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Objective 1

In a patient presenting with acute pain, provide analgesia while seeking a diagnosis.

As we all know, obtaining a good pain history takes time, so if there is a patient presenting with severe, acute pain, you first want to provide them analgesia before you dive into the history and physical exam.

This will help provide the patient with some relief and even make it easier for you to converse with and examine them. If you have a well-appearing patient presenting with mild ear or back pain you'll postpone analgesia until you have a diagnosis.

Our goal in an urgent or emergent setting is not to completely eradicate their pain but to provide them with some symptom relief.

Before you administer any medication, you want to inquire about any allergies and a history of liver or kidney disease, so you can provide the most appropriate analgesic.

Objective 2

When assessing a patient with pain, take a detailed history to recognize clinical patterns to inform your diagnosis.

This would include asking about their chief complaint and then asking follow up questions, like rating their pain.

I personally like using OPQRSTU which is quite comprehensive in terms of a pain history.

Obtaining these aspects of the history helps narrow our differential diagnosis.

Be certain to clarify if there is more than one pain generator! If there is, you need to repeat the entire OPQRSTU for each site of pain. As pain-staking... as that is

One way is to divide it into 3 broad categories, visceral, somatic, and neuropathic.

Visceral pain

comes from organs and their connecting and supporting structures. It is characteristically described as pressure, aching, cramping, squeezing deep pain which is diffuse, hard to localize and sometimes radiate to other non-visceral structures.



It can also have a pattern of escalating intensity or waves of pain. A classic example is menstrual cramps or abdominal cramping you get with indigestion or a stomach bug.

Somatic pain

originates from stimulation of the nociceptors in your skin, muscles or bones, rather than organs, which is why it is well localized compared to visceral pain.

Superficial somatic pain, pain originating from skin, subcutaneous tissues and mucous membranes is generally described as sharp, prickling, stabbing pain. This type of pain is very easy to point to.

In comparison, pain originating from joint capsules, connective tissues, fascia, muscle and bone would be considered deep somatic pain, which is less well localized and described as aching, cramping, throbbing, dull, gnawing pain.

neuropathic pain,

which is a result of damage or dysfunction of your central or peripheral nervous system, which sometimes presents as pain in response to a specific event or injury or just out of nowhere.

This pain is often described as burning, numbness, tingling, electric shocks, and pins and needles, and can often radiate down the nerve or have a glove and stocking presentation. A classic presentation of this is diabetic neuropathy.

There is also another lesser known category of pain that we call quote on quote 'other' which is used to classify pain that doesn't belong in any one of these categories.

Objective 3

In a patient presenting with pain without a clear diagnosis

- a) Include life-threatening conditions in your differential diagnosis,**
- b) Investigate appropriately and in a timely manner.**

We've all heard that "Patients don't read your textbooks", because diseases may not present with classical symptoms. So there are a few life-threatening conditions to keep in mind in a patient presenting with pain,

chest pain

Think of aortic dissection, myocardial infarction, pulmonary embolism or pneumothorax.

abdominal pain,

consider, testicular torsion, ectopic pregnancy, uncontrolled bleed, or traumatic rupture of organs.

And don't forget that some classical chest pain diagnoses may present as abdominal pain like myocardial infarction.



headaches

or a migraine you want to keep temporal arteritis, intracranial hemorrhage, CO toxicity, and encephalitis on your differential.

And because some of these life-threatening conditions present without a clear history or other signs or symptoms, it's important to investigate appropriately and in a timely manner, even if the pain is well controlled.

Such as for a thunderclap headache get a CT and then LP if not clear. For temporal arteritis, if highly suspicious get a CRP and biopsy to confirm.

objective number 4

When there is a concern about drug-seeking behaviour in a patient with pain:

- a) Maintain your therapeutic relationship**
- b) Do not attribute the presentation to drug-seeking without first considering an appropriately broad differential diagnosis**

If you are confronted by a patient who may be displaying drug-seeking behaviours or one that you suspect of malingering, it is important to be empathetic, avoid stereotyping and manage your frustration.

Basically manage your countertransference.

Many pain medications can result in dependence and improper use, but the second part of this objective is to not attribute a patient's presentation to drug-seeking behaviours.

Especially without first listening to their story and considering potential reasons for pain and other biopsychosocial aspects.

With all this talk about pain, how do we go about treating it?

When treating pain with narcotics:

- a) Dose appropriately considering narcotic naïveté and renal function**
- b) Consider addiction risk**
- c) Consider variable and potentially dangerous metabolic responses**

Narcotics are effective analgesic agents in the context of more severe pain that cannot be adequately controlled with non-opiates. You need to prescribe these drugs responsibly and under the right circumstances after appropriately educating patients about the risks and analgesic alternatives.



In narcotic naive patients, it's important to ask about allergies, pregnancy, breastfeeding, and kidney disease. When considering risk of addictions you should ask about mental health issues as well as family or personal history of substance use disorder.

The opioid risk tool is a quick and easy way to categorize the risk of opioid abuse in your patient while taking a history. We've included the opioid risk tool in the show notes for those who are interested.

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		

When prescribing, in all cases, it's good to “start low, go slow” to prevent overdosing. In a patient with a higher risk of opioid abuse, you may try to use non-opioids for as long as possible, and then prescribe small quantities of opioids or use other methods to prevent opioid misuse.

In a patient with renal failure or one undergoing dialysis, consider hydromorphone or methadone.

For renal or liver disease consider Fentanyl.

For the elderly, it is recommended to use 25% of starting dose and they often have renal impairment, so hydromorphone is usually the best drug to use.



One final thing to consider is potentially dangerous metabolic responses to opioid use including:

- respiratory depression,
- sedation,
- tolerance,
- hyperalgesia, and
- sudden loss of painful stimulus resulting in changes to sympathetic tone.

In pregnant women, we want to be quite cautious of opioid use as it can result in neonatal abstinence syndrome in the newborn or abrupt stoppage of opioids could result in abortion or preterm labour.

And in those breastfeeding, opioids can pass through breast milk resulting in respiratory depression or even infant death.

Moral of the story is that we need to be cautious when prescribing due to the many potential side effects. Speaking of side effects, never forget to prescribe appropriate laxatives along with every narcotic prescription you write.

And one aspect that can be easy to miss is our next objective:

Objective 6

When prescribing medication for pain, inform the patient not to use over-the-counter products that contain the same drug or drugs from the same class to ensure that they are not reaching toxic doses.

Some examples would include T3s and Percocets which both contain acetaminophen

Remind patients they can only use one NSAID, either: Naproxen, Ketorolac, or ibuprofen.

Objective 7

When treating a patient with pain appropriately use non-pharmacologic treatments and self-management strategies to control pain and optimize function.

Don't forget the basics:

- stretching,
- physiotherapy,
- heat and ice (alternating), and
- rest.

Other options include:

- acupuncture,
- massage,
- osteopathic and chiropractic manipulation,
- yoga,
- mindfulness,
- dietary considerations and self-care/self-efficacy strategies.



All of these have mixed evidence and their effects are context and patient-dependent.

When used in conjunction with pharmacological treatment, they help create the most optimal approach to combating pain.

But what about patients who continue to have pain despite being given opioids?

Objective 8

In a patient whose pain is not resolving or following the anticipated course, regularly re-evaluate.

You would reconsider your diagnosis, the current medication choices and any complications.

First, verify they are taking the prescriptions as written. If not, find out why...? Can they afford them? Are they worried about becoming addicted?

If there are any red flags for diversion, order a urine tox screen on the spot. Verify your original history, did you mistakenly classify neuropathic pain as somatic?

Lastly, if your patient is experiencing psychological distress, counseling is needed as part of the pain treatment plan.

Well said. And that brings us to our final objective.

Objective 9: In a patient where acute pain has become chronic:

a) Recognize the transition

b) Readdress the treatment plan and your patient's expectations appropriately

When pain has lasted for more than 3 months, it can be classified as chronic. Nearly 8 million Canadians live with chronic pain, and face a wide range of physical, emotional and social challenges.

which is why it is important to:

b) Readdress the treatment plan and your patient's expectations appropriately

Treatment goals may include a reduction in pain and/or improvements in cognitive health, psychological health, social function, and physical function.

In terms of pharmaceutical treatment, the WHO analgesic ladder provides a great approach to pain management. We've added this in the show notes again.

Adjuvants including tricyclic antidepressants, serotonin-norepinephrine reuptake inhibitors, anticonvulsants like gabapentin and pregabalin, and topical anesthetics can also be helpful along with nonpharmacologic options.

You also want to manage your patient expectations - ensuring you don't over-promise and communicate in a way the patient can understand. Establishing a good rapport and professional relationship with your patient goes a long way to gaining their trust and improving their experience.

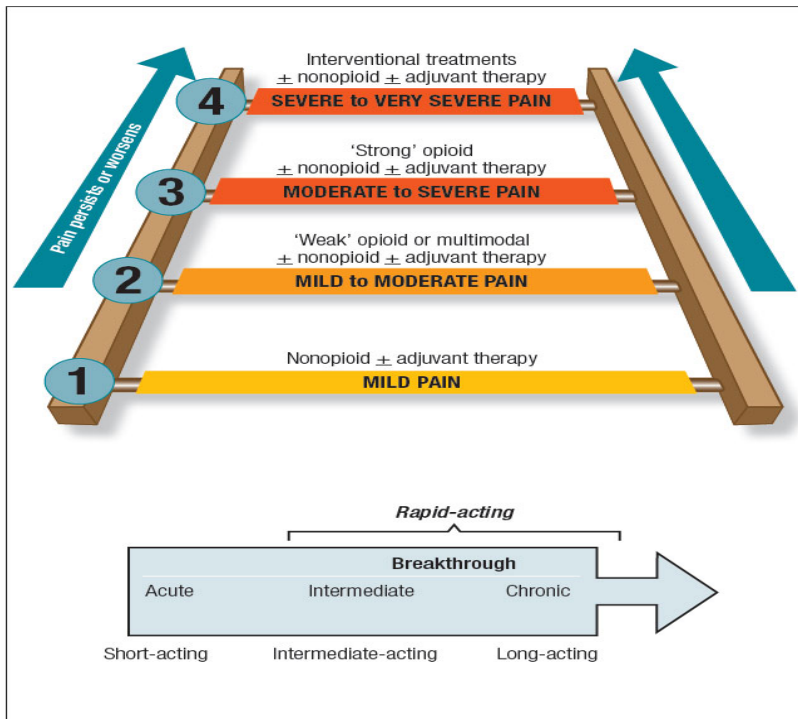


Figure 3. An updated version of the 1986 WHO pain ladder. Persistent and chronic pain syndromes should be treated with long-acting opioids; rapid-onset opioids are appropriate for breakthrough pain. A fourth step has been added for “very severe” pain that can be treated with peripheral nerve blockade.



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