Hello!

I have no disclosures and no associations with industry/pharma.
Objectives

By the end of this session, participants will be able to:

- Review available evidence for opioid use in cancer patients
- Describe guidelines for opioid prescribing in cancer patients
- Develop individualized cancer pain management treatment plans.
It’s not ALL about the drugs...

Interventional
Rehabilitative
Psychological
Neurostimulatory
Integrative

BELINDA

58yo taxi driver
Recurrent breast cancer to liver, bone, lymphadenopathy

She is a skeptic...
She is suffering.
OPIOIDS AND CANCER

Opioids may be Immunosuppressive

VS.

Pain and stress have adverse influence on cancer progression

Evidence of the Evidence

Cochrane Library
Cochrane Database of Systematic Reviews

Opioids for cancer pain - an overview of Cochrane reviews
(Review)

Wiffen PJ, Wee B, Derry S, Bell RF, Moore RA

What kind of pain are you treating?

Who are you treating?
GUIDELINES

JOURNAL OF CLINICAL ONCOLOGY

Management of Chronic Pain in Survivors of Adult Cancers: American Society of Clinical Oncology Clinical Practice Guideline

Judith A. Paice, Russell Portenoy, Christina Lacchetti, Toby Campbell, Andrea Cheville, Marc Citron, Louis S. Constine, Andrea Cooper, Paul Glare, Frank Keefe, Lakshmi Koyyalagunta, Michael Levy, Christine Miaskowski, Shirley Otis-Green, Paul Sloan, and Eduardo Bruera

WHO GUIDELINES
FOR
THE PHARMACOLOGICAL
AND RADIOTHERAPEUTIC
MANAGEMENT OF
CANCER PAIN
IN ADULTS
AND ADOLESCENTS

BC Centre for Palliative Care

PAIN | B.C. Inter-Professional Palliative Symptom Management Guidelines
And here the evidence ends...
THE ABCDs OF OPIOID PRESCRIBING

Assessment - get a baseline

Breakthrough dosing

Constipation (& proactive prescribing)

Details - titrating, rotating, adjuvants and complexities

A for Assessment

Onset
Provoking/Palliating
Quality
Region/Radiation
Severity
Treatment → current and past therapies tried
U
V
FORM 3.2 Brief Pain Inventory

Date: / / Time:________________________

Name: ________________________________ ________________________________ ________________________________

1) Throughout our lives, most of us have had pain from time to time (such as minor headaches, sprains, and toothaches). Have you had pain other than these everyday kinds of pain today?
   1. Yes  2. No

2) On the diagram shade in the areas where you feel pain. Put an X on the area that hurts the most.

Right

Left

3) Please rate your pain by circling the one number that best describes your pain at its worst in the past 24 hours.
   0 1 2 3 4 5 6 7 8 9 10
   No pain as bad as pain you can imagine

4) Please rate your pain by circling the one number that best describes your pain at its least in the past 24 hours.
   0 1 2 3 4 5 6 7 8 9 10
   No pain you can imagine

5) Please rate your pain by circling the one number that best describes your pain on the average.
   0 1 2 3 4 5 6 7 8 9 10
   No pain you can imagine

6) Please rate your pain by circling the one number that tells how much pain you have right now.
   0 1 2 3 4 5 6 7 8 9 10
   No pain you can imagine

7) What treatments or medications are you receiving for your pain?

8) In the Past 24 hours, how much relief have pain treatments or medications provided? Please circle the one percentage that most shows how much relief you have received.
   0% 10 20 30 40 50 60 70 80 90 100%
   Complete relief

9) Circle the one number that describes how, during the past 24 hours, pain has interfered with your:
   A. General activity
   0 1 2 3 4 5 6 7 8 9 10
   Does not interfere Completely interferes

   B. Mood
   0 1 2 3 4 5 6 7 8 9 10
   Does not interfere Completely interferes

   C. Walking ability
   0 1 2 3 4 5 6 7 8 9 10
   Does not interfere Completely interferes

   D. Normal work (includes both work outside the home and housework)
   0 1 2 3 4 5 6 7 8 9 10
   Does not interfere Completely interferes

   E. Relations with other people
   0 1 2 3 4 5 6 7 8 9 10
   Does not interfere Completely interferes

   F. Sleep
   0 1 2 3 4 5 6 7 8 9 10
   Does not interfere Completely interferes

   G. Enjoyment of life
   0 1 2 3 4 5 6 7 8 9 10
   Does not interfere Completely interferes
Understanding → what do you think is causing the pain?
   how is it affecting you and your family?
   what are your beliefs about opioids?

Values → are you having to make compromises because of the pain?
   what overall goals do we need to keep in mind?
   what is your acceptable level of pain (0-10)?
   are there any beliefs, views or feelings about this symptom important to you and your family?
RISK VS FEAR

Opioid Risk tool

Score 8 or higher indicates High risk for opioid abuse

... that doesn’t mean don’t prescribe, just discuss and be aware of the risk!

<table>
<thead>
<tr>
<th>Mark each box that applies</th>
<th>Female</th>
<th>Male</th>
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<tbody>
<tr>
<td><strong>Family history of substance abuse</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Illegal drugs</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Rx drugs</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>Personal history of substance abuse</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Illegal drugs</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Rx drugs</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>Age between 16—45 years</strong></td>
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<td>1</td>
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<tr>
<td><strong>History of preadolescent sexual abuse</strong></td>
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<td>0</td>
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<tr>
<td><strong>Psychological disease</strong></td>
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<tr>
<td>ADD, OCD, bipolar, schizophrenia</td>
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<td>2</td>
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<tr>
<td>Depression</td>
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<td>1</td>
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<tr>
<td><strong>Scoring totals</strong></td>
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</tr>
<tr>
<td>Fear</td>
<td>Reassurance</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>--------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Addiction</td>
<td>Rare and can be screened for</td>
<td></td>
</tr>
<tr>
<td>Side effects</td>
<td>Most can be treated and/or diminish with time</td>
<td></td>
</tr>
<tr>
<td>Won’t be effective when the pain</td>
<td>Doses can be adjusted, opioids won’t ‘run out’</td>
<td></td>
</tr>
<tr>
<td>becomes worse, tolerance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>People will think you are giving up</td>
<td>Pain control should allow patients to do more, have better QoL</td>
<td></td>
</tr>
<tr>
<td>Opioids hasten death</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A FOR ASSESSMENT

Focused physical exam

Blood work/Imaging

Social History

Other symptoms
What do I need to know about your pain?
Initiate Treatment and Set Expectations

Identify the three simple stepwise goals for pain management:

- A good night’s sleep.
- Pain control during the day while at rest.
- Pain control when active and ambulatory.
BELINDA

58yo taxi driver
Recurrent breast cancer to liver,
bone, lymphadenopathy

She is struggling to do chores and
activities around the house due to
RUQ pain.

What would you start her on?
Could start oxycodone/acetaminophen combination, or tramadol
Could start lower dose pure opioid for mild/moderate incident pain

Morphine 5mg PO q2hr PRN
  = Hydromorphone 1mg PO q2hr PRN
  = ~2.5mg Oxycodone PO q2hr PRN
Starting doses:

- Start Low, Go Slow
- Better to start with low dose at higher frequency based on time to FULL EFFECT (as close as q15min for IV, q30min for SC, q60min for PO Doses)
- Usually:
  - Don’t start a regular dose when initiating opioids
  - Don’t start a long acting formulation when initiating opioids
- 10mg PO Morphine equivalent for severe pain in robust Patients*
  - Reduce for frailty (not age dependent!) by 50%
  - Reduce for Renal insufficiency (no absolute cut off) by 50%
B for Breakthrough

Incident Pain
- often predictable; treat proactively if possible

Spontaneous Pain
- not predictable; requires reactive treatment

End of dose Failure
- occurs prior to next regular dose; increase regular dosing in most cases
Stick with the same Opioid... Except...

Fentanyl Patch
- Look at morphine equivalency
- Calculate 10% of this
- Give breakthrough in short acting opioid

Methadone
- Methadone can be used for breakthrough dosing (q3hr PRN due to accumulation)
- Usually a shorter acting opioid is used instead
Belinda is now using Morphine 5mg 5x/day with some relief. What is your next step?
Belinda is now using Morphine 5mg 5x/day with some relief. What is your next step?

Morphine 5mg x 5 = 25mg

- Long acting eg 15mg Morphine Long Acting q12hrs + 2.5mg q1hr PRN
- OR  Morphine 5mg q4hrs (can skip overnight dose) + 2.5mg q1hr PRN
Breakthroughs & establishing a dose:

- Reassess the pain and when it "breaks through"
- Most cancer patients with good pain control will require 2-3 PRNs / Day
- Calculate total daily dose - Regular + all breakthrough doses
- Regular dosing should generally encompass the total daily dose, up to a 50% increase*
  - Use a long acting formulation - your patient will thank you
- How often can they use it? As often as the time to full effect
  - Half life determines how often to dose regularly
- New breakthrough dose = total daily dose x 10%
  - In some cases up to 20% may be needed (e.g., acute incident pain)
Prescribing...

Generally prescribe generics
(eg Morphine Long Acting)

Know your Formulary

Document your prescriptions clearly
(in your clinic notes and on the Rx)

Dispense in intervals if prudent

Fentanyl Patch 25mcg/hr

Apply 1 patch every 72 hours
Dispense 5 patches every 14 days

OR Dispense 1 patch every 3 days; please have patient return used patch to receive next patch
### Prescription Opioids Analgesics and Stimulants Marketed in Canada

<table>
<thead>
<tr>
<th>OPIODS</th>
<th>Product Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buprenorphine</td>
<td></td>
</tr>
<tr>
<td>Codeine</td>
<td></td>
</tr>
<tr>
<td>Codeine</td>
<td></td>
</tr>
<tr>
<td>Fentanyl</td>
<td></td>
</tr>
<tr>
<td>Fentanyl</td>
<td></td>
</tr>
<tr>
<td>Butorphanol</td>
<td></td>
</tr>
<tr>
<td>delta-9-THC/CBD</td>
<td></td>
</tr>
</tbody>
</table>

### Notes
- Search for: "Prescription Opioids Analgesics and Stimulants Marketed in Canada PDF"
C for Constipation

Expect the expected!

Prescribe a laxative
Prescribe an anti-nauseant

Docusate is pill burden
Senna and PEG get you far
Metoclopramide for most
ASK ASK ASK ABOUT STOOL.
D FOR DETAILS

ASSESS, EDUCATE, TREAT, REPEAT

Look for opioid side effects & toxicities

Look for opioid ineffectiveness

Educate

Increment doses and

Rotate if needed
<table>
<thead>
<tr>
<th>Opioid Side Effects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Extinguishing</strong></td>
<td><strong>Non-Extinguishing</strong></td>
</tr>
<tr>
<td>Somnolence/Sedation</td>
<td>Constipation</td>
</tr>
<tr>
<td>Nausea</td>
<td>Confusion/Nightmares/Hallucination</td>
</tr>
<tr>
<td>Itching*</td>
<td>Urinary Retention</td>
</tr>
<tr>
<td></td>
<td>Myoclonus</td>
</tr>
<tr>
<td></td>
<td>Hyperesthesia</td>
</tr>
<tr>
<td></td>
<td>Hypotension</td>
</tr>
<tr>
<td></td>
<td>(Respiratory Depression)</td>
</tr>
</tbody>
</table>
Patient and Family Education

- What the medications are & why they have been prescribed.
- How & when they should be taken.
- Potential adverse effects & how they can be managed if they occur.
- Medication safety processes
- How prescriptions are filled.
- Safe handling, storage, & pharmacy take-back disposal of analgesics, particularly opioids.
Opioid rotation

May be required if:

Non-extinguishing symptoms
Previous route is unavailable
Current opioid is ineffective
Side effect management not effective
ROTATION

1) Calculate total dose
2) Convert to Oral Morphine Equivalents
3) Convert to ‘new’ Opioid
4) Reduce by ~33% to account for incomplete cross tolerance
### Table B Appendix 8.1 Oral Opioid Analgesic Conversion Table

<table>
<thead>
<tr>
<th></th>
<th>Equivalence to oral morphine 30 mg:</th>
<th>To convert to oral morphine equivalent, multiply by:</th>
<th>To convert from oral morphine, multiply by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine</td>
<td>30 mg</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Codeine</td>
<td>200 mg</td>
<td>0.15</td>
<td>6.67</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>20 mg</td>
<td>1.5</td>
<td>0.667</td>
</tr>
<tr>
<td>Hydromorphone</td>
<td>6 mg</td>
<td>5</td>
<td>0.2</td>
</tr>
<tr>
<td>Meperidine</td>
<td>300 mg</td>
<td>0.1</td>
<td>10</td>
</tr>
<tr>
<td>Methadone and tramadol</td>
<td>Morphine dose equivalence not reliably established.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. **Equivalence between oral morphine and transdermal fentanyl:**

<table>
<thead>
<tr>
<th>Transdermal fentanyl*</th>
<th>Morphine dose equivalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-134 mg morphine</td>
<td>25 mcg/h</td>
</tr>
<tr>
<td>135-179 mg = 37 mcg/h</td>
<td></td>
</tr>
<tr>
<td>180-224 mg = 50 mcg/h</td>
<td></td>
</tr>
<tr>
<td>225-269 mg = 62 mcg/h</td>
<td></td>
</tr>
<tr>
<td>270-314 mg = 75 mcg/h</td>
<td></td>
</tr>
<tr>
<td>315-359 mg = 87 mcg/h</td>
<td></td>
</tr>
<tr>
<td>360-404 mg = 100 mcg/h</td>
<td></td>
</tr>
</tbody>
</table>
BELINDA

58yo taxi driver
Recurrent breast cancer to liver, bone, lymphadenopathy

She comes in with increased pain, significant nausea and constipation.
Belinda is now using Morphine Long Acting 20mg q12hrs + 40mg of PRN Morphine. What is your next step?
Belinda is now using Morphine Long Acting 20mg q12hrs + 40mg of PRN Morphine. What is your next step?

Calculate total dose, Convert to Oral Morphine Equivalents → 20x2 + 40 = 80mg OME
Convert to Hydromorphone → 80mg * 0.2 = 16mg Hydromorphone
Reduce by ~33% to account for incomplete cross tolerance → 12mg Hydromorphone
→ Hydromorphone Long Acting 6mg PO q12hrs

OR
Rotate to Fentanyl Patch - 80mg OME
= 25mcg/hr Patch + 1mg q2hr PRN Hydromorphone
Opioid toxicities and Rotations:

- Use a consistent table as none is Perfect!
- Generally move from a 'dirtier' to a 'cleaner' opioid for improved side effects
  - Codeine $\rightarrow$ Morphine $\rightarrow$ Hydromorphone $\rightarrow$ Oxycodone $\rightarrow$ Fentanyl/Methadone
- Reduce by 25-50% for incomplete cross tolerance
- In most cases, calculate oral morphine equivalents and then convert to target opioid
- For fentanyl patch
  - Use a chart, Don’t need to dose reduce
  - To rotate FROM patch, reduce morphine dose by 50% if using standard chart
  - Often better for constipation, compliance
  - May not be as good for neuropathic pain
Caveats

Codeine has a ceiling effect, variable metabolism, only PO doses - usually avoided unless pain will be only mild/moderate and not chronic

In renal insufficiency, hydromorphone or oxycodone are preferred at lower doses, methadone and fentanyl are much preferred if higher doses are needed (eg >90mg morphine/day)

Call for help if needed! PSMPC teams are happy to help/give advice.
**Methadone**

Seems better for Neuropathic pain

Often works when other opioids don’t

Interacts with other medications

Long Half Life

QTC prolongation

Online course - 2 Mainpro+ credits

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*Methadone for Pain in Palliative Care*

*Methadone4Pain.ca* is a series of three education modules for physicians, nurses and pharmacists seeking to improve their knowledge in prescribing and managing patients prescribed methadone for pain in palliative care.
Thanks!

Questions?

jRidley@bccancer.bc.ca