# MASTERING PAIN MANAGEMENT SKILLS:

Safe Opioid Use Amid Opioid Phobia
September 22, 2016



## Learning Objectives:

- Describe a proper opioid titration
- Find an opioid equivalency dose using an opioid equivalency chart
- Calculate an appropriate breakthrough dose (BTD) for a patient on a long-acting opioid (LA)
- List 3 situations when an opioid rotation may be indicated.
- Use the Pasero Opioid Sedation Scale (POSS)
- Name 2 safety strategies for seniors on opioids.

# Morphine: THE GOLD STANDARD of OPIOIDS Morphine CuthinNos Norphine Norphine



# Indications for Opioids in Hospice ANALGESIA TREATMENT OF DYPSNEA PAIN



# A Swinging Pendulum • 1990's Pain Epidemic secondary under treatment of Pain • Increase in opioid RXs • Increase in opioid related deaths (illegal use of substances & patient overdoses)

# Decrease access to opioids for some pain patients Some states are placing limits on daily amounts of MS that physicians can prescribe for a patient mg/day Get a "pass card" for cancer patients, palliative care and hospice patients.

# Opioid Phobia ? Phobias: What do we really fear?

# Opioid Phobia?

### Patients/Families

- "Don't want momma to get addicted."
- Opioids will cause me to stop breathing
- "They went to hospice. Got morphine and then died!"



# Opioid Phobia?

### **Medical Community**

- "I don't want to be the Candy Doctor."
- Fear of scrutiny
- Fear of loosing medical license
- Fear of having a patient die from an overdose a Rx written by them
- Lawsuit



# Opioid Phobia ? OR Opioid Fear?

### Fear

- Response to a <u>real</u> or <u>perceived</u> <u>threat</u>.
- Reaction to objects or events
- Experience mild to moderate anx

Phobia

• Similar to fear BUT anxiety is severe



## Opioid Phobia ? **OR** Opioid Fear?

### Fear

### REAL PROBLEMS:

- Misuse of Opioids
- Abuse
- Addiction Rates higher than once taught.



## How do we ensure safe use of opioids?

### KNOW OUR STUFF / SKILLS to MASTER in Pain Management

- Find appropriate starting dose
- Recognize the potency of the opioid compared to morphine
- Calculate breakthrough dose when using a ER/LA (extended release/long-acting) opioid or when giving fixed IR/SA (immediate release/short-acting) opioid ATC (around the clock)
- Titrate an opioid (when & how)
- Recognize 3 situations where opioid rotation is needed
- Assess levels of sedation secondary to opioid use
- Practice safety protocols with seniors.

### **Find Starting Dose**

- LOOK IT UP!
- Start with a conservative dose (You can always go up if needed.)
- ALWAYS, ALWAYS start with an immediate release/short-acting (IR/SA) opioids



J

## **Find Starting Dose**

- REDUCE recommended adult starting dose 25-50% elderly & titrate based on patient response
- Titrate according to patient response
- May consider ER/LA opioid formulation after steady-state is reached (24 hours for most oral opioids)



# Read Opioid Equivalency Chart

Drug	Parenteral Dose (mg)	Oral Dose (mg)	Duration (hours)
Morphine IR	10	30	3-4
Morphine Controlled Release (MSContin, Oramorph SR)	-	30	8-12
Hydromorphone (Dilaudid)	1.5	7.5	3-4
Codeine (Very limited use)	130	200	3-4
Oxycodone (controlled release = OxyContin)	-	20-30	12
Oxycodone immediate release (Percocet, Tylox, Oxy IR, Roxicodone)	-	20-30	3-4
Hydrocodone (Lortab, Vicodin, Norco)	-	30	3-4
Meperidine (Demerol) (Not for long term use)	100	300+	2-3
Levorphanol (Levo-dromoran)	2	4	6-8
Methadone (Use with great caution)	10 acute 2-4 chronic	20 acute 2-4 chronic	6-8
Fentanyl*	0.1	Transdermal patch	48-72

# Miss Mary: Recognizing opioid potency



- Admissions Nurse: "Miss Mary. How much opioid pain medicine are you taking?"
- Miss Mary: "I'm just taking a little bit... 2mg."
- Admissions Nurse: "What's the name of the pain medication? May I see the bottle please?"
- Miss Mary hands the nurse a bottle of hydromorphone (dilaudid) 2mg tablets

# Miss Mary: Recognizing opioid potency

Drug	Parenteral Dose (mg)	Oral Dose (mg)	Duration (hours)
Morphine IR	10	30	3-4
Morphine Controlled Release (MSContin, Oramorph SR)	-	30	8-12
Hydromorphone (Dilaudid)	1.5	7.5	3-4



- Admission Nurse: "Miss Mary, did you know that 2 mg of your hydromorphone is equal to \_\_\_mg of MS?"
- $\frac{7.5 \text{ mg hydromorphone}}{30 \text{ mg MS}} = \frac{2 \text{ mg hydromorphone}}{x}$ 
  - 2 mg hydromorphone × 30 mg MS
- $x = \frac{7.5 \text{ mg hydromorphone}}{7.5 \text{ mg hydromorphone}}$  x = 8 mg MS

# Miss Mary: Recognizing opioid potency

Drug	Parenteral Dose (mg)	Oral Dose (mg)	Duration (hours)	
Morphine IR	10	30	3-4	
Morphine Controlled Release (MSContin, Oramorph SR)	-	30	8-12	
Hydromorphone (Dilaudid)	1.5	7.5	3-4	



- Admission Nurse: "Miss Mary, did you know that 2 mg of your hydromorphone is equal to <u>8 mg</u> of MS?" Miss Mary: "Whoa... well I'll be. I didn't know that."

### Equivalency of Transdermal Fentanyl (TDF) patch to morphine



- TDF patch dosed in mcg/hr. NOT mg
- TDF patch is approximately 50% of total daily dose of morphine.
  - E.g. 25mcg/hr. patch  $\times$  2  $\approx$  50 mg of morphine over 24 hours
- Rotation to TDF patch: divide total daily dose (TDD) of oral morphine by two
  - E.g. Patient taking TDD 100 mg morphine ÷ 2 = 50 mcg/hr. TDF patch.

# Equivalency of Transdermal Fentanyl (TDF) patch to morphine



Titrating TDF upward

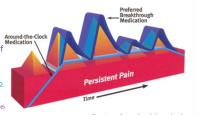
- After initiation of TDF therapy, evaluate use of rescue opioid on days 2 and 3. If patient using more than three doses of rescue opioid, calculate TDD of rescue opioid, and increase TDF patch strength in an equivalent amount.
- Increase by 25-50 mcg/h, but not to exceed a 100% increase Also, no dosage increase should exceed 50 mcg/h
- Increase from 25 mcg/h to 50 mcg/h
- For patients on 50 mcg/h or higher, increase by 50 mcg/h

McPherson, M.L. (2010). Demystifying Opioid Conversion Calculations a Guide | Effective Dosing, p. 102. Bethesda, MD: American Society of Health-System Pharmacists. Used with permission from publisher for educational purposes.

## Calculate BTD (breakthrough dose)

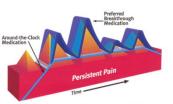
- BTD should be available for BTP (breakthrough pain) when persistent pain is controlled
- BTD needs to be 10 15 % of the total daily dose of opioid controlling baseline pain\*

  Around-th Medication of the total daily dose of opioid controlling baseline pain\*
- BTD should be ordered q1 or q2 hours
- \*Oral BTD (IV BTD is 50% 100% of hourly rate)



Courtesy of www.breakthroughpain.com

# Calculate BTD (breakthrough dose)



### Types of BTP

- 1. Spontaneous
- 2. Incident pain -volitional pain
- 3. Incident pain- non-volitional
- 4. End-of-dose pain

Courtesy of www.breakthroughpain.com

# \*Debate: ER/LA formulations more effective for chronic pain

### **ER/LA Opioids**

- ER/LA opioids avoid the peaks and troughs in pain control
- Avoid watching the clock
- QOL advantage: improved quality of sleep

### IR/SA

- NO difference in outcome measures (pain intensity and stability) when given on fixed schedule
- NO difference in QOL and depression
- Concerns about misuse. Safer?

## Titrate opioids to patient response



• More than three BTDs are used in 24 hrs.

### OR

• Total dose of SA opioid (immediate-release) is more than 50% of the LA dose



# Rotate opioids

Switching to an equianalgesic dose of another opioid

Consider a rotation when patient experiences:

- Inadequate pain relief
- Unacceptable side effects from specific opioid that limits dose escalation (e.g. myoclonus from morphine metabolite build up of M<sub>3</sub>G)
- Drug shortage



# Rotate opioids

- Take into consideration incomplete cross-tolerance.
- Find opioid equivalent dose for new opioid
- $\bullet$  Reduce the new opioid dose 25 – 50 % and titration dose according to patient response.
- IF you switched opioid because pain was poorly controlled on the original opioid, you may consider using the calculated dose of the new opioid without a reduction.

# Assess sedation levels Decreased Pain Improved Forestion Improved Breatning Respiratory Depression



### Assess Sedation levels/ Pasero Opioid Sedation Scale (POSS)

S = Sleep, easy to arouse

Acceptable; no action necessary; may increase opioid if necessary.

1 = Awake and alert
 Acceptable; no action necessary; may increase opioid if necessary.

Acceptable; no action necessary; may increase opioid if necessary.

2 = Slightly drowsy, easily aroused
 Acceptable; no action necessary; may increase opioid if necessary.

3 = Frequently drowsy, arousable, drifts off to sleep during conversation
 Unacceptable; monitor resp. status & sedation level. Decrease opioid
 dose 25-50% or notify provider for orders. Ask pt. to take deep
 breathes every 15 to 30 minutes

4 = Somnolent, minimal or no response to verbal and physical stimulation
 Unacceptable; STOP opioid; consider administering naloxone; call a
 code if indicated by pt. status; support respirations; notify provider;
 monitor respiratory status & sedation level.

monitor respiratory status & sedation level.



### **POSS**

S = Sleep, easy to arouse
Acceptable; no action necessary; may increase opioid if necessary.

Awake and alert

Acceptable; no action necessary; may increase opioid if necessary.

Slightly drowsy, easily aroused

Acceptable; no action necessary; may increase opioid if necessary.
Frequently drowsy, arousable, drifts off to sleep during conversation Unacceptable; monitor resp. status & sedation level. Decrease opioid dose 25-50% or notify provider. Ask pt. to take deep breathes every 15

Somnolent, minimal or no response to verbal and physical stimulation

STOP opioid; consider admin. Naloxone. Call Code if indicated by pt. status; notify provider. Monitor resp. status & sedation level. 994, Pasero C. May be duplicated for use in clinical practice

### Safety protocols with seniors



- Lower the starting opioid dose for seniors (>70 years) by 25 -50 % recommended adult dose
- · "Start low, Go slow."
- Consider a longer interval between opioid doses (kidney function decreases with age slowing the elimination of opioids )

Mastering	Pain N	Manage	ement Sl	kills
Safe opioid	use an	nid opio	id phobia	3

- Maybe NOT *phobia* after all. Maybe *fear* is better term.

- Pain Management Skills Needed
  Find starting dose
  Read an opioid equivalency chart
  Calculate BTD when patient taking ATC fixed dosages of opioids ER/LA or IR/SA
- Rotate opioids
- Assess opioid-induced sedation
- Safe practices for seniors

ு	_	_	_	_	_	NΙ	1	_	_
$-\Gamma$	ы		_	$\sim$	_	N		┖.	ച

- McPherson, M.L. (2010). Demystifying Opioid Conversion Calculations a Guide for Effective Dosing. Bethesda, MD: American Society of Health-System Pharmacists.
- Pasero, C., McCaffery, M. (2011). Pain assessment and pharmacologic management. St. Louis, MO:
- Vowles,KE, McEntee ML, Julnes PS, Frohe T, Ney JP, van der Goes DN. (2015). *Rates of opioid misuse, abuse, and addiction in chronic pain: a systematic review and data synthesis*. Pain Apr;156(4):569-76. Abstract. Retrieved from <a href="http://www.ncbi.nlm.nih.gov/pubmed/25785523">http://www.ncbi.nlm.nih.gov/pubmed/25785523</a>
- Covin,R (2012). The Difference Between Phobia and Fear. Retrieved from http://www.huffingtonpost.ca/roger-covin/phobia-and-fear b 159664o.html
- von Gunten, C (2016). *The Pendulum Swings for Opioid Prescribing*. Editorial. Journal of Palliative Medicine, Vol 19, Number 4.
- King, SA (2014). Are Long-Acting Opioids More Effective Than Short-Acting Opioids for Chronic Pain? ConsultantLIVE® Blog. July 21, 2014. Retrieved from http://www.consultantlive.com/pain/arelong-acting-opioids-more-effective-short-acting-opioids-chronic-pain