PainWeek

ADVANCED EDUCATION

CERTIFICATION SERIES

Monitoring and Adjusting Analgesic Regimens

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Titles and Affiliations

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Disclosures

Learning Objectives

- Describe the steps in the drug therapy selection and monitoring process
- Differentiate between subjective and objective monitoring parameters for therapeutic effectiveness and potential toxicity
- Given a simulated case of a patient with pain, design a monitoring plan that includes subjective and objective parameters for therapeutic effect and potential toxicity
- Given the results of monitoring a simulated patient with a complaint of pain, adjust the analgesic regimen

Drug Therapy Selection and Monitoring

1. Problem identification and assessment
2. Define the therapeutic objective
3. Identify indices of therapeutic effect
4. Identify available modalities
5. Identify variables that affect drug selection
   - Patient related variables (pre-existing conditions that may alter therapeutic and toxic effects of drug)
   - Drug related variables (efficacy, toxicity, convenience, cost)
6. Select appropriate pharmacologic agent(s)
7. Identify expected/potential toxicities
8. Administer therapy
9. Monitor patient response
10. Adjust regimen as appropriate

1. Problem Identification and Assessment

- Accurate history of present illness
- Physical exam
- Diagnostic studies or imaging (if applicable)
- Risk assessment of substance abuse, misuse or addiction
  - Screener and Opioid Assessment for Patients with Pain (SOAPP)
  - Opioid Risk Tool (ORT)
- Determine likely pathogenesis of the pain

P =
palliative/
precipitating factors
and **p**revious
therapy

Q =
quality

R =
region/**r**adiating

S=
severity

T =
temporal

U =
(YOU!) associated
symptoms,
impact on ADLs

P – Precipitating Factors

- What brings on the pain or makes it worse?
  - Position changes, weight bearing
  - Certain activities, coughing, bowel movements
  - Changes in weather
  - Personal care
  - Light touch

P – Palliating Factors

- What helps relieve the pain (from a nonmedication perspective)?
  - Heat, cold application
  - Position change (standing, lying down, rolling over)
  - Coping strategies (prayer, meditation)
  - Distraction (listening to music, watching TV, looking at photographs)
  - Energy therapy
  - Surgery

P – Previous Therapy

- What methods of pain relief have been tried previously?
  - Medications
    - OTC
    - Prescription
    - Injections
  - Herbal and natural products
- Did you have any side effects?
- How well did they work?

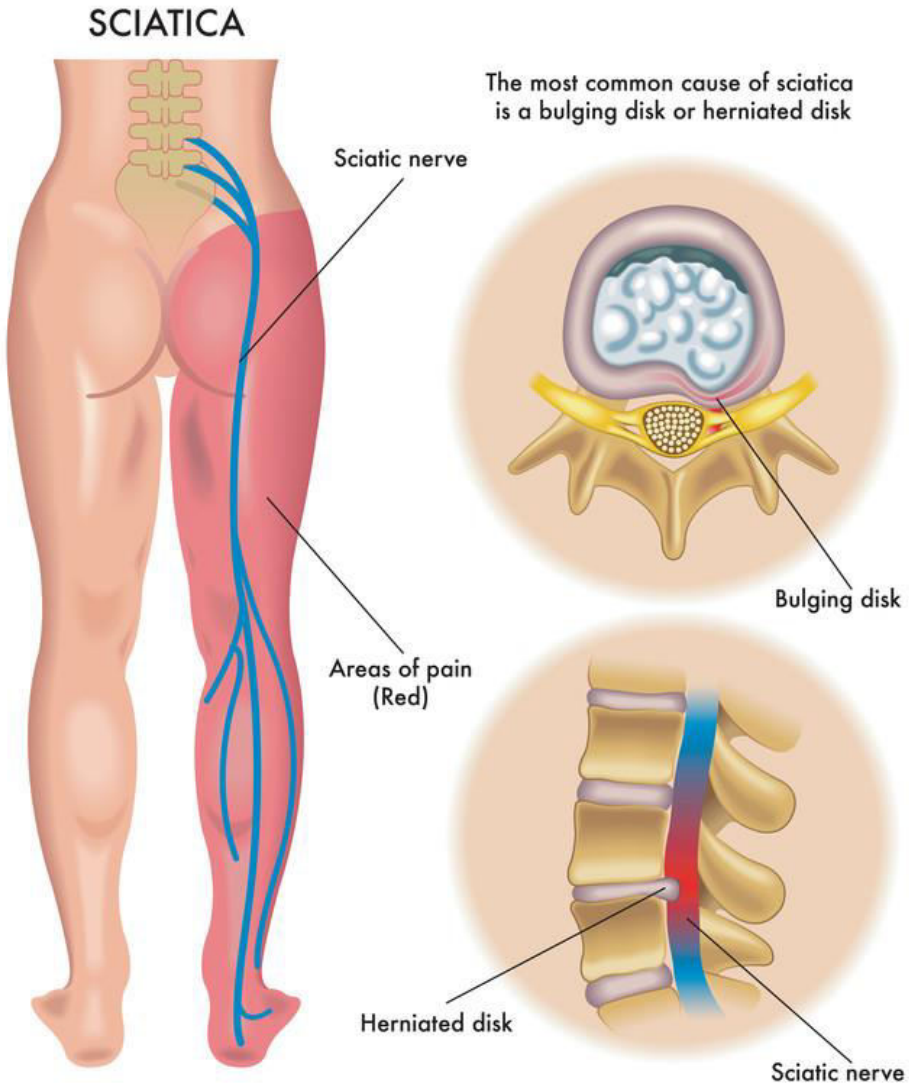
Q – Quality

- What does the pain feel like?
  - Somatic nociceptive pain: aching, deep, dull, throbbing, sharp, well localized
  - Visceral nociceptive pain: diffuse, gnawing, cramping, squeezing, pressure
  - Neuropathic pain: burning, numbness, radiating, shooting, tingling

- Use the patient's own words!
- Don't prompt them with words listed above unless necessary
- Their own description of the pain is often the most helpful in determining the pathogenesis

R – Region/Radiation

- Where does it hurt?
  - Can the patient point to it?
  - Is it localized or referred?
  - Superficial or deep beneath the skin?
- Does it spread or radiate to other areas?
- Does it stay in one place?
- Can the pain be duplicated?
  - Touch, pressure, or specific movements



S – Severity

The most commonly defined element on a given scale

Same scale should be used with each reassessment of the pain

How much does it hurt?

- Pain right now?
- Pain at its worst?
- Pain at its best?
- Pain on average?
- Tolerable pain level?

How does the pain change with activity or rest? Before and after medication administration?

T – Temporal

- Onset
- Duration
- Variation (pain course/changes)
- Frequency
- Patterns (persistent/intermittent)
- Acute vs chronic

U –

You! Associated symptoms: How does pain effect your life

- How does the pain affect:
  - Mood/emotional state
  - Ability to work
  - Activities of daily living
  - Personal relationships
  - Ability to sleep
  - Quality of sleep
  - Appetite

Let’s meet our patient!

- Mrs. DA is a 54-year-old woman who has Stage 4 breast cancer with mediastinal, right axillary node, and bone (rib) metastases
- She has already had three separate courses of chemotherapy and radiation therapy to her breast, mediastinum and right axilla
- She has known soft tissue and lymph node metastases in the right axilla, as well as an esophageal stricture from tumor in her mediastinum
- She has had several esophageal dilations
- On admission to hospice, Mrs. DA tells you she is miserable due to her pain situation

Mrs. DA continues…

- Mrs. DA has a son in the military who is supportive but is often required to be out of town
- She also has a supportive sister, who is a registered nurse, who lives approximately two hours' drive out of town
- Mrs. DA is plagued by concerns – she worries about her ability to cope with her disease as it progresses, and she does not want to be a burden to her family
- She is also concerned about her finances and worries that she may not be able to pay for the nutritional supplements and alternative therapies that her friends have recommended
- She also worries about who will walk her little dog if she gets too weak to continuing doing so

Element	Chest Pain (Anterior)	Right Rib Area
Precipitating	Made worse with eating	Rolling over on her right side, coughing
Palliating	Not eating	Lying perfectly still
Previous Treatment	Acetaminophen 4 g/d; no adverse effects, little perceived benefit	
Quality	Pressure-like	Sharp ache, like “a knife being jabbed into me over and over”
Region/Radiation	Center of her chest, starting at her throat and going straight down	She points directly to her right rib area
Severity	Pain in general 7/10; never better than a 6/10	Pain in general 7/10; never better than a 6/10. Pain can hit a 10/10 when she rolls over on right side
Temporal	Constant	Constant
Associated symptoms	She is not eating well for fear of exacerbating the pain. She is losing weight and says she’s very worried that she’ll be too weak to stay at home alone soon. She can no longer walk her dog, an activity she really enjoyed. She also worries who will take Rover if she should get sicker or die	She’s not sleeping well, afraid to change position, says she’s constantly exhausted and has a very hard time with personal care

Element	Axilla	Arm Pain
Precipitating	Nothing	Nothing she can identify
Palliating	Nothing	Nothing she can identify
Previous Treatment	Acetaminophen 4 g/d; no adverse effects, little perceived benefit	
Quality	Numb and tingling	Electrical shocks
Region/Radiation	Right axilla	Entire right arm
Severity	Constantly a 7-8/10	Hits a 10+/10
Temporal	Constant	Occurs about 10-12 times a day, peaks quickly and lasts about 10-15 minutes
Associated symptoms	Doesn't really impede any activities but the discomfort is very annoying and she worries about the meaning of the pain	Shooting pain leaves her in tears, and she's always dreading the "other shoe is going to drop." If she's holding something in her right hand when the pain hits, she drops it (eg, a coffee mug)

1. Problem Identification and Assessment

- Accurate history of present illness
- Physical exam
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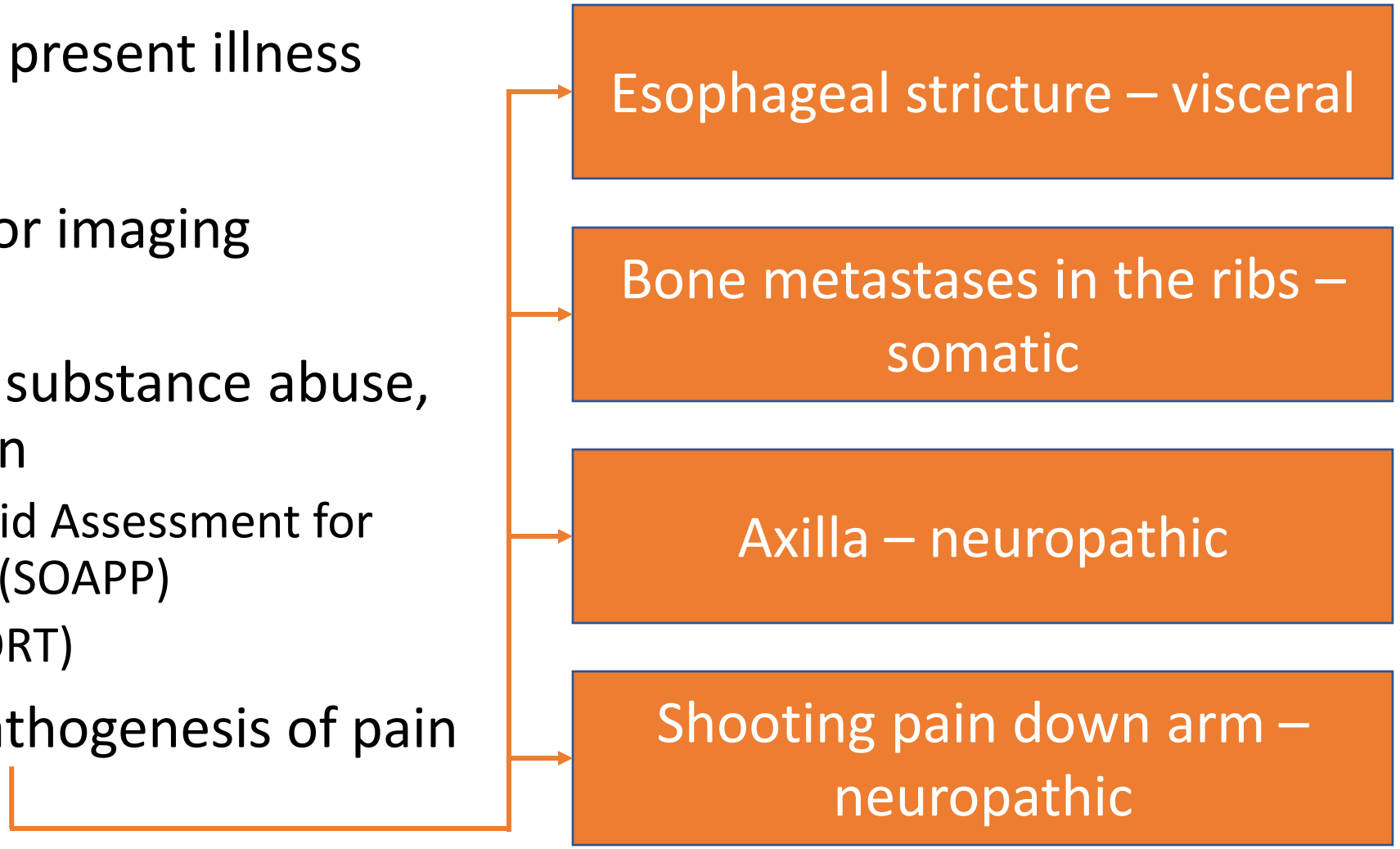
  - Opioid Risk Tool (ORT)
- Determine likely pathogenesis of pain



ORT

- Total score is 1
- Low risk for future opioid abuse
- She has taken Percocet and Vicodin after minor surgical procedures – made her sleepy and she wants to avoid sedation

Opioid Risk Tool

This tool should be administered to patients upon an initial visit prior to beginning opioid therapy for pain management. A score of 3 or lower indicates low risk for future opioid abuse, a score of 4 to 7 indicates moderate risk for opioid abuse, and a score of 8 or higher indicates a high risk for opioid abuse.

Mark each box that applies	Female	Male
Family history of substance abuse		
Alcohol	1	3
Illegal drugs	2	3
Rx drugs	4	4
Personal history of substance abuse		
Alcohol	3	3
Illegal drugs	4	4
Rx drugs	5	5
Age between 16—45 years	1	1
History of preadolescent sexual abuse	3	0
Psychological disease		
ADD, OCD, bipolar, schizophrenia	2	2
Depression	1	1
Scoring totals		

www.drugabuse.gov/sites/default/files/opioidrisktool.pdf.

2. Define the Therapeutic Objective

- Reduce suffering – pain and associated emotional distress
  - Pain ratings (presently, at best, at worst, breakthrough, at rest, with movement)
- Increase physical, social, vocational, and recreational function
- Optimize health
- Optimize psychological well-being
- Improve coping abilities
  - Self-care strategies, reduce dependence on medications
- Improve relationships with others

2. Define the Therapeutic Objective – Pain

- There are TWO parts to the therapeutic objective in treating a complaint of pain!

Severity

- Pain rating goal
- Best, worst, average, at rest, with movement

Functional Status

- What would you like to be able to do that the pain prevents you from doing?

2. Define the Therapeutic Objectives

- **Pain severity rating goal**
  - Patient says if all her pain complaints could be < 5 on average that would be a great start
  - She hopes none of the pains would exceed 6 on a 0-10 scale (at any time – at rest or with movement)
- **Functional goals**
  - Able to eat again without pain; stabilize her weight and maybe regain
  - Able to walk her dog
  - Able to sleep through night and not have the pain wake her up; be less exhausted
  - Improved mood (anxiety, depression)
  - Stop dreading the shooting pain down her arm
  - Stop dropping anything she's holding in her right hand when the pain strikes

3. Identify Indices of Therapeutic Effect

Subjective parameters

- Data are from the patient's point of view ("symptoms") including feelings, perceptions and concerns obtained through interviews

Objective parameters

- Data that are observable and measurable ("signs") obtained through observation, physical examination, and laboratory and diagnostic testing

Subjective vs Objective??

Monitoring Parameters for Therapeutic Effect

	Subjective	Objective
Therapeutic effectiveness	• Pain rating (best, worst, average, at rest, with movement) anterior chest, ribs, axilla, shooting pain • Able to eat more/easily without discomfort/less weakness • Able to walk her dog • Able to reposition in bed more easily/sleep better • Able to hold things in right hand • Less tearful/better mood • Appetite improved	• Weight (regain) • PRN use of analgesic • Observed grimacing, guarding • Number of hours sleeping/night • Objective assessment of affect (anxiety, depression) • Objective assessment of walking (dog) • Objective assessment of oral intake (calories)

4. Identify Available Modalities

- Nonpharmacologic
  - Heat, cold
  - Electrical/energy therapies
  - Rehabilitative therapy (PT/OT)
  - Patient education
  - Reconditioning
  - Cognitive behavioral therapy
  - Pacing
- Interventional
  - Surgery
  - Spinal cord stimulation
- Pharmacologic
  - Nonopioids
    - Acetaminophen, NSAIDs
  - Opioids
    - Short-acting, long-acting
    - Combination product
  - Adjuvant analgesic
    - Gabapentin
    - SNRIs/TCAs
    - Corticosteroid
    - Topical agents
    - Other co-analgesics

What's Mrs. DA thinking?

- Mrs. DA tells you the acetaminophen 4 grams a day is not making any difference at all, but she's afraid to try anything else for fear of "getting hooked"
- Her oncologist states there are no additional viable interventions (chemo, radiation)
- Patient's lab values are all WNL
  (SCr = 0.8 mg/dl; height 5'3", weight 101 pounds)
- Comorbid conditions include seasonal allergies and mild hypertension
  - BP now < 120/80 mmHg and not on antihypertensive therapy

4. Identify Variables for Appropriate Drug Selection

Patient-related variables

- Pre-existing conditions that may alter the expected effects and dosing of the drug that is administered
  - Renal and hepatic function
  - Comorbid conditions
  - Adherence issues
  - Patient age, size, support systems, health literacy, manual dexterity

Drug-related variables

- Cost
- Convenience
  - Dosage forms
  - Dosing schedule
- Efficacy
  - Targets pain
- Toxicity
  - Drug-drug/drug-food interactions

Case Example of Mrs. DA

Patient-Related Variable	Explanation
Patient is unhappy with her pain situation and scores positively on the Beck depression scale	If we are selecting a medication for her neuropathic pain (numb axilla, shooting pain down her arm) some antidepressants are preferred over others to treat BOTH neuropathic pain and depression
Patient has hypertension	When we think of her metastatic bone pain in right ribs, we may consider a steroid or a NSAID. Do they both affect blood pressure?
She lives alone and has to self-manage her medications	Patient is taking analgesics (acetaminophen) throughout the day. From a convenience and cost-effectiveness perspective it would be preferable to use a long-acting analgesic to treat the majority of her pain (but still have a short-acting analgesic for breakthrough pain)
Based on assessment data, we are not using the BEST analgesics to treat her pain	She has neuropathic and somatic pain; opioids are partially effective for BOTH of these types of pain. Acetaminophen will NOT help neuropathic pain. There are better choices (eg, antidepressants/anticonvulsants for neuropathic pain; steroid/NSAID for somatic pain)

Case Example of Mrs. DA

Drug-Related Variable	Explanation
SNRIs and TCAs both treat depression and neuropathic pain.	But we would lean toward an SNRI (venlafaxine or duloxetine) because we really don't use TCAs for depression (risk of toxicity and death with suicide attempts)
Steroids and NSAIDs increase blood pressure	Even though steroids and NSAIDs increase blood pressure, it doesn't completely rule out using these analgesics. At this time her BP is normal and she is not taking any antihypertensive agents
There are short- and long-acting analgesics, and once a day adjuvant agents	• Acetaminophen – 8 hour formulation • Opioids – MS Contin, OxyContin, methadone are all long-acting • Opioids – Roxanol, oxycodone, hydromorphone are all short-acting • Antidepressants – duloxetine and venlafaxine are once a day (XR) • Dexamethasone is once or twice a day (and less toxicity than prednisone) • NSAIDS – there are once or twice a day NSAIDs
We can select more targeted drug therapy – opioids plus adjuvant analgesics	Antidepressants target neuropathic pain and depression. Steroids and NSAIDs target somatic pain. Opioids are helpful with both pains; methadone may bring a little more to the picture targeting nociceptive and neuropathic pain

6. Select Appropriate Pharmacologic Agent(s)

- Start with simplest approach to pain management if possible
  - Oral route with optimized dosing interval
- Consider combinations of analgesics to allow lower total daily dosages and fewer adverse effects (rational polypharmacy), examples include:
  - Morphine + gabapentin
  - Nortriptyline + pregabalin
- Inhibit nociceptive processing at multiple levels to enhance analgesia

Plan at this Point

- The patient says she will continue taking the acetaminophen 4 grams a day, and with great reluctance agrees to take oxycodone 5 mg/ acetaminophen 325 mg every 4 hours for moderate to severe pain (prn)
- She will discontinue acetaminophen 4 grams/day
- She agrees to start a bowel regimen (polyethylene glycol, 1-2 scoops qd)

Monitoring…

- What are you monitoring?
- How do you monitor?

7. Identify Expected/Potential Toxicities

- You MUST do this prospectively
- Insufficient to claim “Oh, I’ll know it when I see it” – you won’t!

7. Identify Expected/Potential Toxicities

Subjective parameters

- Data are from the patient's point of view ("symptoms") including feelings, perceptions and concerns obtained through interviews

Objective parameters

- Data that are observable and measurable ("signs") obtained through observation, physical examination, and laboratory and diagnostic testing

Subjective vs Objective??

Monitoring Parameters for Potential Toxicity

	Subjective	Objective
Toxicity (oxycodone with acetaminophen)	• Complains of sedation or drowsiness • Complains of nausea or vomiting • Complains of confusion, seeing/hearing things not there • Complains of constipation and/or abdominal discomfort • Yellowing of eyes	• Number of hours sleeping (in one stretch, in total 24 hours) • Number of episodes of vomiting • Sedation rating scale • Mini-Mental State Exam/CAM • Bowel movement frequency/ Bristol Stool Chart Assessment • Observed snoring or syncopal events (fainting, falling) • Observed rash

The Plot Thickens…

- One week later, Mrs. DA tells you the following:
  - The oxycodone/acetaminophen is working better than the acetaminophen alone; it's hard to remember to take it every 4 hours (the increasing pain intensity reminds her)
  - She especially hates having to take it again in the middle of the night; she's tried taking two oxycodone/acetaminophen tablets at bedtime but she still wakes up in pain about 4-5 hours later
  - Her anterior chest pain has reduced to an average of 5-6/10, which she finds to be an improvement, but it could be better
  - She is eating a little better, mostly drinking the Ensure supplements, no solid food yet
  - She rates the right rib pain as a 5-6/10 but it still shoots up when she rolls on her right side (to a 9-10/10). This pain is still adversely impacting her ability to get comfortable and sleep at night
  - Her sleep pattern is about the same – about 3-5 hours a night, and it's interrupted

The Plot Thickens… (continued)

- She states her arm pain is largely unchanged also;
  she rates it as a 6/10 on average (axilla)
- The number of shooting episodes has not diminished in number, duration or intensity
- She is still very upset about this pain, and the propensity for it to strike at any time
- Mrs. DA denies adverse effects from the oxycodone/acetaminophen.
- She generally requires 2 scoops of polyethylene glycol to keep her bowels regular
- Based on her progress, you decide to change to:
  - Methadone 2.5 mg po q12h
  - Switch to plain oxycodone 5 mg po q2h for breakthrough pain
  - Dexamethasone 4 mg po qam for metastatic rib pain

The Plot Thickens… (continued)

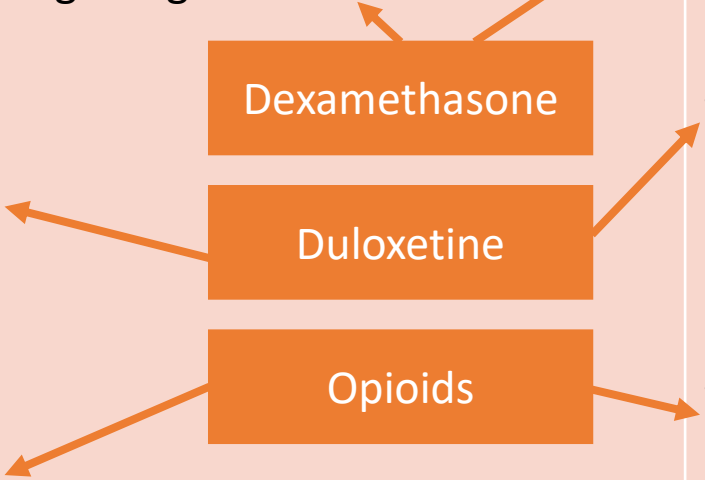
- She is tolerating the methadone well, and her anterior chest pain is much improved; she is able to eat small amounts of soft solid food
- Her right rib pain is better (about 3/10 without movement, but still goes up to 6-7/10 when she rolls onto her right side). She would like this to b a bit better
- Her axilla pain is slightly better, but the shooting pain is not really any better
- She's still pretty unhappy about how things are; she thought after two weeks under hospice care she's be a lot better
- You decide to add duloxetine 30 mg po qd for 1 week, then increase to 60 mg po qd
- Continue methadone (titrate as needed), continue oxycodone for breakthrough pain
- Increase dexamethasone 4 mg po bid (breakfast and lunch)

Side Effects Associated with Mrs. DA's Analgesics

- Dexamethasone – insomnia, edema, hypertension, hyperglycemia, delirium
- Duloxetine – nausea, headache, drowsiness, fatigue, dry mouth
- Opioids – somnolence, fatigue, nausea, confusion, constipation, respiratory depression
  - Methadone – increasing somnolence, snoring

- Dexamethasone – insomnia, edema, hypertension, hyperglycemia, delirium
- Duloxetine – nausea, headache, drowsiness, fatigue, dry mouth
- Opioids – somnolence, fatigue, nausea, confusion, constipation, respiratory depression
  - Methadone – increasing somnolence, snoring, unexplained syncopal events

Subjective Monitoring Parameters for Potential Toxicity	Objective Monitoring Parameters for Potential Toxicity
c/o poor sleep	Number of hours sleeping (in one stretch, in total 24 hrs)
c/o swollen ankles	Pitting edema
c/o increased thirst, hunger, urinary, blurred vision	Blood pressure
c/o confusion, seeing/hearing things not there	Mini-Mental State Exam/CAM
c/o nausea or vomiting	# episodes of vomiting
c/o headache	Sedation rating scale
c/o sedation/drowsiness	Observed dry mucous membranes
c/o tiredness	
c/o dry mouth	Number of hours sleeping (in one stretch, in total 24 hrs)
	# episodes of vomiting
c/o sedation/drowsiness	Sedation rating scale
c/o nausea or vomiting	Mini-Mental State Exam/CAM
c/o confusion, seeing/hearing things not there	Bowel movement frequency/Bristol Stool Assessment
c/o constipation and/or abdominal discomfort	Observed snoring or syncopal events (fainting, falling)



- Dexamethasone – insomnia, edema, hypertension, hyperglycemia, delirium
- Duloxetine – nausea, headache, drowsiness, fatigue, dry mouth
- Opioids – somnolence, fatigue, nausea, confusion, constipation, respiratory depression
  - Methadone – increasing somnolence, snoring, unexplained syncopal events

Subjective Monitoring Parameters for Potential Toxicity	Objective Monitoring Parameters for Potential Toxicity
c/o poor sleep c/o swollen ankles c/o increased thirst, hunger, urinary, blurred vision c/o confusion, seeing/hearing things not there c/o nausea or vomiting c/o headache c/o sedation/drowsiness c/o tiredness c/o dry mouth c/o constipation and/or abdominal discomfort	Number of hours sleeping (in one stretch, in total 24 hrs) Pitting edema Blood glucose Mini-Mental State Exam/CAM # episodes of vomiting Sedation rating scale Observed dry mucous membranes Bowel movement frequency/Bristol Stool Assessment Observed snoring or syncopal events (fainting, falling)

8. Administer Therapy

- When should Mrs. DA start the methadone relative to stopping the oxycodone/acetaminophen?
- When should she start the dexamethasone?
- Let's assume the medications are delivered at 4 pm on Tuesday
- What say you?

8. Administer Therapy

- When should Ms. DA start the methadone relative to stopping the oxycodone/acetaminophen and prn oxycodone?
- When should she start the dexamethasone and duloxetine?
- Let's assume the medications are delivered at 4 pm on Tuesday
- What say you?
  - Start methadone Tuesday evening – pick a time (7 pm, then 7 am/7 pm?) – 7 pm
  - Start dexamethasone Wednesday morning (after eating)
- One week later when you start duloxetine
  - Start duloxetine Tuesday evening (after dinner) because it can cause sedation

9. Monitor Patient Response (Pain)

Five A's (PADT; Pain Assessment and Documentation Tool and Guidebook)

1. Analgesia
2. Activities of daily living
3. Adverse effects
4. Aberrant drug-related behaviors
5. Affect

These were part of your therapeutic goal

These we already determined

What do we mean by these?

archives.drugabuse.gov/sites/default/files/passik.pdf.

Pain severity rating goal

Patient says if all her pain complaints could be < 5 on average that would be a great start

She hopes none of the pains would exceed 6 on a 0-10 scale (at any time – at rest or with movement)

Functional goals

Able to eat again without pain; stabilize her weight and maybe regain

Able to walk her dog

Able to sleep through night and not have the pain wake her up; be less exhausted

Improved mood (anxiety, depression)

Stop dreading the shooting pain down her arm

Stop dropping anything she's holding in her right hand when the pain strikes

Analgesia and Activities of Daily Living (Functional Goals)

Pain Rating Goals:

Patient says if all her pain complaints could be < 5 on average that would be a great start.

She hopes none of the pains would exceed 6 on a 0-10 scale

(at any time – at rest or with movement).

Functional Goals:

- Eat, sleep, walk without pain
- Gain weight
- Improved mood
- Stop dreading arm shooting pain
- Stop dropping things from right hand when shooting pain occurs

1. Analgesia
   - Is the pain relief clinically significant? Pain level on average? At its best? At its worst?
2. Activities of daily living
   - Physical function, mood, sleep, work, social/family relationships

Subjective Parameters of Therapeutic Effect
• Pain rating – best in day, worst in day, average in day • Expresses subjective lessening of shooting arm pain • States able to sleep better/longer; walk; eat • States less crying and generally happier
Objective Parameters of Therapeutic Effect
• # episodes of shooting arm pain/day • # episodes of dropping things/day • # hours sleeping (at one time/in total in 24 hours) • # episodes of crying/day • Beck depression score • # doses of prn analgesic per day

5A's – 3. Adverse Effects

Subjective Monitoring Parameters for Potential Toxicity	Objective Monitoring Parameters for Potential Toxicity
c/o poor sleep	Number of hours sleeping (in one stretch, in total 24 hrs)
c/o swollen ankles	Pitting edema
c/o increased thirst, hunger, urinary, blurred vision	Blood glucose
c/o confusion, seeing/hearing things not there	Mini-Mental State Exam/CAM
c/o nausea or vomiting	# episodes of vomiting
c/o headache	Sedation rating scale
c/o sedation/drowsiness	Observed dry mucous membranes
c/o tiredness	Bowel movement frequency/Bristol Stool Assessment
c/o dry mouth	Observed snoring or syncopal events (fainting, falling)
c/o constipation and/or abdominal discomfort	

9. Monitor Patient Response

4. Aberrant drug-related behaviors
   - Purposeful misuse for sedation, negative mood changes, increasingly impaired/intoxicated, modified route of admin, using for nonapproved reasons, selling or giving away for illicit use

Subjective Parameters Aberrant Drug-Related Behavior	Objective Parameters Aberrant Drug-Related Behavior
• Family/CG c/o excessive sedation or impairment • Family/CG reports missing medications, misuse of medications, altering dosage formulations	• Observed excessive sedation; inability to arouse patient or observed impairment • Pill count

5. Affect
   - Is the pain effecting emotional tone? Is affect appropriate? Blunted vs exaggerated?

Subjective Parameters Affect	Objective Parameters Affect
• Patient, family, caregiver c/o significant change in affect	• Observed significant change in affect

Subjective Parameters of Therapeutic Effectiveness	Objective Parameters of Therapeutic Effectiveness
• Pain rating – best in day, worst in day, average in day • Expresses subjective lessening of shooting arm pain • States able to sleep better/longer • States less crying and generally happier	• # episodes of shooting arm pain/day • # episodes of dropping things/day • # hours sleeping (at one time/in total in 24 hours) • # episodes of crying/day • Beck depression score • # doses of prn analgesic per day
Subjective Parameters of Potential Toxicity	**Objective Parameters of Potential Toxicity**
• c/o poor sleep • c/o swollen ankles • c/o increased thirst, hunger, urinary, blurred vision • c/o confusion, seeing/hearing things not there • c/o nausea or vomiting • c/o headache • c/o sedation/drowsiness • c/o tiredness • c/o dry mouth • c/o constipation and/or abdominal discomfort • Family/CG c/o excessive sedation or impairment • Family/CG reports missing medications, misuse of medications, altering dosage formulations • Patient, family, caregiver c/o significant change in affect	• Number of hours sleeping (in one stretch, in total 24 hrs) • Pitting edema • Blood glucose • Mini-Mental State Exam/CAM • # episodes of vomiting • Sedation rating scale • Observed dry mucous membranes • Bowel movement frequency/Bristol Stool Assessment • Observed snoring or syncopal events (fainting, falling) • Observed excessive sedation; inability to arouse patient or observed impairment • Pill count • Observed significant change in affect

Allergy vs Intolerance

- Identifying between an allergy and intolerance is important for healthcare professionals to distinguish
- Optimize available drug therapies
- Common manifestations of intolerance
  - Nausea/vomiting
  - Localized itching
  - Drowsiness/sedation
  - Mild confusion
  - Appropriate counseling

Anaphylaxis

- A rapidly progressing, life-threatening allergic reaction
- Can occur within minutes or seconds
- Can result in airway constriction, skin and intestinal irritation, and altered heart rhythms, shock, death

10. Adjust Therapy as Appropriate

- Continue therapy as prescribed; goals being met
- Adjust analgesic dose (increase or decrease) and/or route of administration/formulation
- Switch to different drug within the same therapeutic class (eg, opioid rotation)
- Switch to or add an additional agent from another therapeutic class
- Add rescue/breakthrough analgesia if not already prescribed
- Adjust rescue/breakthrough dose, frequency

10. Adjust Therapy as Appropriate

- Continue therapy as prescribed; goals being met
- Adjust analgesic dose (increase or decrease) and/or route of administration/formulation
- Switch to different drug within the same therapeutic class (eg, opioid rotation)
- Switch to or add an additional agent from another therapeutic class
- Add rescue/breakthrough analgesia if not already prescribed
- Adjust rescue/breakthrough dose, frequency

- Consider a dose change if...
  - Is pain control not at goal ALL the time?
    - Should we adjust long-acting analgesic/opioid?
    - Increase to incorporate use of breakthrough opioid dose
    - Increase 25%-50% for moderate pain; 50-100% for severe pain
  - Assess effectiveness of PRN dose
    - Is patient using PRNs? What's pain rating before they take PRN medication, and an hour later?
    - How long does the effect last? Does the medication wear off too soon?
  - Adverse effects are causing harm or discomfort to patient (dose-related?)
    - Confusion or sedation that is bothersome to the patient/family

10. Adjust Therapy as Appropriate

- Continue therapy as prescribed; goals being met
- Adjust analgesic dose (increase or decrease) and/or route of administration/formulation
- Switch to different drug within the same therapeutic class (eg, opioid rotation)
- Switch to or add an additional agent from another therapeutic class
- Add rescue/breakthrough analgesia if not already prescribed
- Adjust rescue/breakthrough dose, frequency

- Opioid rotation

SELECTED EQUIVALENCIES

	Equianalgesic Equivalence (mg)	
OPIOID	PARENTERAL	ORAL
Morphine	10	25
Fentanyl	0.15	NA
Hydrocodone	NA	25
Hydromorphone	2	5
Oxycodone	10 *(not in US)*	20
Oxymorphone	1	10

- Changing to a different steroid, adjuvant analgesic

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- Target the pain
- Switch to methadone
- Add adjuvant analgesic
  - Antidepressant
  - Anticonvulsant
  - Steroid
  - Bisphosphonate
  - Etc

10. Adjust Therapy as Appropriate

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- Adjust analgesic dose (increase or decrease) and/or route of administration/formulation
- Switch to different drug within the same therapeutic class (eg, opioid rotation)
- Switch to or add an additional agent from another therapeutic class
- Add rescue/breakthrough analgesia if not already prescribed
- Adjust rescue/breakthrough dose, frequency

- Transmucosal fentanyl – very expensive
- Morphine, oxycodone, hydromorphone → 10%-15% of total daily dose scheduled long-acting opioid
  - MS Contin 60 mg po q12h
  - Roxanol 12-18 mg po q1, 2, 4 h prn
  - eg, Roxanol 15 mg po q2h prn
- Assess pain before PRN dose and one hour after PRN dose
  - Want 30%-50% reduction in pain

Knowledge Question

Patient CS is a 87-year-old female with newly diagnosed metastatic cancer. She is having new-onset, severe pain and presents to the inpatient hospice unit. Her EMR lists an allergy to morphine. Upon questioning the patient and her family you discover that her reaction to morphine was localized itching and nausea. The MD has ordered IV hydromorphone for pain management. You know that morphine and hydromorphone are cross-allergens in someone with a true morphine allergy. You:

A. Do not administer any medication and wait for the MD to change the order on rounds tomorrow
B. Alert the doctor that the patient has a reported allergy on EMR but you confirmed with the patient/family that it is an intolerance and not a true allergy
C. Alert the doctor that the patient has a true morphine allergy and agree with his decision to avoid all potential crossreactive opioids

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Appropriate Documentation

- If it wasn't documented, it didn't happen!

- The most important communication tool we have collectively as healthcare professionals is **high quality documentation**

- How?
  - Every organization has different templates
  - Progress notes, SOAP notes, care note, medication action note
  - **Comprehensive care plan – should include the 5 A's!**

Comprehensive Care Plan

- Information should be comprehensive and concise
- Neat and organized
- Accurate, timely
- Reflects complexity of patient's case
- Avoids judgmental language or personal opinions
- Free of spelling/grammatical errors
  - This is an official legal document
- Provide supporting evidence when applicable
- DO NOT COPY AND PASTE PREVIOUS NOTES

Documenting Pain Encounter – SOAP Note

Section	Content	
S – Subjective	• Chief complaint (patient's complaint in their own words with a time element) • Symptom analysis of chief complaint • Review of systems for system in which the complaint is • Meds if per patient recall • Social history	• Pain rating (**A**nalgesia) • **A**ctivities of daily living • **A**dverse effects from analgesics • **A**berrant behavior • **A**ffect
O – Objective	• Meds if from MAR • Physical exam data/including observation of behavior	• Imaging • Labs and urine toxicology • Pill counts if appropriate
A – Assessment	• Why now? Etiology? How severe? • Controlled/uncontrolled? Stable/unstable? • Therapeutic effectiveness/ progress toward goals	• Toxicity • Abuse and diversion • Adherence
P - Plan	• Medication changes (be specific) • Nonmedication recommendations • Recommendations for follow-up	• Referrals • Patient education provided

PainWeek

ADVANCED EDUCATION

CERTIFICATION SERIES

Monitoring and Adjusting Analgesic Regimens

Mary Lynn McPherson, PharmD, MA, MDE, BCPS