Pain Management: Overview of A Practical Approach

Michael B. Potter, M.D.
Department of Family and Community Medicine
University of California, San Francisco
What is Pain?

• “An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage” -- IASP

• In reality, it’s what the patient says it is.
Ways to Define and Classify Pain

• Duration
  – Acute, Subacute, or Chronic
  – Constant or Intermittent

• Mechanism
  – Nociceptive, Neuropathic, Visceral, or Mixed

• Disease Process
  – Muscle Pain, Arthralgias and Arthritis, Neuralgias, Radicular Pain, Peripheral Neuropathy, Cancer Pain, Fibromyalgia, Various Types of Headache, Complex Regional Pain Syndromes, and so on…

• Things can get confusing quickly!
Goals for Today

• General Approach to Evaluation and Treatment
• Detailed Discussion of Some Common Scenarios
  – Musculoskeletal Pain
  – Neuropathic Pain
  – Refractory Chronic Pain Requiring Opioids
  – Cancer Pain
• Increase Your Comfort and Competence in Managing Patients in Pain
First Step: Evaluate the Pain

• Look for underlying causes
• Assess the pain as an entity in itself
  – Onset, Character, and Magnitude on scale of “0 to10”
  – Constant or Intermittent?
  – What makes it better or worse? (e.g. rest, medication)
  – Detailed history of prior evaluations and treatments
  – How does it affect physical function and work?
  – How does it affect social and mental functioning?
Second Step: Identify Pain Treatment Options

- Non-Drug Therapies
- Drug Therapies
- More Invasive Therapies
Non-Drug Therapies

Ice/Heat
Exercise/Rest
Physical Therapy
Chiropractic Care
Acupuncture
TENS Units
Behavioral Therapy
And Many More....
Drugs for Pain

• Non-Opioid Analgesics
  – Acetaminophen
  – Salicylates and Non-Selective NSAIDS
  – Selective COX-2 Inhibitors

• Adjuvant Analgesics
  – Antidepressants
  – Anticonvulsants
  – Topicals, Muscle Relaxants, and Others

• Opioids
  – Short- and long-acting formulations
Some More Invasive Therapies

- Trigger Pont Injections
- Joint Injections
- Regional Nerve Blocks
- Epidural Injection
- Various Surgeries
CASE #1:

A 52-year old woman with type 2 diabetes complains of low back pain that began after rearranging the furniture in her house one week ago. She says the pain is constant, and shoots down her right leg. It’s worse when she sits and tries to get up. The pain level varies from 5-7/10 and is only partially relieved by acetaminophen and ibuprofen. She got more relief from a couple “leftover codeine pills” from a dental procedure she had two months ago.
CASE #1: Additional Findings

- no prior history of LBP
- no bowel or bladder symptoms
- normal vital signs
- no motor weakness
- equivocal straight leg raise on right
- ankle and patellar reflexes normal bilaterally
- considering a job change
- may be depressed
- no history of drug abuse or drug-seeking behavior
Universal Principle of Pain Management:

BELIEVE THE PATIENT!
Acute Low Back Pain

- The most common acute pain we see in adults.
- Usually resolves within 2 months no matter what.
- Be wary of unusual presentations, especially in the elderly or in those with neurological findings.
- Consider the possibility of referred pain, especially if the patient has other symptoms such as fever, weight loss, or urinary tract symptoms.
Evidence-Based Treatments for Musculoskeletal Pain

- Acetaminophen – up to 1000mg qid
- NSAIDs – (e.g. ibuprofen up to 800mg tid)
- Short-acting opioids – (e.g. hydrocodone with APAP 5/500, 1-2 tabs bid)
- Muscle relaxants (e.g. cyclobenzaprine 10mg bid)
- Brief physical therapy or chiropractic care
- Minimize bedrest
CASE #2: 6 Months Later...

Your patient returns, stating that her low back pain has mostly resolved with ibuprofen and the back stretching exercises you gave her. She also reports that she has found a new job and is very happy about that.

However, this episode has made her more aware of some longstanding tingling, burning pain in her right foot, and it’s worse over the last six months. She’s now noticing symptoms on the left, too.
CASE #2: Additional Findings

- motor exam and reflexes normal
- monofilament exam shows diminished sensation on the bottom of both feet, with right slightly worse than left
- she’s had type 2 diabetes for 15 years
- straight leg raise no longer positive
- normal DP and PT pulses; normal capillary refill
- TSH, B12, and liver function are normal
General Characteristics of Nociceptive vs. Neuropathic

- “dull, ache, sharp”
  - Often decreases over time
  - NSAIDs often work
  - Opioids effective
  - Adjuvant and topical analgesics sometimes effective

- “tingling, burning”
  - Often persists or worsens over time
  - NSAIDs not effective
  - Opioids less effective
  - Adjuvant and topical analgesics somewhat more effective
Evidence-Based Treatments for Neuropathic Pain

• Antidepressants:
  – Especially tricyclics; but watch for side effects

• Anticonvulsants:
  – Gabapentin popular, due to fewer side effects. Others include carbamazepine, lamotrigine, and topiramate.

• Others:
  – Topical lidocaine
  – NMDA antagonists – dextromethorphan, amantadine?
  – Sympathetic antagonists – clonidine, tizanadine?
  – Opioids
Other Considerations

- Pain treatment is a trial and error process, and this can be especially true for neuropathic pain.
- Convey a willingness to work with your patient to find the right combination of treatments “no matter what it takes”.
- Realistic expectations are equally important.
CASE STUDY #2: One Year Later…

You continue to work through a number of pain treatments for your patient’s peripheral neuropathy over the next year – high doses of anticonvulsants were minimally effective for her. Topical lidocaine patch helped somewhat, but were too expensive. She finally found relief in a combination of amitriptyline 25mg at night, which helps her sleep, and using biofeedback exercises she learned at a multidisciplinary pain clinic you referred her to. She now has pain of 3/10 on most days, which she says she can handle.
CASE #3

A 46 year old patient of yours has experienced a motor vehicle accident last year which shattered his left knee. He has had multiple unsuccessful knee surgeries at which have failed to relieve his pain. His pain is 8/10 on most days, but his orthopedic surgeon refused to give him opioids for fear of causing addiction. The patient has a past history of injection drug use in his 20’s. The patient comes to you and asks if you can give him the “strong stuff” he really needs.
Prescribing Opioids Safely

Short-Acting “PRN” opioids have their place, especially for acute pain or for breakthrough chronic pain.

For moderate to severe chronic daily pain, round-the-clock long-acting opioids are likely to be safer and more effective.
More Important Issues With Opioids

- Understand the difference between tolerance, physical dependence, and addiction.
- Know the difference between addiction and pseudoaddiction.
- Anticipate and prevent side effects.
If Prescribing Opioids Chronically, Document the “Five A’s” At Each Visit

Analgesia
Activities of Daily Living
Adverse Effects
Aberrant Drug-Taking
Affect
When To Use Written Agreements

Not required for most patients

Consider them for chronic pain patients who:
  Who are at risk for abuse or misuse
  Who take opiates around-the-clock
  Who get care from several providers
When to do Urine Drug Testing (UDT)

Not necessary for most patients

Consider testing for chronic pain patients:
  Who are on opiates and new to you
  Who have hx of prior substance abuse
  Who exhibit aberrant behaviors
  When starting new treatments
  To support a referral or a contract
Interpreting UDT Results

If Unexpected Negative Test:
You may not have ordered the right test, or there may be a legitimate reason for the result.

If Unexpected Positive Test:
You may not have ordered the right test, and there still may be a legitimate reason for the result.

BE CAREFUL OF YOUR CONCLUSIONS!
CASE #3: Six Months Later

Your patient has followed his pain contract and seen you monthly since starting methadone 20 mg po bid. He uses approximately 30 vicodin tablets a month for breakthrough pain. A daily combination of senna and colace controls his symptoms of constipation. He has kept his appointments and random UDT on two occasions was consistent with taking methadone as expected. His pain is now 4-5/10 on most days and he’s still considering more surgery, but he is able to walk more and credits you for believing him and restoring hope that he can continue to get better.
Prevalence of Chronic Pain

- 9% of community dwelling US adults had pain 5-10/10 on a constant or recurring basis for six or more months:
  - 78% in pain “today”
  - 56% had it for over 5 years
  - 55% had it “under control”

» American Pain Society, 1999
How Chronic Pain Affects Lives

68% lose sleep
53% limits on walking
50% trouble having sex
42% trouble concentrating
34% trouble working
26% problems maintaining social contacts
18% feel depressed

» APS Survey, 1999
How Are We Doing With Chronic Pain?

47% changed doctors to find relief
22% changed doctors 3 or more times

Reasons:
– 42% Still had too much pain
– 31% Doctor lacked competence
– 29% Doctor didn’t take pain seriously
– 27% Doctor unwilling to treat aggressively
– 22% Doctor didn’t listen

» APS Survey, 1999
A hospitalized 72 year old woman with metastatic breast cancer is scheduled to go to home hospice tomorrow. An alert nurse informs you that the patient continues to report back pain of 8/10 from her bony metastases despite current therapy with fentanyl patch at 50ug/hr. Her family asks you not to give drugs that will be “too sedating”.
Traditional Approach to Cancer Pain

WHO’s Pain Relief Ladder

1. Pain persisting or increasing
   - Non-opioid
   +/− Adjuvant

2. Pain persisting or increasing
   - Opioid for mild to moderate pain
     +/− Non-Opioid
     +/− Adjuvant

3. Freedom from Cancer Pain
   - Opioid for moderate to severe pain
     +/− Non-Opioid
     +/− Adjuvant
A Few Words About Cancer Pain

• 30% at diagnosis; 60-90% if advanced
• Nociceptive, Neuropathic, and Visceral
• Attention to “Total P.A.I.N.” important
  – Physical Distress (physical pain/discomfort)
  – Affective Distress (anger, anxiety, depression)
  – Interpersonal Distress (relationships)
  – Normative Distress (spiritual, existential)
A Few More Words About Cancer Pain

- Any or all drug classes can be used
- RTC opioids are a mainstay of treatment
- Pain from bony metastases often responds to radiation and/or corticosteroids
- Understand your goals and the goals of your patient: Don’t withhold pain treatment in terminal patients for fear of hastening the patient’s death.
- Multidisciplinary approach is often a key to successful pain management in cancer patients.
CASE STUDY #4: Four Months Later

You had a team meeting with the patient and her family, including your social worker, hospice personnel, oncologist, and in-house pain management team. You kept her in the hospital for an extra couple days to initiate high dose steroids and palliative radiation. This helped at first, but when the pain returned, she decided to forego additional radiation treatments. She required escalating doses of morphine from her family and hospice workers for her pain. Her husband calls to tell you she died, and to thank you for your support through this process.
Summary of a Practical Approach to Pain Management

1. Evaluate and treat the underlying cause.
2. Evaluate and treat the pain itself.
3. Listen to and trust your patients.
4. Use all the resources at your disposal.
5. Refer if you get stuck…

but stick with your patients!