Management of Non-Pain Conditions 1

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Program Details

- **Title:** Management of Non-Pain Conditions 1
- **Dates/Term of offering:** This activity was released on June 17, 2025 and is valid for one year. Requests for credit must be made no later than June 16, 2026.
- **Joint Providership:** This activity is jointly provided by Global Education Group (Global) and Hospice and Palliative Board Review.com.

- **Target Audience:** The educational design of this activity addresses the needs of Physicians, NPs, Nurses, and health care professionals interested in learning more about hospice and palliative medicine and those who want to earn continuing education credits and/or prepare for board certification in hospice and palliative medicine.

PROGRAM DETAILS

- **Program Overview:** Clinicians and health care professionals are unaware of best practices to be utilized when managing symptoms and non-pain conditions for patients in the palliative and hospice care setting. As such, they do not know how to adequately manage and counsel patients on interventions utilized for symptom management.
- **Faculty:** Eric Bush, MD, RPh, MBA,CHCQM; CEO-Hospiceandpalliativeboardreview.com-Board Certified Internal Medicine,Hospice and Palliative Medicine, and Addiction Medicine
- **Physician Accreditation Statement:**
  This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Global Education Group (Global) and Hospice and Palliative Board Review.com. Global is accredited by the ACCME to provide continuing medical education for physicians.

Program Details

- **Physician Credit Designation:**

  Global Education Group designates this enduring activity for a maximum of 0.50 *AMA PRA Category 1 Credit™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

- **ABIM MOC Recognition Statement:**
  Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to 0.5 MOC point(s) in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit.

PROGRAM DETAILS

- **Instructions to Receive Credit:** In order to receive credit for this activity, the participant must score at least a 75% on the post quiz and submit a completed evaluation and credit application form.
- **Global Contact Information:** For information about the accreditation of this program, please contact Global at 303-395-1782 or cme@globaleducationgroup.com.
- **Fee Information & Refund Policy:** There is a fee for this educational activity. For refund details, please see https://hospiceandpalliativeboardreview.com/refund-policy/.
- **System Requirements:**
  - **PC:** Microsoft Windows 2000 SE or above, Flash Player Plugin (v7.0.1.9 or greater), Internet Explorer (11.0 or greater), Chrome, Firefox, Adobe Acrobat Reader*
  - **MAC:** MAC OS 10.2.8, Flash Player Plugin (v7.0.1.9 or greater,), Safari, Chrome, Adobe Acrobat Readers*, Internet Explorer is not supported on the Macintoch.
    *Required to view printable (PDF) version of the lesson.

PROGRAM DETAILS

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  All relevant financial relationships have been mitigated.

  The ***faculty*** have the following relevant financial relationships with ineligible companies:
  - **Eric Bush, MD, RPh, MBA**: Nothing to disclose

- The ***planners and managers*** at Global Education Group and HospiceAndPalliativeBoardReview.com have no relevant financial relationships to disclose.

Program Details

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Program Details

- **Disclaimer:**

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Learning Objectives

- Describe how to perform symptom management in the palliative and hospice setting.
- Describe how to counsel patients and caregivers on interventions in this setting and the applicable risk versus benefit for appropriate interventions.
- Describe how to perform triage and referral of eligible patients for palliative and hospice services.
- Describe how to counsel patients and families on appropriate utilization of hospice and palliative care services.
- Describe how to discuss utilization of appropriate personnel allocation in the hospice and palliative care setting.
- Describe how to counsel patients and families on appropriate personnel allocation in the hospice and palliative care setting and the benefits for patients and families undergoing this type of care

Why Palliative Care & Hospice?
The Need for Palliative Care & Hospice

Focus outline can be found on page 122

Non-beneficial treatments in hospital at the end of life: a systematic review on extent of the problem

M CARDONA-MORRELL[1], JCH KIM[2], RM TURNER[3], M ANSTEY[4], IA MITCHELL[5], and K HILLMAN[1,6]

- Evidence from 38 studies indicates that on average 33–38% of patients near the EOL received NBTs. Mean prevalence of resuscitation attempts for advanced stage patients was 28%.
- Mean death in intensive care unit (ICU) was 42%; and mean death rate in a hospital ward was 44.5%.
- Mean prevalence of active measures including dialysis, radiotherapy, transfusions and life support treatment to terminal patient on average 30%.
- Non-beneficial administration of antibiotics, cardiovascular, digestive and endocrine treatments to dying patients occurred on average 38%.
- Non-beneficial tests were performed on 33–50% of patients with do-not-resuscitate orders.
- From meta-analyses, the pooled prevalence of non-beneficial ICU admission was 10% (95% CI 0–33%); for chemotherapy in the last six weeks of life was 33% (95% CI 24–41%).

Why?

- The healthcare system in the U.S. is optimized around revenue and profits - not safety and quality
- The U.S. healthcare industry is an economic unit larger than Germany
- It's currently running at over $3 trillion - per year(0.5 to $1 Trillion per yr in Non-beneficial/futile care)
- That equals over 18% of our entire GDP
- About 100,000 deaths occur each year due to medical errors
- We're the only industrialized country where medical expenses are a leading cause of personal Bankruptcy
- Lack of medicolegal reform-unnecessary costs

WHO Ranking of World Health Care

- One of the most widely cited international rankings of health care systems was published by the World Health Organization in 2000*
- It ranked the United States 37th in overall health care system performance, just behind Costa Rica and just ahead of Slovenia and Cuba
- France was No. 1 in the ranking, and Myanmar was last among 190 countries surveyed

*For the full survey, see WHO, http://www.who.int/whr/en/.
A convenient summary of the main findings can be found at
http://www.photius.com/rankings/healthranks.html

Posted Feb. 27, 2011 on Ed Dolan's Econ Blog http://dolanecon.blog

1	France
2	Italy
3	San Marino
4	Andorra
5	Malta
6	Singapore
7	Spain
8	Oman
9	Austria
10	Japan
11	Norway
12	Portugal
13	Monaco
14	Greece
15	Iceland
16	Luxembourg
17	Netherlands
18	United Kingdom
19	Ireland
20	Switzerland
21	Belgium
22	Colombia
23	Sweden
24	Cyprus
25	Germany
26	Saudi Arabia
27	United Arab Emirates
28	Israel
29	Morocco
30	Canada
31	Finland
32	Australia
33	Chile
34	Denmark
35	Dominica
36	Costa Rica
37	**United States of America**
38	Slovenia
39	Cuba

According to a recent publication from the Commonwealth Fund, the USA is ranked last of 11 Countries. The U.S. ranks last, as it did in 2006, 2007, 2010, and 2014

Value

- Hospice and palliative care are high value, high quality, patient and family centered services that should be a larger part of any population health initiative
- ASCO/NCCN 2017 Recommendations – Palliative Care consultation should be offered to every newly diagnosed stage 4 cancer patient


Seeing the Forest for the Trees

Why Talk About This?

25% of deaths occur at home - more than 70% of Americans would prefer to die at home

(Robert Wood Johnson Foundation)

Additional Reading - New Yorker

- Annals of Health Care
- May 11, 2015 Issue
- Overkill
- An avalanche of unnecessary medical care is harming patients physically and financially. What can we do about it?
- By Atul Gawande

Why Palliative Care?

- Aggressive measures for control of pain and other distressing symptoms
- Better quality and often longer life, with neither quality or quantity achieved at the other's expense
- More goal centered
- Interdisciplinary team of caregivers, participating in holistic care of patient and family

Palliative Care vs. Hospice Care

Similar but Different

Palliative Care

- Focuses on relief from physical suffering. The patient may be being treated for a disease or may be living with a chronic disease, and may or may not be terminally ill.
- Addresses the patient's physical, mental, social, and spiritual well-being. Is appropriate for patients in all disease stages, and accompanies the patient from diagnosis to cure.
- Uses life-prolonging medications.
- Uses a multi-disciplinary approach using highly trained professionals. Is usually offered where the patient first sought treatment.

Hospice Care

- Available to terminally ill Medicaid participants. Each State decides the length of the life expectancy a patient must have to receive hospice care under Medicaid. In some States it is up to 6 months; in other States, up to 12 months. Check with your State Medicaid agency if you have questions.
- Makes the patient comfortable and prepares the patient and the patient's family for the patient's end of life when it is determined treatment for the illness will no longer be pursued.
- Does not use life-prolonging medications.
- Relies on a family caregiver and a visiting hospice nurse. Is offered at a place the patient prefers such as in their home; in a nursing home; or, occasionally, in a hospital.

Combined Care

Hospices are the largest providers of palliative care services in the country. Many organizations work together to offer the patient a seamless continuum of care over the course of a serious illness.

CMS

Follow us on Twitter #MedicaidIntegrity

Palliative Care vs Hospice Care

- The core philosophy of Palliative Care and Hospice Care are the same: provide comfort and symptom management to maximize quality of life.
- The goals of Palliative Care and Hospice Care are generally the same, with some nuanced differences (related to the point in time on the patient's disease trajectory)

Palliative Care

- Care given to improve the quality of life of patients who have a serious, chronic or life-threatening disease.
- The goal of palliative care is to prevent or treat as early as possible the symptoms of a disease, side effects caused by treatment of a disease, and psychological, social, and spiritual problems related to a disease or its treatment.
- In short, symptom management, regardless of where the patient is in the disease process utilizing a biopsychosocial approach

Who is eligible for Palliative Care?

- Patients with life-limiting diseases who may still be seeking curative treatment
- Sufferers of chronic conditions which require aggressive pain management and symptom management
- May not have a terminal prognosis

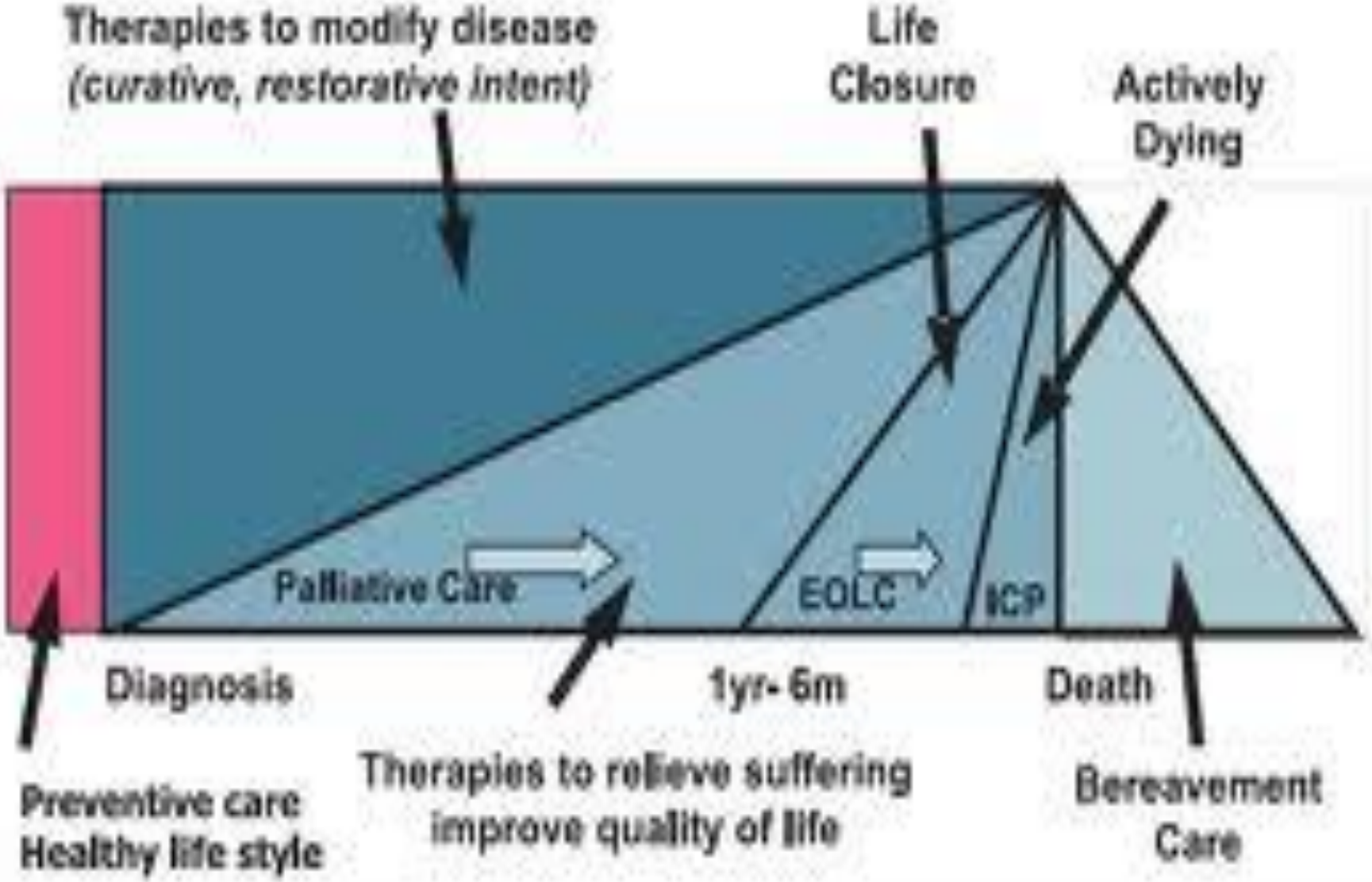
Goals of Inpatient Palliative Care

- Expert symptom management-pain, dyspnea, N&V, etc.
- Assessment of appropriate next steps in care: Hospice, comfort, SAR etc.
- Goals of care consultation should be in conjunction with primary team and pertinent specialists
- Primary resource for comfort care: order sets, standard work, policies and procedures
- Changing culture: goal of open engagement with patients and families & providers regarding goals of care and dialogue

Goals of Outpatient Palliative Care

- Expert symptom management: pain, dyspnea, N&V, etc.
- Relationship building with patients, families, providers
- Assessment of appropriate next steps in care & prevention of unnecessary hospitalization
- Goals of care consultation: “shared” decision making earlier in the disease course (i.e. before the roof is on fire), Do Not Hospitalize Orders in SNF’s
- Primary resource for community based palliative care
- Changing ***Macro*** culture: goal of open engagement with patients and families & providers regarding goals of care and dialogue (Conversation project, Five Wishes)

Modified from-
http://depts.washington.edu/pallcare/training/ppt.shtml



Barriers to Palliative Care & Hospice

- Lack of knowledge
- Culture
- Religion
- Limited trained providers
- Fractionated health system
- Communication
- Perception

Palliative Care Reimbursement

- Paid for by Medicare and private insurance just as any other recognized medical specialty
- Care provided by physicians boarded in hospice & palliative medicine, nurse practitioners with advanced practice in hospice & palliative medicine

Differentiation

- Hospice: if the disease follows the expected course, a prognosis of six months or less (patients often referred late, NEJM NSCLC study)
- Palliative (Supportive): symptom focused care anywhere throughout the disease spectrum, can be delivered in conjunction with curative care - WOULD YOU BE SURPRISED IF THE PATIENT DIED IN THE NEXT YEAR? IF NOT REFER TO PALLIATIVE CARE

Palliative Family/Patient assessment

- Underlying philosophy of shared decision: making and respecting autonomy
- Beneficence, autonomy
- Advanced directives, living will

Diagnoses for Pall Care Referral

- ES CHF
- COPD/Pulm Diseases-End Stage
- Neuro-stroke, ALS,MS, dementia(FAST >7A)
- Oncology-Stage 4 Disease
- Sickle Cell Disease

Case 1

- 80 YO Female with Lung Cancer
- Pain & shortness of breath
- Residing at local facility
- Symptoms managed with steroids and non-narcotic interventions
- Functionality and quality of life improved
- On Palliative care for 2 years
- Care that meets her and her family “where she is”(focused care, workup, labs, physical therapy, etc.)

Benefits for Palliative Care

- Improved pt Quality Of Life
- Less harmful care, non-beneficial care
- Longer lifespan(good evidence for lung cancer)
- Decreased hospitalizations
- Differentiation - prognostically - 1yr Pall Care Referral; 6months - Hospice

Who We Are/Where We Provide Palliative Care

- Physicians, NP's and SW with advanced training, practice in Hospice & Palliative Medicine
- Homes
- Facilities (ALF'S, SNF'S)
- Ambulatory-Hussman Palliative Care Center
- Anywhere!

Why Hospice Care?

- Provides physical, emotional and spiritual support
  to individuals at end of life
- Helps patients remain in their home
- Offers pain and symptom management
- Helps individuals live the best that they can with what they have been given
- Focuses on quality of life more than quantity

What is Hospice Care?

- Hospice is a care program that provides assistance to those individuals who have an incurable disease and have chosen not to pursue any further aggressive treatment.
- Hospice considers the patient and family/caregivers as one unit of care – provides support for all.
- Hospice care is provided wherever a patient calls “home.”

Hospice Care Payment

- Medicare and Medical Assistance
  - Hospice care is paid per diem (paid a set amount per day, varies from county to county)
- Private insurances
  - Coverage varies, but most offer a hospice benefit

What Hospice Provides

- As part of per diem payment, hospice is responsible for items related to the palliation and management of the terminal illness and related conditions. Typically:
  - Medications
  - Wound care supplies
  - Durable Medical Equipment
  - Miscellaneous (blood transfusion, dialysis - goal dependent)

Who is Hospice Eligible?

Similar to Pall care dx but prognosis < 6months, consider declining final status, kps-3,pps 4

- ES CHF(NYHA 4,ACC/AHA CLASS D)
- COPD/Pulm Diseases-End Stage
- Neuro-stroke, ALS, MS, dementia(FAST >7A)
- Oncology-Stage 4 Disease

How Hospice Referral Works

- D/W PT and family, pertinent other providers
- Refer to case mgmt for Hospice
- Hospice Liaison determines LOC
- Pall care does not necessarily need to see PT before Hospice (appropriate utilization scarce resources

Case 2

- 81 yo F End Stage Multiple Sclerosis (40yr Hx) on pall care at local SNF
- Overall decline, also with brittle diabetes
- Risk/benefit meds – titrated (blood sugar in 20's)
- Pt w/nerve pain, depression
- Duloxetine started, quality of life improving
- Education provided to patient daughter
- Pt enrolled in Hospice care at SNF w/improved symptom mgmt

Levels of Hospice Care

- Routine Home Care
  - Regular visits made by Hospice team members; provided in the home setting
- Continuous Care (billed hourly)
  - For patient symptom management only – cannot be used for caregiver breakdown
  - 51% of the service must be RN/LPN level
  - Social work/counselor does not count towards the time

Levels of Hospice Care, cont.

- Respite
  - For caregiver relief
  - A five-day stay at a contracted facility
- General Inpatient
  - Admission to a hospital or inpatient Hospice unit for symptoms that cannot managed at home
  - Short stay to get patient controlled and home
  - An actively dying patient does not automatically qualify for this level

General Inpt Hospice

- Highest level of PT Care
- Highest Reimbursement
- Highest OIG scrutiny
- Should be ~3% of any hospice total days/census
- “Symptoms that cannot be managed in any other venue”
- If not GIP appropriate, we generally offer routine LOC
- Focus should not be improving O/E morality
- Markedly beneficial to PT and families when used appropriately

Residential Hospice Care

- Home, SNF's, ALF's, ILF's, etc.
- Should be the majority of Hospice Care (ie 97%)
- Multi-disciplinary care at home (CNA, RN, SW, Chaplain, MD, NP)
- Care at "home" focus on QOL
- Focus on appropriate utilization of services

General Inpatient Hospice Care

- Also known as GIP
- Based on symptoms, strictly regulated by CMS
- Improved patient and family EOL care (including bereavement care for family)
- Increased awareness of Hospice services
- Expanding spectrum of services that hospitals provide

Hospice Team Members

- Core
  - Hospice Medical Director/Attending Physician
  - Hospice Nurse
  - Hospice Social Worker
  - Hospice Spiritual Counselor/Bereavement Counselor
- Support Service
  - Hospice Aide/Homemaker
  - Patient Care Volunteer
  - Physical, Occupational, or Speech Therapist (as appropriate)

Which One Should I Choose?

- Depends on where you/your loved one is on the disease trajectory
- Talk to your family and doctor sooner rather than later about your wishes, options (Conversation Project, Five Wishes, NHPCO Connections)
- Goal dependent - ie Hospice better at avoiding hospitalization, more encompassing family support

5. Is Hospice and Palliative Care Equitable?

- Studies suggest that minorities (African-American, Hispanic-Latino, Asian) less likely to receive palliative + hospice care than whites.
- Hospice data: 78% white (vs. 75% U.S.); 8% A-A (vs. 12.3% U.S.); 6% Hispanic (vs. 12.5% U.S.); 2% Asian (vs.3.6% U.S.); 6.4% multiracial.
- No ethnic-racial data on hospital palliative care consult services

Benefits for hospice care

- Improved pt Quality Of Life
- Less harmful care, non-beneficial care
- Longer lifespan(2007: *Journal of Pain and SymptomManagement; CHF, Breast, colon, lung, pancreatic CA*)
- Decreased hospitalizations

About Us

- Hospice of the Chesapeake & Chesapeake Palliative Medicine is a not for profit community based Hospice & Palliative Care organization started in 1979. We serve Anne Arundel and Prince George's Counties
- Last year we provided Hospice care to over 3000 patients in AA & PG Counties; we provided Palliative Care to more than 350 patients

“PEARLS”

- HAVE EMPATHY
- REFER “EARLY”
- PRIMUM NON-NOCERE
- FOREST FOR TREES
- BE AWARE OF TRANSFERENCE/COUNTERTRANSFERENCE
- THIS IS A TEAM SPORT,INVOLVE YOUR TEAMMATES
- RISK VS BENEFIT
- DON’T FORGET SELF-CARE
- YOU ARE THE FUTURE AND THE FUTURE IS NOW!

PALLIATIVE CARE AND SYMPTOM MANAGEMENT

PALLIATIVE CARE PERSPECTIVE

- Empathy: The ability to understand the feelings of another

Palliative Care

- Care given to improve the quality of life of patients who have a serious, chronic or life-threatening disease.
- The goal of palliative care is to prevent or treat as early as possible the symptoms of a disease, side effects caused by treatment of a disease, and psychological, social, and spiritual problems related to a disease or its treatment.
- In short, symptom management, regardless of where the patient is in the disease process utilizing a biopsychosocial approach

DIFFERENTIATION

- Hospice: If the disease follows the expected course, a prognosis of six months or less(patients often referred late)
- Palliative: Symptom focused care anywhere throughout the disease spectrum, can be delivered in conjunction with curative care

Why Palliative Care?

- Aggressive measures for control of pain and other distressing symptoms
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- Interdisciplinary team of caregivers, participating in holistic care of patient and family

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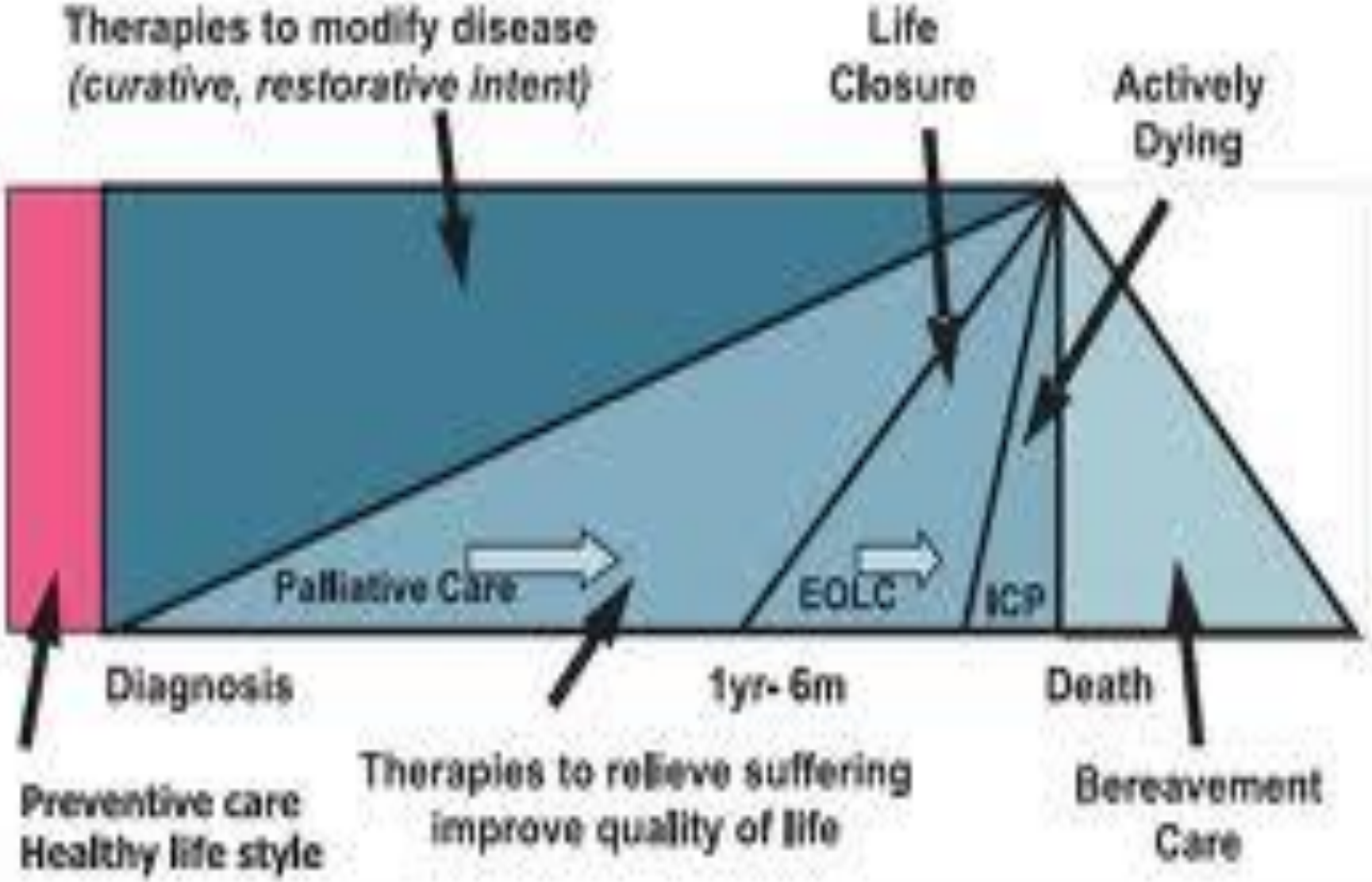
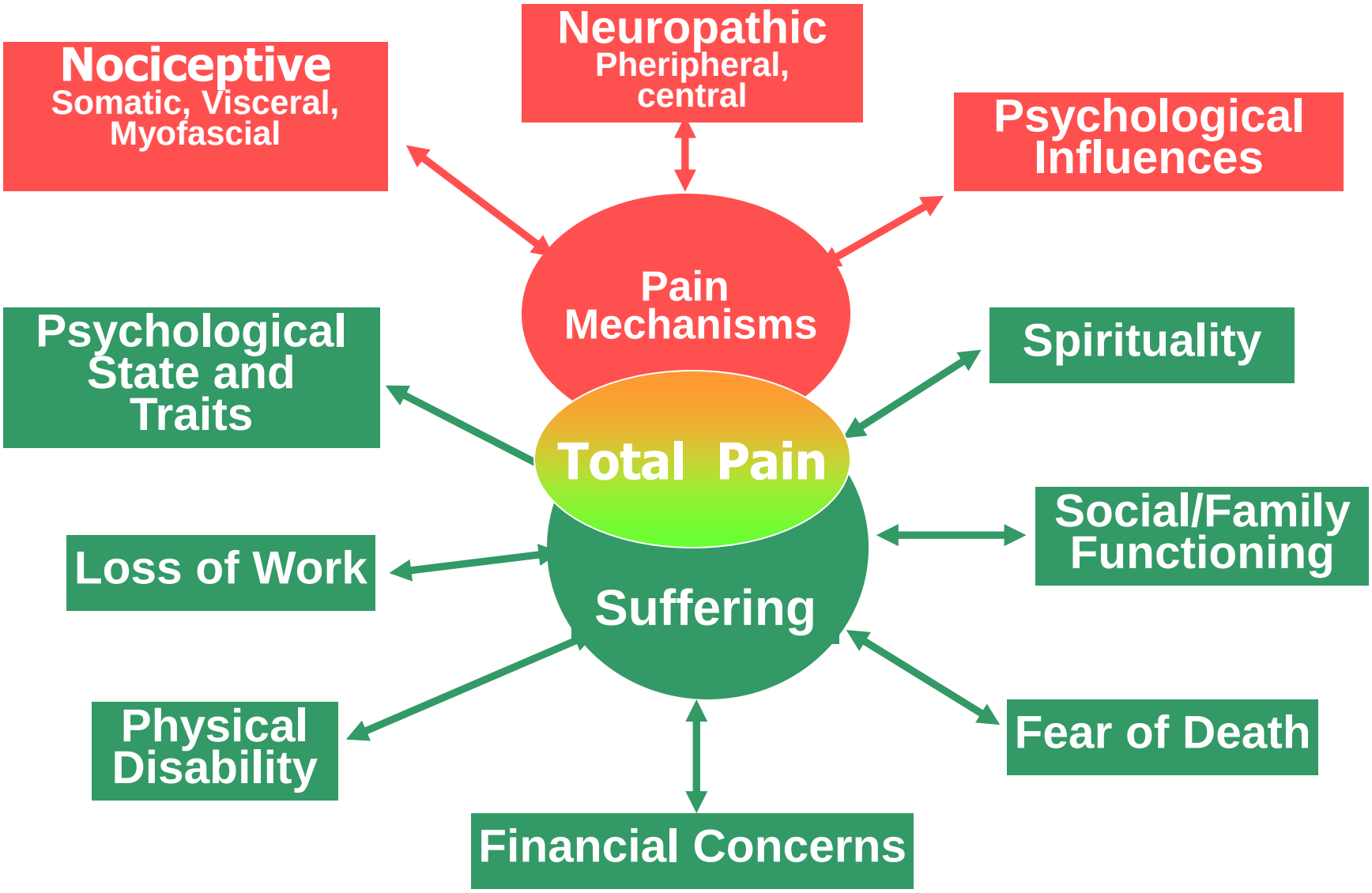


Basic concepts in palliative Care - Pain Mgmt

- Pain: An unpleasant sensation that can range from mild, localized discomfort to agony. Pain has both physical and emotional components

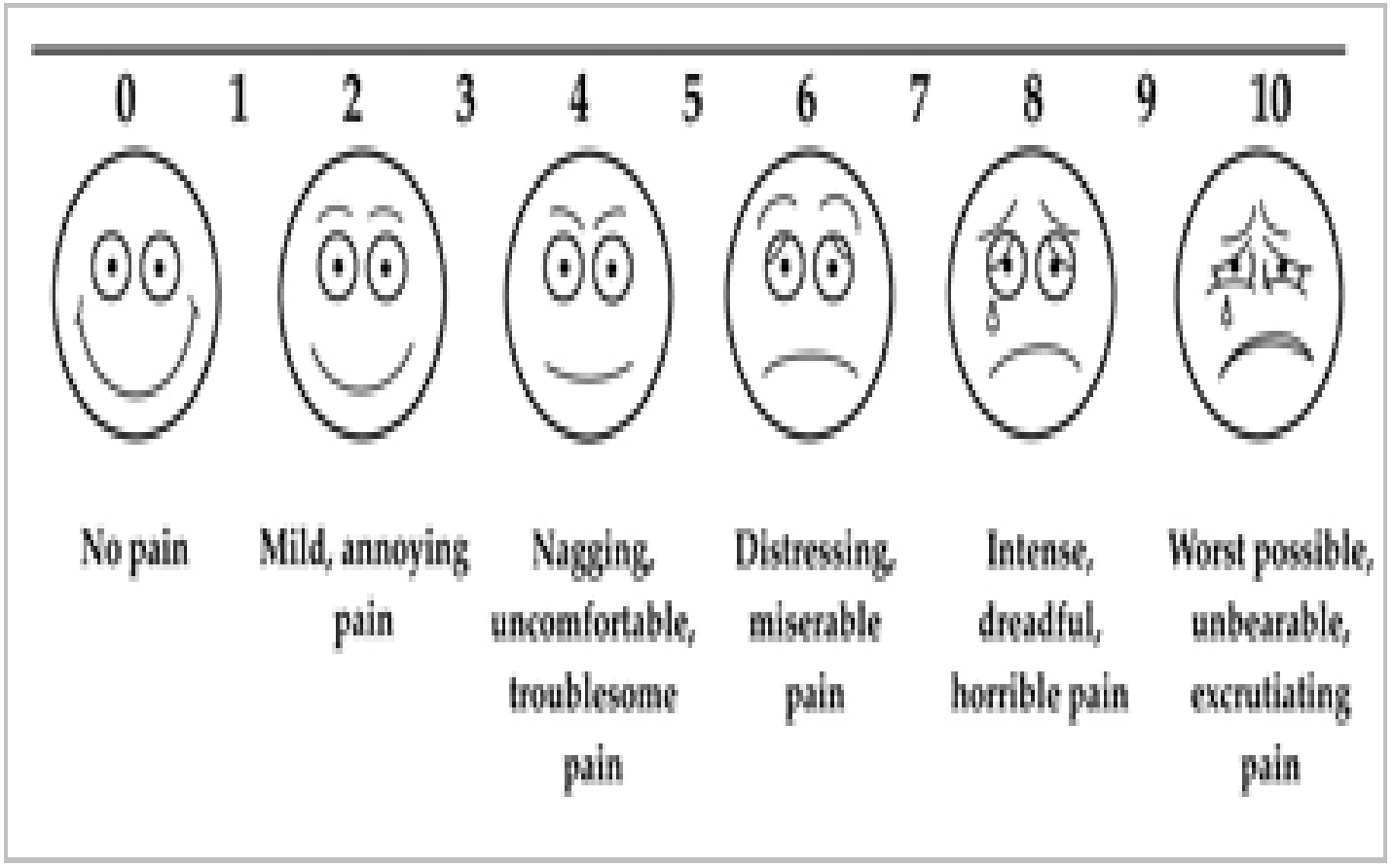
Nature of Pain



ASSESSMENT

- Vital role of nursing in pain and symptom management
- Under appreciated resource
- Goal of assessment and appropriate pain management is to restore functionality

VAS w/Wong-Baker



Pain Assessment (Non-verbal)

- CNVI/CNPI Pain Scale w/Move At rest
- Nonverbal vocalizations:* :*
- Facial grimaces/winces :* :*
- Bracing :* :*
- Restlessness :* :*
- Rubbing :* :*
- Vocal complaints :* :*
- Pain score (0-12)=

Functional Pain Scale

- Functional Pain Scale-adapted from Gloth et al
- 0 No Pain
- 2 Tolerable (Doesn't interfere with activities)
- 4 Tolerable (Interferes with some activities)
- 6 Intolerable (Able to use phone, TV, or read)
- 8 Intolerable (Unable to use phone, TV, or read)
- 10 Intolerable (Unable to verbally communicate)

Alberta Health Services

Covenant Health

Edmonton Symptom Assessment System:
(revised version) (ESAS-R)

Please circle the number that best describes how you feel NOW:

No Pain	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Pain
No Tiredness *(Tiredness = lack of energy)*	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Tiredness
No Drowsiness *(Drowsiness = feeling sleepy)*	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Drowsiness
No Nausea	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Nausea
No Lack of Appetite	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Lack of Appetite
No Shortness of Breath	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Shortness of Breath
No Depression *(Depression = feeling sad)*	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Depression
No Anxiety *(Anxiety = feeling nervous)*	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Anxiety
Best Wellbeing *(Wellbeing = how you feel overall)*	0	1	2	3	4	5	6	7	8	9	10	Worst Possible Wellbeing
No _____ Other Problem *(for example constipation)*	0	1	2	3	4	5	6	7	8	9	10	Worst Possible _____

Patient's Name _____

Date _____ Time _____

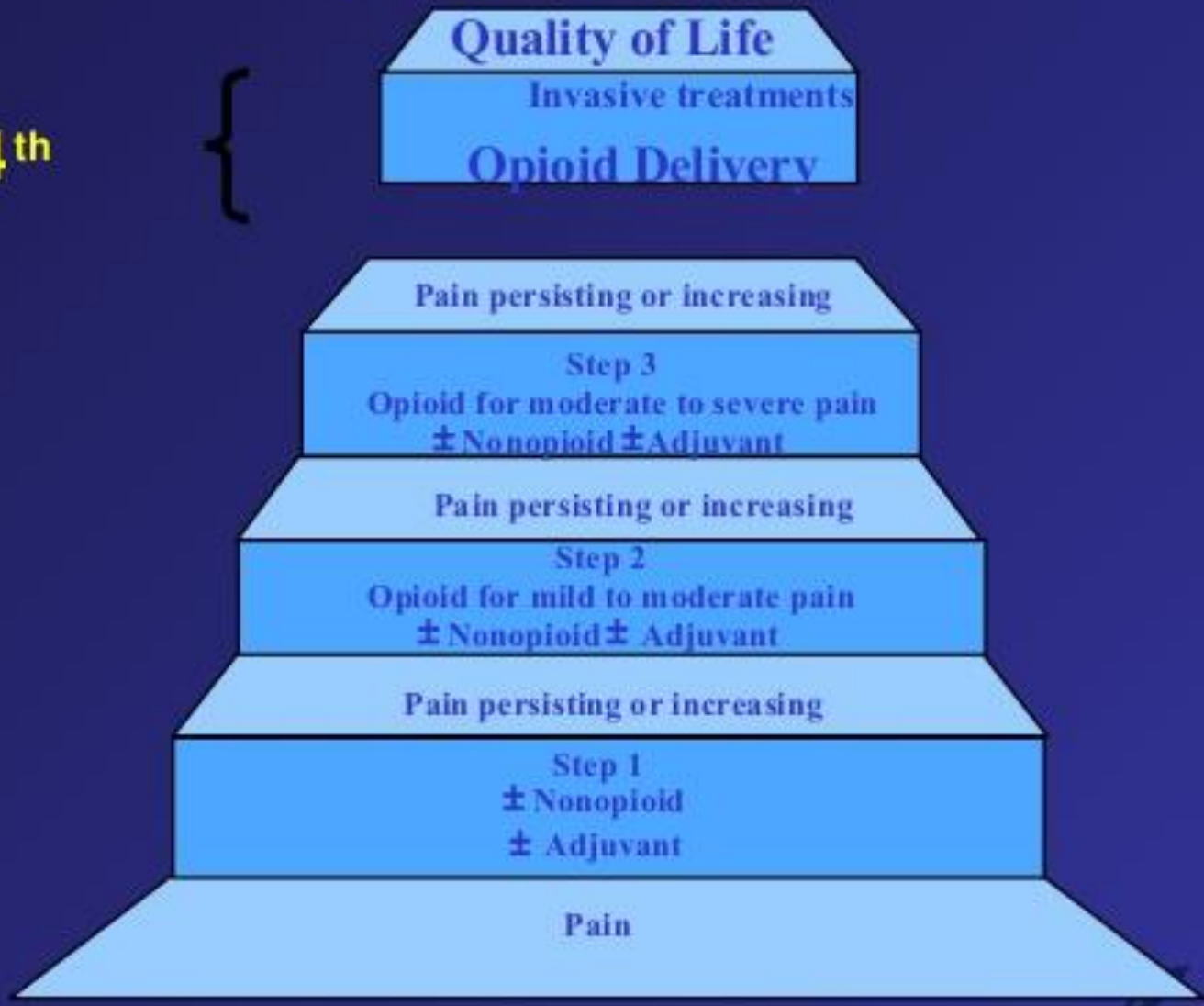
Completed by (check one):
- ☐ Patient
- ☐ Family caregiver
- ☐ Health care professional caregiver
- ☐ Caregiver-assisted

BODY DIAGRAM ON REVERSE SIDE

Modified WHO Analgesic Ladder

Proposed 4th Step

The WHO Ladder



Deer, et al., 1999

POLYPHARMACY NIGHTMARE

Avoid the 31 Flavors of Baskin Robbins approach ***for all symptoms:***

- *Stick to the basics.* The basic principle is to titrate one agent to effectiveness or side effect, before introducing a second agent. Use 1 long acting and 1 short acting opiate.
- *Explore the possibilities:* Investigate etiology of pain. Consider complementary approaches. Use opioid sparing adjuvants.

CONCEPT

- DOME
- Daily Oral Morphine Equivalence
- Codeine and meperidine should be avoided

Opioid Prescribing and Equian				
Generic (Brand)	**Onset (O) and Duration (D)**		**Approximate Equianalgesic Dose**	
	Oral	**IV**	**Oral**	**IV**
Morphine (MSIR®) [CII]	O: 30-60 min D: 3-6 h	O: 5-10 min D: 3-6 h	30 mg	10 mg
Morphine extended release (MS Contin®) [CII]	O: 30-90 min D: 8-12 h	—	30 mg	10 mg
Hydromorphone (Dilaudid®) [CII]	O: 15-30 min D: 4-6 h	O: 15 min D: 4-6 h	7.5 mg	1.5 mg
Hydrocodone/APAP 325 mg (Norco 5, 7.5, 10®) [CII] Hycet (7.5 mg/325 mg per 15 mL)	O: 30-60 min D: 4-6 h	—	30 mg	—
Fentanyl [CII] (Sublimaze® Duragesic®) *Patch for opioid tolerant patients ONLY*	Transdermal O: 12-24 h D: 72 h per patch	O: immediate D: 30-60 min	—	100 mcg (0.1 mg)
Methadone (Dolophine®) [CII] *Opioid tolerant patients ONLY*	O: 30-60 min D: >8 h (chronic use)	—	Variable	Variable
Oxycodone 5, 15, 30 mg (Roxicodone®), Oxycodone 5, 7.5, 10 mg/ APAP 325 mg (Percocet®), ER=Oxycontin® [CII]	O: 10-15 min D: 4-6 h	—	20-30 mg	—
Tramadol (Ultram®) [CIV] ^	O: 1 h D: 3-6 h	—	300 mg	—

^ Not recommended in nursing mothers.

Equianalgesic Opioid Dosing

	Equianalgesic Doses (mg)	
Drug	Parenteral	Oral
Morphine	10	30
Buprenorphine	0.3	0.4 (sl)
Codeine	100	200
Fentanyl	0.1	NA
Hydrocodone	NA	30
Hydromorphone	1.5	7.5
Meperidine	100	300
Oxycodone	10*	20
Oxymorphone	1	10

Onset of Action

- IV opioids: 5-15 minutes
- Oral opioids: 45-60 minutes
- Transmucosal (fentanyl): 20-30 minutes

METHADONE-BENEFITS

Mu agonist, synthetic opioid:

- Has two non-opiate analgesic receptor activities:
  - Prevents MAO reuptake in periaqueductal gray
  - Prevents N-methyl-d-aspartate (NMDA) receptors
- Lacks neuroactive metabolites
- High bioavailability (79 +/-11 hours)
- Long half life (30 +/- 16 hours)
- Highly lipophilic
- Fecal excretion-safe in ESRD
- Very inexpensive

METHADONE

When converting to Methadone:

- Assess the appropriateness of converting in the home
- Educate to side effects and responses
- Process takes 3-5 days to reach full therapeutic effect
- Breakthrough dosing with another opioid is imperative for transition
- Know the assessment findings that indicate overdose or under dosing

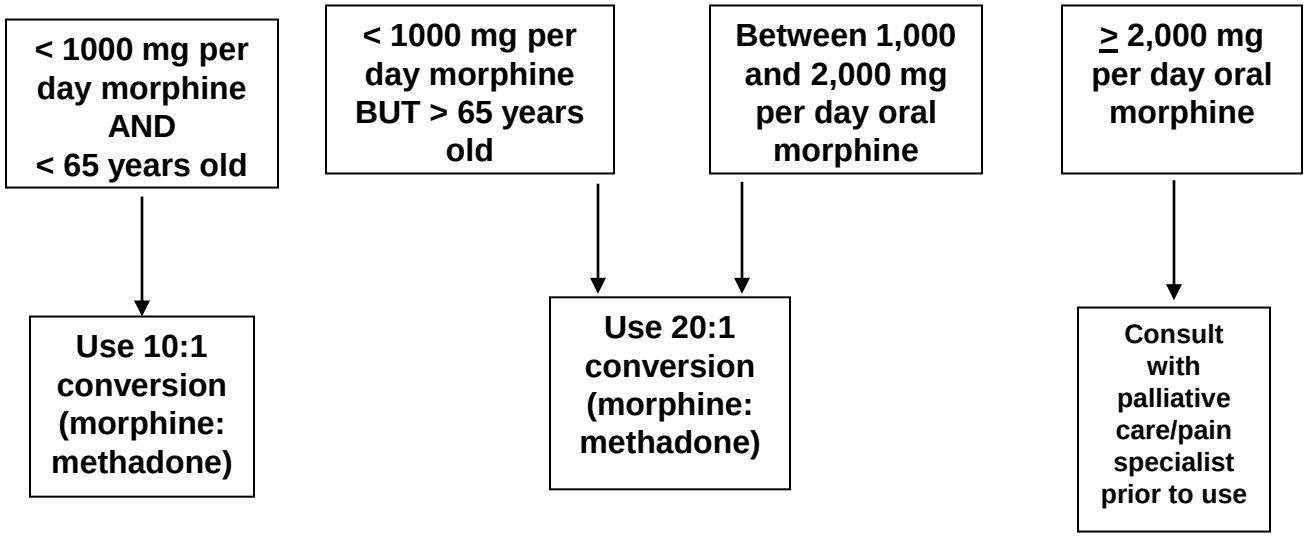
Methadone Precautions

- Lack of caregiver(s) to monitor the patient
- Very limited prognosis
- Increased risk of QT prolongation in patients with known bradycardia or heart failure, patients with hypokalemia or those taking drugs which potentiate QT prolongation.
- Patients with OSA, hypercarbia.

METHADONE DOSES

- Initial dose for opioid naïve patients: 1-2.5mg at bedtime or twice a day
- Use their previous opioid or morphine for breakthrough pain
- With careful oversight, can use methadone for breakthrough(rare) in case of allergies etc..
- IV Methadone is twice as potent as oral

CONVERSION FROM MORPHINE TO METHADONE



FENTANYL PATCH

It isn't for everyone:

- Generally not for beginners. Patient must be opioid tolerant to the minimum equivalent of Morphine 50-65 mg/day, to be able to tolerate 25 mcg of Transdermal Fentanyl . No they can't be cut in half or use prn.
- Need a little fat for the patch. It's a lipophilic agent requiring adequate adipose tissue to facilitate absorption into fatty subcutaneous molecules.
- Not good for a quickie. It takes 12-24 hours for onset of action, not appropriate for acute or emergent pain management.
- Keep it cool. Fever/External heat (102-104^{o}) can increase absorption
- Generally, doubling the strength of the patch will give you the DOME(Daily Oral Morphine Equivalents). For example, a 25 mcg patch will provide approximately 50***mg*** of oral morphine equivalents per day(please see fentanyl patch manufacturing info/package insert for exact dosing prior to prescribing).

OPIOIDS ARE INCREASED BUT NO PAIN RELIEF IS IN SITE.....

What type of pain is the patient experiencing?

- Somatic, Myofascial, Neuropathic
- Has the pain changed in quality-important in differentiating acute on chronic
- Total body pain
- Emotional suffering/depression-pay attention to pt affect
- Anxiety

PCA Pitfalls

Your patient is getting sleepier and sleepier:

- Is the patient opioid naïve and receiving basal and bolus dosing at the start?
- Is someone other than the patient using the bolus button?
- Is the prescriber increasing the basal rate in response to the patient's persistent complaints of pain?
- PCA to oral
- Does the patient need a long-acting opioid?
- Will prn dosing only provide adequate coverage?
- The pump is off-when should the new regimen start?
- The bolus button becomes a Xbox(Nintendo etc) game(anxiety)*Attempts verses Doses received*
- Continuous opioid infusions even at end of life should only be started once patient has "failed" appropriate titration of ATC parenteral opiates

Important Definitions

- Addiction-characterized by *aberrant behaviors*
- Physical Dependence-need for a substance to function
- Tolerance-requiring increased dose of substance to experience expected effects
- Opioid Naïve-<30mg DOME
- High Dose Opiates->90mg DOME

SABOTAGING SIDE EFFECTS

CNS: drowsiness, confusion, hallucination

- The dose of opioid is excessive
- The pain is not opioid responsive
- Conversion from one opioid to another was done incorrectly
- Other concomitant sedatives being prescribed(most commonly benzos)

Respiratory Depression

- Excessive opioid dose in naïve patient
- Can occur if dosing persists in face of sedation

CASE 1

- 43 YO M WITH 1 YR C/O “DYSPNEA”(2012-2013)
- NON-SMOKER
- FORMER MILITARY
- LEFT CW PAIN
- MARRIED, 1 ADULT SON W/SPECIAL NEEDS
- ER CT SHOWED LT LUNG MASS
- VATS COMPLETED PATH C/W STAGE 4 NSCLC
- PAIN 8/10 “SHARP,STABBING”
- WHERE DO WE GO FROM HERE

CASE 1 (CONTINUED)

- Gabapentin+IV Ketorolac+IV Hydromorphone Immediate Post-op
- Chemo/RT
- Convert to po dilaudid prn btp prior to d/c, continue and titrate gabapentin,venlafaxine added for depression
- Patient continues to f/u oupt pall care(5yrs later), remains on gabapentin,venlafaxine, “medical marijuana” & crizotinib with good qol

CASE 2

- 72 yo F consulted for acute on chronic LBP
- Initial admit for CHF exacerbation, deconditioning
- Pt with long h/o chronic LBP, s/p spinal cord stim placed at JHU ~5yrs ago
- Given gabapentin at hs and po oxycodone/acetaminophen prn
- Little improvement in pain
- Extremely flat affect

CASE 2 (CONTINUED)

- Pt queried wrt depression
- Dgtr died earlier this month from CA
- Son died almost exactly 1 yr previously from AMI
- Pt w/insight into somatization of depressive features/normal grief process
- Declined additional anti-depressant tx
- Opted to embrace current coping skills (religion, denial)
- Dx-Unresolved/complicated grief

CASE 3

- 52 yo m physician w/widely metastatic prostate ca
- Chemo 1 wk PTA
- Severe pain,dyspnea
- Seen on bipap in ICU,teenage son at bedside
- Taking Oxycontin 80mg po q6h atc with Oxy IR 30mg po q4h prn for BTP

CASE 3 (CONTINUED)

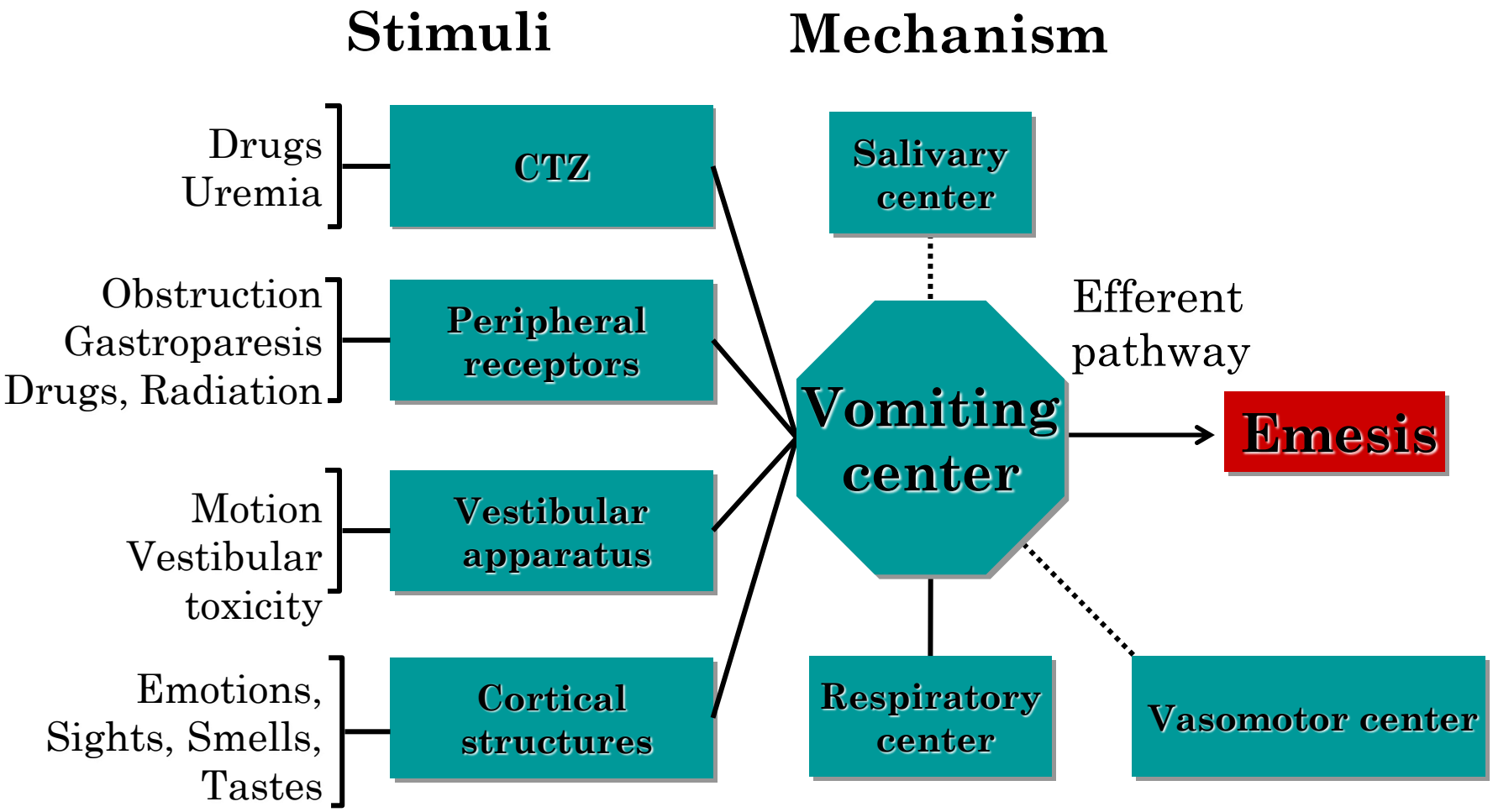
"Physician know thy self"

- Establish goals of care("break the ice if needed")
- Do not take hope away but be realistic
- Discuss risks and benefits(we ALL have them)
- Establish a clear plan and objectives
- Calculate DOME as a starting point(convert to hydromorphone PCA Basal 1mg/hr,bolus 0.5mg q6min)
- Use adjuvants(Dexamethasone 8mg IV BID)
- Know the therapeutic index prior to making changes
- Use adjuvants aggressively when possible

NAUSEA

- Definition-stomach distress with a distaste for food and an urge to vomit

NAUSEA & VOMITING



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ANTI-EMETIC THERAPY

- CTZ
  - Serotonin antagonists *5-HT3*
  - (Ondansteron, granisetron)
- Peripheral and Cortical
  - Corticosteroid
- Benzodiazepine
  - Lorazepam
  - *S/E sedation*
- Butyrophenone
  - Haloperidol
  - *S/E tardive dyskinesia, arrthymias, hypotension*
- Dopamine antagonist
  - *D2*
  - Metoclopramide
  - *S/E seizures, tardive dyskinesia*
- Cannabinoid
  - *Blocks VC*
  - Dronabinol /Nabilone
  - *S/E alt sensorium, anxiety, mood disturbance*
- Anti-convulsant
  - *Taste related nausea*
  - Clonazepam
  - *S/E drowsiness, ataxia*
- Anti-histamine
  - Meclizine,scopolamine
  - *S/E tachycardia, dry mouth*

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Complementary Therapies

- Acupressure bands(“Sea Bands”)
- Acupuncture
- Avoid triggers
- Environment
- Music toning
- Relaxation, imagery, diversion therapy
- Meditation
- Hypnosis
- Psychosocial support

CASE 4

- 38 yo M with Stage III Laryngeal CA
- Recent completion of cisplatin
- Undergoing RT
- Persistent N/V
- Has PEG tube
- No recent BM's
- Where do we go from here?

CASE 4 (CONTINUED)

- Metoclopramide 5mg IV q6h ATC with titration upward to 10mg IV q6h ATC
- Nausea improved, now w/emesis without preceding nausea, scopolamine patch added
- MRI brain ordered-negative for CNS/cerebellar mets
- 2nd scopolamine patch added, & reglan titrated up to 10mg IV q4h ATC with adequate symptom control-subsequent med conversion to liquid via PEG and d/c home

CONSTIPATION

- Constipation is defined as having a bowel movement fewer than three times per week

Back-up on the GI Beltway: Constipation

- Opioids, anticholinergics, antispasmotics, antidepressants, antipsychotics, antiemetics, aluminum antacids, diuretics, iron, vinca alkaloids
- Hypercalcemia, hypokalemia
- Dehydration, polyuria, fever, vomiting
- Inadequate fluid & fiber intake
- Immobility
- Lack of privacy & bowel training
- Autonomic neuropathy/failure
- Bowel ileus or obstruction
- Spinal cord involvement
- Hemorrhoids, anal fissure, perianal abscess
- Radiation fibrosis
- Intracolonic or pelvic tumor mass

TREATMENT

Step 1: Preventative/Maintenance Regime

Stool softner & stimulant

Docusate Sodium/casanthranol

Docusate Sodium/Sennosides

** *abdominal cramping, colic, diarrhea, nausea, vomiting*

Step 2: If no bowel movement in 48 hrs

Hyperosmotic Agents or Laxatives

Lactulose, Poly-ethylene-glycol, Sorbitol

Milk of magnesia, Bisacodyl

** *abdominal distention, pain, flatulence, electrolyte disorders*

TREATMENT

Step 3A: If no bowel movement in 3-4 days

- *Rapid-acting Laxative*

Note: *Administer only in the presence of active bowel sounds & in the absence of rectal fecal impaction, vomiting, severe abdominal cramping*

- Magnesium citrate, Mineral oil 30-60 ml
- ** *malabsorption of fat soluble vitamins, electrolyte disturbance*

Step 3B: if no bowel movement in 3-4 days *Fecal Impaction*

- Pre-treat with analgesia or mild sedative
- Soften stool with glycerin suppository or oil retention enema
- Manually disimpact stool, while encouraging relaxation deep breathing techniques
- Follow with SSE or tap water enemas until clear
- Offer sitz bath, or apply warm compresses, Tucks pads or local anesthetic ointment

PHARMACOLOGIC TREATMENT

- Prokinetic agent:
  - Metoclopramide 5-10 mg QID
  - Erythromycin 250mg IV BID
- Opioid Antagonist
  - Naloxegol
  - Methylnaltrexone
  - Naloxone
- Opioid rotation to lipophilic agent
  - Fentanyl or Methadone

CASE 5

- 46 yo F with Stage 4 Cervical CA
- Cachexia, declining fxnal status
- On opiates as outpt
- Scant BM x 5 wks PTA
- Abd distention and pain
- How do we proceed?

CASE 5 (CONTINUED)

- D/C prn IV hydromorphone with change to Fentanyl PCA
- Initiate adjuvants for pain(gabapentin)
- Metoclopramide 5mg IV q6h ATC with upward titration to 10mg IV q4h ATC
- GI involved mult enemas given, mult scopes performed to try and resolve impaction
- Surgery on board in case of perforation
- Methylnaltrexone given subcut mult times with some results

DYSPNEA

- The *subjective* sense of breathlessness or smothering.

BACKGROUND

- Dyspnea is the primary complaint of patients with advanced lung or heart disease.
- 94% of patients with chronic lung disease experience dyspnea in the last year of life.
- In SUPPORT (Study to Understand Patient Preferences and Outcomes of Treatment), “serious dyspnea” was far more common (66%) than “serious pain” (25%).
- These investigators reported that patients with COPD were more likely to die with poor control of dyspnea than patients who had lung cancer.

PRINCIPLES

- The experience of dyspnea includes sensory (how severe is it?) and affective (how unpleasant is it?) components.
- Based on a neurophysiological model, breathlessness is thought to be similar to the perception of pain.
- ACCP Statements based on dyspnea that persists at rest or with minimal activity and is distressful despite optimal therapy of advanced lung or heart disease.

ACCP Position

- Patients with advanced lung or heart disease should be asked about the intensity and distress of their breathlessness.
- Pursed-lips breathing, relaxation, oxygen for those with hypoxemia, noninvasive positive pressure ventilation, and oral/parental opioids can provide relief of dyspnea.
- Therapies should be started with the understanding that the patient and clinician will reassess whether the specific treatments are relieving dyspnea without causing adverse effects.
- It is important to communicate about palliative and end-of-life care.

Pt Presentation

- Shortness of breath
- Breathlessness
- Smothering feeling
- Suffocation
- Present at rest
- Worsened by activity

DIAGNOSIS

- Self-report is the key to detecting dyspnea & appreciating the severity of dyspnea.
- Blood gas, oxygen saturation, and respiratory rate do not substitute for patient's self assessment and report of dyspnea.

Goal of Treatment

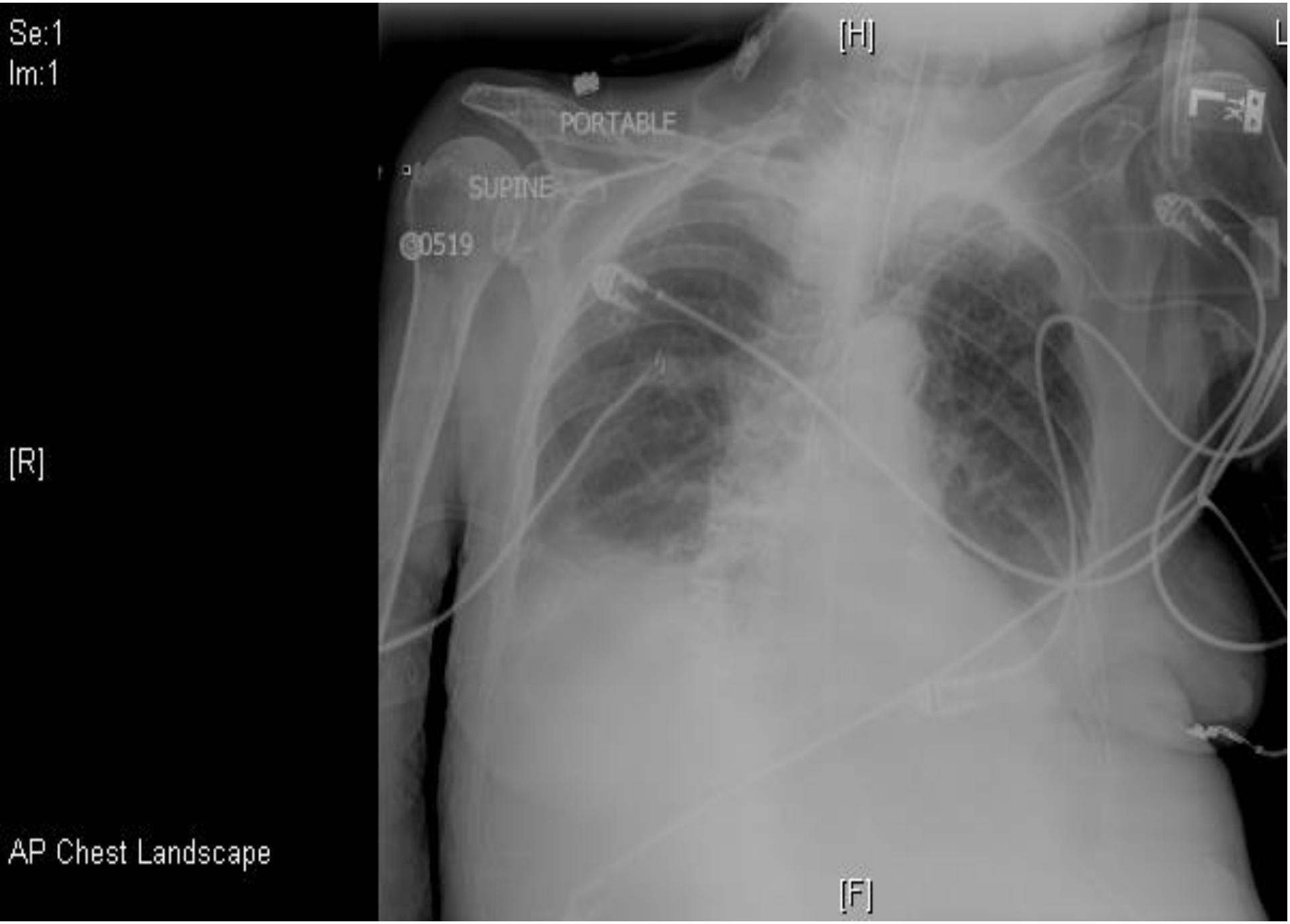
- Should be to improve the patient's subjective sensation rather than trying to modify any abnormality in blood gases or pulmonary function
- *Primum non nocere* - avoid suctioning and other traumatic interventions when possible, start low doses of medications in naïve individuals and titrate appropriately

Patient Case 6

- 86 yo F with CHF
- UTI subsequent hypotension
- Dyspneic and “anxious”

PATIENT CASE 6 (CONTINUED)

- Pt on NRB
- Agitated, dyspneic ,tachypneic, pooling oropharyngeal secretions
- On TPN, with inc wt and dec albumin
- B/L Crackles, poor aeration
- Pt AMS, poor historian, non-verbal cues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TREATMENT

- Address goals of care
- Continue O2 (but remove mask when possible)
- Diurese
- Decrease fluid burden (d/c TPN and IVF)
- Start low dose opiates (ie; Morphine 2mg IV q4h ATC with titration for dyspnea - when goal is comfort, do not hold for parameters such as BP etc)
- Scopolamine patch 1.5 mg top q72 for secretions

AGITATION/ANXIETY IN DEMENTIA

- Agitation/anxiety - a moving back and forth or with an irregular, rapid, or violent action; a feeling of worry, nervousness, or unease, typically about an imminent event or something with an uncertain outcome
- Prevalence 60 to 90 percent of patients
- Both typical and atypical antipsychotics carry ***negative mortality benefit(ie increase risk for earlier death)***
- Interventions - remove/treat exacerbating cause if possible(UTI,PNA etc), provide supportive ,caring environment, avoid physical restraints, use pharmacologic interventions selectively; if antipsychotics absolutely necessary use low dose preferably via SL route(ie Haloperidol 1mg sl q4h prn)

CASE 7

- 90 yo m with ES dementia (FAST 7A) well cared for at home, acute/chronic
- UTI-TX w/ceftriaxone
- Agitation persists in spite of TX environment
- 24 Hr sitter
- Start Valproic Acid Sprinkels 125mg PO Q6H, ATC w/ improvement in behavior

TAKE HOME POINTS

- *Primum non-nocere (First do no harm)*
- Risk/benefit ratio changes as patients goals of care change
- Palliative care can lengthen lifespan and enhance QOL
- Evaluate the whole patient (look for congruent vs discordant non-verbal cues).
- Maintain your own well-being and appropriate boundaries

KNOWLEDGE CHECK

- Palliative care is the same as Hospice Care T/F
- Morphine is the strongest opiate T/F
- Hydromorphone, Methadone & Buprenorphine are strong opiates T/F
- Dyspnea is defined by Pulse Ox T/F
- Agitation in dementia is best treated with non-pharmacologic interventions
  T/F

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APPENDIX

Onset of Action - Pg 71: Notes

- The 1992 Agency for Health Care Policy and Research CPG states that pain should be reassessed:
  1. Within 30 minutes of parenteral drug administration
  2. Within one hour of oral drug administration
  3. With each report of new or changed pain
- However, these recommendations pertain to the reassessment of acute pain in an acute care setting.
- Multiple factors determine the appropriate frequency of pain reassessment, including characteristics of the pain (eg duration, severity), patient factors and needs, the clinical setting, and pain management plan (ie type of drug or intervention).
- In the outpatient setting, patients should be instructed to report any changes in pain characteristics, side effects of treatment, and treatment outcomes. Periodic reassessment is recommended in patients with chronic pain to evaluate improvement, deterioration, or treatment-related complications.

Nausea & Vomiting – Pg 89: Notes

- The vomiting center coordinates emesis. It is located in the lateral reticular formation of the medulla, adjacent to the structures involved in the coordination of vomiting (cranial nerves VIII and X and the vasomotor, respiratory, and salivary centers).
- Vomiting results from the stimulation of a multistep reflex pathway controlled by the brain. It occurs when efferent impulses are sent from the vomiting center to the salivation center, abdominal muscles, respiratory center, and cranial nerves.
- There are many stimuli that can contribute to poorly controlled emesis in patients receiving complex, multiday chemotherapy.
- Some of these stimuli, such as motion, uremia, smells, or tastes, act centrally in the brain to stimulate the vomiting center.
- Others, such as gastroparesis and radiation, primarily interact peripherally by stimulating afferent impulses from the gut to the vomiting center.
- Chemotherapy drugs stimulate emesis both centrally and peripherally.

Anti-Emetic Therapy – Pg 90: Notes

- Corticosteroids are widely used to control CINV; their antiemetic mechanism of action is unknown, but it may be mediated through inhibition of prostaglandin synthesis.
- At equivalent doses, corticosteroids have equivalent safety and efficacy and can be used interchangeably. The corticosteroids most commonly studied for use as antiemetics have been dexamethasone and methylprednisolone. Dexamethasone has the advantage of being available in many dosage formulations.
- For acute CINV, corticosteroids (eg, dexamethasone, methylprednisolone) add approximately 20% to 25% to the emetic response rates of cancer patients when given with a serotonin antagonist, compared with using the serotonin antagonist alone. For delayed CINV, dexamethasone and serotonin antagonists appear to have equivalent antiemetic activity.
- Use of corticosteroids in hematologic malignancy patients may be prohibited by treatment protocols either because of theoretical concerns about drug interactions or infection concerns in high-risk patients.
- Often the cancer treatment regimen already includes a corticosteroid, the administration of which should be scheduled close to chemotherapy administration to take advantage of the synergy with serotonin antagonists.

Focus outline-
MANAGEMENT OF NON-PAIN CONDITIONS PART 1

- Management of dyspnea
- Intramuscular antibiotics
- Cancer patient candidates for immunotherapy
- Acute causes of increased CO2/HCO3
- Tailoring laxative use to co-morbidities
- Dietary modification in dysphagia
- Prevalence of hospice referral by diagnostic category(ie cancer, cardiac, neuro etc)

POSTTEST/QUIZ

Please click on the link below to be taken to this activity's quiz. After successful completion, you can then fill out an evaluation and application for CME credit.

Management of Non-Pain Conditions 1