

# Foundations of Safe and Effective Pain Management

*Evidence-based Education for Nurses, 2018*

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Module 1: The Multi-dimensional Nature of Pain

Module 2: Pain Assessment and Documentation

**Module 3: Management of Pain and Special Populations**



# Author Information and References

Module developed by:  
Melodie Daniels  
Melissa Yager  
Patty Atkins

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For references and other resources, please visit:  
<http://sharpnet.sharp.com/pharmacy/Pain-Management.cfm>

# Question 1

Alvin is 43 years old and has been admitted for an appendectomy. He will be going to surgery tomorrow and is NPO. He has no medical history and is complaining of pain (6/10). What steps will the nurse take to develop a plan of care for Alvin?

- A. Ask Alvin what he uses for pain at home
- B. Collaborate with Alvin to set a realistic acceptable level of pain
- C. Include at least 2 non-opioid techniques in his plan of care
- D. Start at the lowest doses possible
- E. All of the above

## Question 2

Mindy is 77 years old and has been admitted with pneumonia and a fractured wrist after sustaining a fall. She has history of GERD, renal failure and atrial fibrillation. Her fracture is casted and she has physical therapy and respiratory treatments ordered. What would be the best pharmacologic approach to her pain?

- A. Norco 1 tab 5/325mg every 4 hours PRN mild pain, 2 tabs 5/325mg every 4 hours for moderate pain, morphine 4mg IV every 3 hours for severe pain
- B. Ibuprofen 400mg every 6 hours around the clock, with morphine 4 mg IV for breakthrough pain
- C. Acetaminophen 650mg PO every 4 hours around the clock, with oxycodone 5mg PO every 3 hours for breakthrough pain
- D. Toradol 15mg IV every 6 hours, with oxycodone 5 mg PO every 3 hours for breakthrough pain

## Question 3

Kay recently had a total hip replacement, she has obstructed sleep apnea and uses CPAP at home. She is experiencing severe pain (9/10). She has been receiving around the clock acetaminophen, oxycodone 2 tabs 10/325mg every 3 hours PRN. At home she normally takes clonazepam for anxiety and is asking that it be added to her plan of care. What steps can you take to ensure Kay's safety?

- A. Notify her provider about her high levels of pain and recommend the following: clonazepam PRN for anxiety
- B. Notify her provider about her high levels of pain and recommend the following: clonazepam to be added for PRN anxiety and hydromorphone IV for severe pain
- C. Notify her provider about her high levels of pain and recommend the following: clonazepam PRN anxiety, continuous capnography, addition of a non-steroidal anti-inflammatory
- D. Notify her provider about her high levels of pain and recommend the following: clonazepam PRN anxiety, continuous capnography, addition of a non-steroidal anti-inflammatory. Increase frequency of POSS and RASS assessments to monitor for sedation, ensure patient wears CPAP

## Question 4

Which of the following is most critical in assessing and managing pain for patients at the end of life?

- A. The oral route is generally preferred over IV or transdermal
- B. PRN dosing is more effective than around-the-clock analgesia
- C. If respiratory rate is  $<10$ , give narcan immediately
- D. Assessing for underlying causes of distress remains a critical component to effective pain management

## Question 5

Lindsey is a 43-year-old woman with a history of chronic painful diabetic neuropathy. Her treatment regimen for severe pain is 30mg of methadone five times daily, Neurontin 600 mg three times daily, Ibuprofen 400mg every 6 hours around the clock, with morphine 4mg for breakthrough pain. She is admitted to rule out an underlying new source of pain.

What are your immediate concerns for Lindsey?

- A. Respiratory depression
- B. Risk of renal failure
- C. Lack of social support
- D. Risk of opioid addiction

**The following two slides contain additional Reference Information re:  
The California Opioid Assessment and Action Safety Tool (COAST)  
A new decision-support tool to help identify which patients are at risk for  
respiratory depression**

1. Unexplained, Unexpected, or Uncontrolled Pain, Anxiety, Agitation, or Delirium Creating Increased Opioid Dose Requirement

Underlying issue that requires procedural or other intervention

Opioid Tolerance

Drug Seeking Behavior

2. Altered Airway Issues

**STOPBANG/OSA FACTORS:**

Snoring  
Tiredness  
Observed Sleep Apnea  
High Blood Pressure  
BMI > 35 kg/m<sup>2</sup>  
Age > 50 years old (>75 years old higher risk)  
Neck > 17" (M) 15" (F)  
Gender: Male

**STOPBANG Score:**

Low Risk = 0-2  
Medium = 3-4  
High Risk = 5-8

History of Difficult Intubation

Anatomical Airway Obstruction (e.g., malocclusion, swelling)

3. Increased Sedation/Decreased Respiratory Rate

Recent unplanned administration of reversal agent

**General Anesthesia:**

Within 1st 24 hours and/or  
Prolonged surgery > 2 hours

**Prescribed Opioids\***

(Dose and Frequency Dependent)

**Highest Risk:**

hydromorphone IV, morphine IV, fentanyl patch or IV, methadone IV or PO, opioid infusion, implanted pain pump

**Moderate to High Risk:**

Morphine PO, hydromorphone PO, fentanyl (Buccal), oxycodone PO, hydrocodone/acetaminophen PO

**High Risk Non-Opioids\***

**Benzodiazepines:**

alprazolam, clonazepam, diazepam, lorazepam, midazolam, oxazepam, temazepam

**Non-benzodiazepines:**

Eszopiclone, zaleplon, zolpidem, zopiclone

**Anti-Nausea Medications:**

promethazine, prochlorperazine, diphenhydramine

**Anti-depressants / Anti-Psychotics:**

mirtazapine, olanzapine, quetiapine, risperidone, haloperidol, trazodone

**Muscle Relaxants:**

cyclobenzaprine, baclofen

Patient Problems / Challenges Contributing to Respiratory Depression and Arrest

A. Identify Risk Factors

Contributing Causes

*Based on the importance of the identified problems and contributing factors, determine the patient's level of risk for respiratory depression and then consult with your care team.*

Full Tool Kit Available at:  
<http://www.hqinstitute.org/post/reducing-harm-respiratory-depression-non-icu-patients-through-risk-mitigation-and-respiratory>

\*This list is not comprehensive.

#### 4. Decreased Ventilation

Thoracic, Abdominal, or Major Spinal Surgery

Rib Fracture

Pregnancy

Non-adherence to Prescribed NIV Regimen

Neurological Deficit (e.g., stroke, neuromuscular disease)

Dependent Functional Status (e.g., Prolonged Immobilization/ Bed Rest, ASA status 3-5)

#### 5. Impaired Gas Exchange

Smoker

Pulmonary Disease (e.g., COPD, Pneumonia)

Oxygen Therapy (SpO<sub>2</sub> may not drop noticeably during hypoventilation due to high FIO<sub>2</sub>)

Cardiac Dysfunction (e.g., CHF)

DKA

#### 6. Altered Drug Metabolism

Kidney Clearance  
CrCl < 50mL/min  
or BUN > 30 mg/dL

Liver Failure (e.g., Increased Liver Enzymes, Alcoholism, Ascites)

BMI < 18.5 kg/m  
> 35 kg/m

Age > 65 years old high risk  
> 75 years old very high risk

Albumin < 30 g/L (Decreased Drug Binding)

Opioid Naïve/ Sensitive

Opioid Tolerant

#### 7. Patient Surveillance Barriers

Poor Visibility of Patient by Staff

Alarm Management Issues such as:

- Lack of effective monitoring
- Risk that alarm not responded to in timely manner
- Risk that alarm doesn't trigger when it should (e.g., disconnected)

Situational Awareness Challenges (e.g., Night shift, busy department)

Inadequate Handover of Information

Language Barriers

Patient Problems / Challenges Contributing to Respiratory Depression and Arrest

### A. Identify Risk Factors

Contributing Causes

*Based on the importance of the identified problems and contributing factors, determine the patient's level of risk for respiratory depression and then consult with your care team.*