



“No Pain, No Gain” Pharmacy Patient Pain Counseling Competition

Offered by the Maine Pharmacy
Association as part of the 2010 MPA
Fall Conference

Come Participate in the Competition

- Come pick up a raffle ticket to compete
- 12 contestants will be selected from the raffle tickets to compete for a \$500 prize



Pain management is an important topic

Pain management is an important topic that pharmacists and student pharmacists are often faced with while practicing. Often, these patients present unique challenges to providers. It is important to review key pain management concepts and counseling techniques in order to optimize your patient's treatment plan. The "No Pain, No Gain" Pharmacy Patient Pain Counseling Competition will increase pharmacist awareness and involvement in patient care opportunities involving pain management.

At the end of this presentation, participants should be able to:

1. Identify common medications and treatments used in pain management
2. Illustrate main counseling points and strategies for patients with pain
3. Describe common barriers for providing optimal pain management

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Contestant Selection....



COMPETITION FORMAT BRIEF OVERVIEW

- 12 contestants will be drawn from a raffle to participate to compete
- Contestants will participate in an exciting rapid-fire Q&A Session
- 3 finalists will compete by counseling a sample patient for a chance at a \$500 Prize!
- Counseling graded by a Patient Counseling Competition Evaluation Form

Rapid Fire Question Elimination Round

- Each contestant will be asked a question by the Moderator and have 10 seconds to provide an answer
- They may ask for a repeat of the question but it will not delay the 10 seconds they have to answer unless told by the Moderator
- Should the contestant miss the question, the same question will be redirected to the next contestant in line and so forth until the question is answered correctly.

Rapid Fire Question Elimination Round

- Points will be granted for correct answers. At this point, the top 3 points winners will move on to the next round.
- We will review answers to questions with the audience so all can benefit

Rapid Fire Question Elimination Round

Let's Begin!



Rapid Fire Question # 1

- Identify the 4 processes involved in the pain pathway.
- *Answer: Transduction, transmission, modulation, perception.*

Rapid Fire Question # 2

- What are the “4 A’s” of monitoring opioid analgesic therapy?
- *Answer: Analgesia, activities, adverse effects, and aberrant behaviors.*

Rapid Fire Question # 3

- Which opioid-induced adverse effect will patients not develop tolerance to?
- *Answer: Constipation.*

Rapid Fire Question # 4

- What term is best defined as the neuroadaptation to the effects of chronically administered opioids where fixed doses produce less analgesia?
- *Answer: Tolerance.*

Rapid Fire Question # 5

- What term is best defined as a state of adaptation that is manifested by a withdrawal syndrome that can be caused by the abrupt discontinuation of an opioid analgesic?
- *Answer: Physical dependence.*

Rapid Fire Question #6

- Which pain assessment tool is most appropriate to use to assess pain in a 3 year-old child?
- *Answer: “Faces” scale (Wong-Baker).*

Rapid Fire Question # 7

- Which analgesic should be avoided in children < 12 years old due to the risk of Reye's syndrome?
- *Answer: Aspirin.*

Rapid Fire Question # 8

- Identify one nonopioid analgesic that is safe to use during pregnancy.
- *Answer: Acetaminophen.*

Rapid Fire Question # 9

- Identify two risk factors for the development of acetaminophen-induced hepatotoxicity.
- *Answer: Any two of the following would be acceptable: ingestion of greater than 4 gm/day, presence of liver disease, concomitant hepatotoxic drugs, patients who eat irregularly (due to decreased glutathione stores), patients who ingest alcohol regularly (3 or more alcoholic beverages daily).*

Rapid Fire Question # 10

- Which analgesic should be avoided in a patient with a sulfonamide allergy?
- *Answer: Celecoxib[®].*

Rapid Fire Question # 11

- Name the three primary opioid receptors.
- *Answer: Mu, Kappa, Delta.*

Rapid Fire Question # 12

- Identify two risk factors for the development of an NSAID-induced gastrointestinal bleed.
- *Answer: Advanced age, high-dose and long-term use, concomitant corticosteroid or anticoagulant use, smoking, alcohol intake.*

Rapid Fire Question # 13

- Which class of drugs is most effective for the prevention of NSAID-induced gastric ulcers?
- *Answer: Proton Pump Inhibitors (PPIs).*

Rapid Fire Question # 14

- Which type of pain is commonly described as being burning or electric-like pain?
- *Answer: Neuropathic pain.*

Rapid Fire Question # 15

- Identify two goals of therapy for the management of chronic pain.
- Answer:
 - *to reduce pain to a level that is acceptable for the patient*
 - *to improve functioning*
 - *to improve quality of life*

Rapid Fire Question # 16

- For now, what is considered the safe maximum daily dose of Acetaminophen?
- *Answer: 4 grams per day.*

Rapid Fire Question # 17

- Name 3 common side effects that can be expected after taking opioid medications?
- *Answer: Urinary retention, Hypotension, Constipation, Sedation.*

Rapid Fire Question # 18

- Place the following opioid analgesics in order based on their duration of action (shortest to longest): transdermal fentanyl, methadone, MS Contin[®], and hydromorphone.
- *Answer: Hydromorphone, methadone, MS Contin[®], transdermal fentanyl.*

Rapid Fire Question # 19

- Which opioid analgesic is available in IV, transdermal, transmucosal, and iontophoretic preparations?
- *Answer: Fentanyl.*

Rapid Fire Question # 20

- Which analgesic has a dual mechanism of action by acting as a weak mu-receptor agonist and an inhibitor of serotonin and norepinephrine reuptake?
- *Answer: Tramadol (Ultram[®]).*

Rapid Fire Question # 21

- Identify two classes of drugs that should be avoided in patients taking tramadol.
- *SSRIs (serotonin syndrome), SNRIs (serotonin syndrome), opioids (duplicate therapy, increased CNS depression).*

Rapid Fire Question # 22

- Identify two NSAIDs that are available as intravenous preparations.
- *Answer: Ketorolac and ibuprofen.*

Rapid Fire Question # 23

- What is the name of the active metabolite of morphine?
- *Answer: Morphine-6-glucoronide.*

Rapid Fire Question # 24

- Which opioid analgesic is converted to morphine?
- *Answer: Codeine.*

Rapid Fire Question # 25

- How does the potency of codeine compare with morphine?
- *Answer: Codeine is about 1/10 as potent.*

Rapid Fire Question # 26

- What is the generic name for Kadian[®]?
- *Answer: Morphine.*

Rapid Fire Question # 27

- Which opioid analgesic is only available in combination with nonopioid analgesics such as acetaminophen and ibuprofen?
- *Answer: Hydrocodone.*

Rapid Fire Question # 28

- Which opioid analgesic, marketed as Opana[®], is the metabolite of oxycodone?
- *Answer: Oxymorphone.*

Rapid Fire Question # 29

- Identify two opioid analgesics commonly used in patient-controlled analgesia (PCA) devices.
- *Answer: Morphine, fentanyl, hydromorphone.*

Rapid Fire Question # 30

- What drug should be administered to a patient experiencing an opioid overdose?
- *Answer: Naloxone (Narcan[®]).*

Rapid Fire Question # 31

- Which opioid analgesic forms a toxic metabolite that can induce seizures in a patient with renal impairment?
- *Answer: Meperidine.*

Rapid Fire Question # 32

- Which class of drugs is contraindicated in a patient taking meperidine?
- *Answer: Monoamine oxidase inhibitors (MAOIs).*

Rapid Fire Question # 33

- Which opioid analgesic can cause prolongation of the QTC interval?
- *Answer: Methadone.*

Rapid Fire Question # 34

- Identify the one drug that acts as a partial opioid agonist.
- *Answer: Buprenorphine.*

Rapid Fire Question # 35

- Identify one analgesic that acts as a mixed opioid agonist-antagonist.
- *Answer: Nalbuphine, pentazocine, or butorphanol.*

Rapid Fire Question # 36

- What is the risk of cross-sensitivity to an NSAID in a patient with aspirin hypersensitivity?
- *Answer: Greater than 90%.*

Rapid Fire Question # 37

- What is the brand name of the drug used to treat opioid addiction that is available as a sublingual tablet?
- *Answer: Suboxone[®] or Subutex[®].*

Rapid Fire Question # 38

- What must be accounted for when switching a patient from one opioid analgesic to another?
- *Answer: Incomplete cross-tolerance (the patient may be more sensitive to the new opioid because of differences in chemical structure and receptor activity).*

Rapid Fire Question # 39

- Which opioid has a glucuronidated metabolite that is a potent opioid analgesic and accumulates with renal failure?
- *Answer: Morphine.*

Rapid Fire Question # 40

- What are the advantages of naltrexone compared to naloxone?
- *Answer: Naltrexone is more effective orally and has a much longer duration of action.*

Rapid Fire Question # 41

- Pentazocine, Nalbuphine, and Butorphanol may all precipitate an opioid withdrawal syndrome in patients on Methadone Maintenance. Why?
- *Answer: They are all classified as opioid agonists-antagonists.*

Rapid Fire Question # 42

- Which analgesic is most appropriate for the first-line treatment of mild pain in a 9 year-old boy?
- *Answer: Acetaminophen.*

Rapid Fire Question # 43

- Which class of drugs is considered first-line for the treatment of peripheral neuropathy?
- *Answer: Tricyclic antidepressants.*

Rapid Fire Question # 44

- What is the generic name for Lyrica[®]?
- *Answer: Pregabalin.*

Rapid Fire Question # 45

- What is the maximum daily dose of gabapentin in a patient with diabetic neuropathy and chronic kidney failure?
- *Answer: 1800 mg.*

Rapid Fire Question # 46

- Identify two important counseling points for patients who are prescribed gabapentin for the management of neuropathic pain.
- *Answer:*
 - *It may take a few weeks before you notice its effects*
 - *Can cause drowsiness*
 - *May cause fluid to build up in your legs*
 - *Do not take gabapentin within 2 hours after taking antacids*

Rapid Fire Question # 47

- Which SNRI has been FDA-approved for the treatment of diabetic neuropathy?
- *Answer: Duloxetine (Cymbalta[®]).*

Rapid Fire Question # 48

- What drug can be used as an antidote to treat overdose of MS Contin[®]?
- *Answer: Narcan[®].*

Rapid Fire Question # 49

- Which analgesic, when applied topically, depletes substance P?
- *Answer: Capsaicin.*

Rapid Fire Question # 50

- Identify two important counseling points for a patient who is planning to use capsaicin.
- *Answer:*
 - *Symptomatic improvement may not be seen for weeks*
 - *Do not apply to wounds or broken skin*
 - *Wash your hands immediately after application; avoid touching eyes or mouth*
 - *Can cause burning; this should subside after repeated use*

Rapid Fire Question # 51

- Which NSAID does not affect platelet function?
- *Answer: Celecoxib[®].*

Rapid Fire Question # 52

- Which NSAID is available as both a gel and topical patch?
- *Answer: Diclofenac.*

Rapid Fire Question # 53

- Which topical analgesic that has been approved for the treatment of postherpetic neuralgia should be applied for 12 hours then removed for 12 hours?
- *Answer: Lidoderm[®].*

Rapid Fire Question # 54

- Which two antidepressants are FDA approved for treating Fibromyalgia?
- *Answer: Cymbalta[®] (Duloxetine) and Savella[®] (Milnacipran).*

Rapid Fire Question # 55

- Which two anticonvulsants block the calcium channel on the nerve and thereby help to decrease neuropathic pain?
- *Answer: Gabapentin (Neurontin[®]) and Pregabalin (Lyrica[®]).*

Rapid Fire Question # 56

- A hospitalized patient is being discharged today on oral oxycodone. His total daily dose is calculated as being 180 mg/day. What is an appropriate dosing regimen for this patient if the doctor plans to prescribe immediate-release tablets?
- *Answer: Oxycodone IR 30 mg po every 4 hours.*

Rapid Fire Question # 57

- A patient has been receiving morphine 10 mg IV every 4 hours. The physician would like to switch the patient to oral morphine. How much oral morphine should this patient receive per dose?
- *Answer: Morphine oral:IV ratio is 3:1 so patient should receive morphine 30 mg per dose.*

Rapid Fire Question # 58

- What would be an appropriate regimen of immediate-release morphine for the management of breakthrough pain in a patient who is taking MS Contin[®] 45 mg po BID?
- *Answer: Breakthrough pain is calculated as 10 to 15% of the total daily dose. This patient is taking 90 mg per day (10% would be ~9 mg, rounded to 10 mg). Therefore, the patient should receive 10 mg po every 4 hours as needed.*

Rapid Fire Question # 59

- What is the maximum number of tablets a patient should take in one day if their pain is being managed with Percocet[®] (5 mg/325 mg) 2 tablets every 4 hours as needed?
- *Answer: 12 tablets.*

Rapid Fire Question # 60

- When dispensing a prescription for Flexeril[®], you should ask the patient whether they have what two important medical conditions?
- *Answer: Urinary hesitancy and angle closure glaucoma.*

Rapid Fire Question # 61

- Which muscle relaxant has a tricyclic structure with prominent anticholinergic plus sedative side effects?
- *Answer: Cyclobenzaprine (Flexeril®).*

Rapid Fire Question # 62

- Which anticonvulsant is most effective for trigeminal neuralgia?
- *Answer: Carbamazepine (Tegretol[®]).*

Rapid Fire Question # 63

- Which opioid analgesic with a long half-life has been associated with Torsades de Pointe?
- *Answer: Methadone.*

Rapid Fire Question # 64

- If a patient has an ileostomy, which long acting opioids are the most appropriate?
- *Answer: Fentanyl patch and Methadone.*

Rapid Fire Question # 65

- Which muscle relaxant can be used to treat intractable hiccups and trigeminal neuralgia?
- *Answer: Baclofen.*

Rapid Fire Question # 67

- If a patient is taking Percocet 5/325, two tablets every six hours what should be the starting dose of Oxycontin[®]?
- *Answer: Oxycontin[®] 20mg every 12 hours.*

Rapid Fire Question # 66

- Name 5 drugs used for the treatment of muscle spasms.
- *Answer: Carisoprodol (Soma[®]), chlorphenesin (Maolate[®]), chlorzoxazone (Parafon Forte[®]), Cyclobenzaprine (Flexeril[®]), diazepam (Valium[®]), Methocarbamol (Robaxin[®]), orphenadrine (Norflex[®]), clonazepam (Klonopin[®]), and a handful of NSAIDs.*

Rapid Fire Question # 68

- Which new oral CII analgesic stimulates the opioid receptor and primarily inhibits the re-uptake of norepinephrine?
- *Answer: Nucynta[®] (Tapentadol).*

Rapid Fire Question # 69

- A patient is admitted to the hospital and is NPO due to a bowel obstruction. The patient usually takes methadone 120mg daily. What is equivalent IV daily dose?
- *Answer 60mg.*

Rapid Fire Question # 70

- Name a skeletal muscle relaxant that can be used in the treatment of reversible spasticity associated with multiple sclerosis?
- *Answer: Lioresal[®].*

Rapid Fire Question # 71

- What are the most common side effects associated with the use of baclofen?
- *Answer: Drowsiness, insomnia, dizziness, weakness, ataxia, mental confusion, GI distress.*

Rapid Fire Question # 72

- What can happen at toxic doses baclofen?
- *Answer: It can cause coma, respiratory depression, and seizures.*

Rapid Fire Question # 73

- What can happen with sudden withdrawal after chronic use (e.g., pump failure) of baclofen?
- *Answer: Auditory and visual hallucinations, anxiety, tachycardia, and a rebound increase in the number of flexor spasms.*

Rapid Fire Question # 74

- Why are higher doses of morphine required orally as compared to IV or SC?
- *Answer: Due to first pass metabolism.*

Rapid Fire Question # 75

- Which opioid analgesic, alone or in combination with naloxone, is approved for the office-based treatment of opioid addiction?
- *Answer: Buprenorphine.*

Rapid Fire Question # 76

- What is the maximum daily dose for immediate-release tramadol?
- *Answer: 400 mg/day.*

Finalist Pain Patient Counseling



Finalist Instructions

- You will be presented the case for the patient sitting in front of you who just entered your pharmacy with prescriptions to fill
- You will have a total of 5 minutes once I indicate that the case presentation is over and for you to begin.
- You will be alerted when you have 3 minutes, 2 minutes, 1 minute and 30 seconds left
- You will be allowed to ask 3 prime questions of the patient. Other questions are free to be asked so long as they are based on your 3 prime questions. Good luck

Case #1 — Mr. Robertson

Mr. Robertson is a 43-year old African-American man who presents to the pharmacy with RX for:

- Oxycontin[®] 40mg; Take one tab tid #90
- Gabapentin 600mg; Take one tab tid #90
- Baclofen 20mg; Take one tab tid #90
- Dilaudid[®] 4mg tab, Take 1-2 tabs q4h prn # 90
- Senokot-S[®]; Take two tabs bid

Case #2-Mrs. Choi

Mrs. Choi is a 67-year old Asian female who presents to the pharmacy with RX for:

- Tylenol #3; Take 1-2 tabs q4 hour prn
- Diovan 160 mg; Take one tab qd
- HCTZ 25 mg; Take one tab qd
- Atorvastatin 20 mg; Take one tab qd
- Tylenol Arthritis 650 mg; take 1-2 tabs qd prn (Mrs. Choi is using ~2 tabs/day)
- ASA 81 mg, Take one tab qAM

Case #3-Mr. Krumpky

Mr. Krumpky is a 52-year old Caucasian man who presents to the pharmacy with refill RX for:

- MS Contin 30 mg; Take one tab q12h; Quantity: #60
- Morphine Sulfate IR 10 mg; Take one tab q4-6 h prn; Quantity: #120
- Tramadol 50 mg, Take 1-2 tabs q 6 hours prn; Quantity: #60
- Docusate 100 mg, Take one capsule bid
- ASA 81 mg, Take one tab qAM

Case #4-Ms. Gutierrez

Ms. Gutierrez is a 32-year old Hispanic woman who presents to the pharmacy with RX for:

- Opana ER 5 mg; Take one tab q12h for 3 days; Quantity: #5
- Opana ER 10 mg; Take one tab q12h; Quantity: #60
- Docusate 100 mg, Take one capsule bid

Final Judge Evaluation and Announcement of the Winner



CASE REVIEW

Thank you for your participation