FROM YOUR DISEASE AND THE KINDS OF TREATMENTS YOU WOULD OR WOULD NOT WANT IF/WHEN YOU GET REALLY SICK?
 - WHAT CONVERSATIONS HAVE YOU HAD WITH OTHER DOCTORS AND YOUR FAMILY ABOUT THE CARE YOU WANT TO RECEIVE?
 - WHAT HAVE YOU BEEN TOLD ABOUT YOUR MEDICAL SITUATION SO FAR?
 - WHAT IS YOUR UNDERSTANDING OF WHAT LIES AHEAD WITH YOUR ILLNESS AND YOUR TREATMENT?
 - · WHERE ARE YOU WITH YOUR OVERALL HEALTH RIGHT NOW?
 - TO MAKE SURE WE ARE ON THE SAME PAGE, CAN YOU TELL ME YOUR UNDERSTANDING OF YOUR ILLNESS?
 - HOW HAVE YOU AND YOUR FAMILY BEEN MANAGING YOUR ILLNESS SO FAR?
 - I CAN SEE HOW DEALING WITH THIS MAY BE DIFFICULT FOR YOU

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GOALS OF CARE

- Assess willingness to receive information and preferred role in decision making
 - What information do you need right now?
 - What, if any, information about what lies ahead would you like me to share with you?
 - Would you like to discuss what the [test, lab, scan findings] mean?
 - Sometimes people with a serious or life-limiting illness think about how long they might have. Is that something you think about?
 - How much do you want to know about your condition?
 - Do you want to make your own decisions about your care or do you prefer someone else to make those decisions?
 - Is there anyone you rely on to help you make important decisions?

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GOALS OF CARE

- · EXPLORE FEARS AND WORRIES AND ELICIT VALUES, HOPES, GOALS, AND PRIORITIES
 - WHAT ARE YOUR HOPES OR PERSONAL GOALS AS THE ILLNESS PROGRESSES?
 - WHAT ARE YOUR MOST IMPORTANT GOALS IF YOUR HEALTH CONDITION WORSENS?
 - WHEN YOU THINK ABOUT THE FUTURE, WHAT DO YOU WORRY ABOUT?
 - GIVEN THE SEVERITY OF YOUR ILLNESS, WHAT IS MOST IMPORTANT FOR YOU TO ACHIEVE?
 - GIVEN THIS SITUATION, WHAT'S MOST IMPORTANT FOR YOU?
 - TELL ME MORE ABOUT WHAT (NOT GIVING UP, FIGHTING, A MIRACLE, ETC.) MIGHT LOOK LIKE FOR YOU.
 - WHAT MAKES LIFE WORTH LIVING FOR YOU?
 - WE WANT TO MAKE TREATMENT DECISIONS THAT HONOR WHAT'S IMPORTANT TO YOU. WHAT SORT OF QUALITY OF LIFE WOULD YOU FIND ACCEPTABLE, AND WHAT
 WOULD YOU FIND UNACCEPTABLE?
 - ARE THERE ANY CIRCUMSTANCES UNDER WHICH LIFE WOULD NOT BE WORTH LIVING?
 - HAVE YOU THOUGHT ABOUT STATES OF BEING THAT WOULD BE SO UNACCEPTABLE TO YOU THAT YOU WOULD CONSIDER THEM TO BE WORSE THAN DEATH?
 MY ACP. (2021, JANUARY 1S). THE GRAILS-BE-GAVE CONVERSATION A BEST-PRACTICE, SIET-BY-SIEP APPROACH.

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GOALS OF CARE • Summarize... • Given what you've illness, it sounds I medical care] is in your goals of care • Discuss treatment identified goals are seem to you? • Can we talk about well as we hope My ACP. (2021, Janua Conversation: A Best

- Given what you've told me and what I know about your illness, it sounds like [summarize overall goal(s) regarding medical care] is important to you now. Am I understanding your goals of care correctly?
- Discuss treatments and interventions that align with identified goals and values, ask them how does this plan seem to you?
- Can we talk about what we should do if things don't go as well as we hope

My ACP. (2021, January 15). 15). *The Goals-of-Care Conversation: A Best-Practice, Step-By-Step Approach*

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GOALS OF CARE

- 11 TIPS FOR A PATIENT-CENTERED GOALS-OF-CARE DISCUSSION
 - PREPARE AHEAD OF TIME FOR THE CONVERSATION
 - ESTABLISH RAPPORT AND ASK PERMISSION TO BEGIN THE CONVERSATION
 - USE GOOD COMMUNICATION SKILLS TO CONVEY EMPATHY AND ENCOURAGE ENGAGEMENT
 - EMPLOY SHARED DECISION MAKING
 - · INCORPORATE HIGH-QUALITY, EVIDENCE-BASED PATIENT DECISION AIDS, WHERE APPROPRIATE
 - TAKE THE PATIENT'S HEALTH LITERACY INTO CONSIDERATION
 - USE PLAIN LANGUAGE
 - CONFIRM PATIENT'S CONCERNS AND VALUES BY RESTATING THEM AS UNDERSTOOD
 - USE THE ASK-TELL-ASK TECHNIQUE WHEN DISCUSSING A POOR PROGNOSIS
 - ALLOW FOR AND MANAGE EMOTIONS BEFORE MOVING FORWARD WITH THE CONVERSATION
 - · REVISIT THE DISCUSSION REGULARLY, ESPECIALLY IF THE PATIENT'S HEALTH STATUS CHANGES

MY ACP. (2021, JANUARY 15). THE GOALS-OF-CARE CONVERSATION: A BEST-PRACTICE, STEP-BY-STEP APPROACH.

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RESUSCITATION

- How long it takes for brain damage and brain death to occur after cardiac arrest:
 0-4 minutes: brain damage is not likely; chances of survival and health high
 4-6 minutes: brain damage could occur; reaching the beginning of brain death
 6-10 minutes: brain damage is likely; the person may suffer ongoing issues after being resuscitated
 - 10+ minutes: brain death is likely to occur; very slim chance of a person regaining consciousness or surviving at all

ProCPR (2022 Sentember 22) CPR Facts and Stats - What is the CPR Success Rate?

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