Opioid Abuse and Pain Management

A review of changing government requirements and current medical guidelines for acute and chronic pain

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Opiods

- Currently a hot topic issue
- Large push from politicians to decrease mortality from opiod use
  - But didn't they start this?
  - Don't they grade us based on patient satisfaction
  - Where do we draw the line?

Goals

- Understand the risk of opiod prescription
- Become familiar with opiod equivalents
- Know the safety limits of appropriate opiod Rx
- Meet requirements for Proper prescribing in your home state.
- *Updates in management of common pain complaints.
- *Then move in to case based questions and recommendations.

Pearls

- Increased patient satisfaction increased mortality 26% [5]
- Cost increased 9.1% on drugs[5]
- 8.8% on testing [5]
- Opiods are not reccomended for headaches[4]
- Opiods should be considered a last line
- Removing pain does not fix the problem

- a recent study of patients aged 15–64 years receiving opioids for chronic noncancer pain and followed for up to 13 years revealed that one in 550 patients died from opioid-related overdose at a median of 2.6 years from their first opioid prescription, and one in 32 patients who escalated to opioid dosages >200 morphine milligram equivalents (MME) died from opioid-related overdose (25).

Oklahoma specific

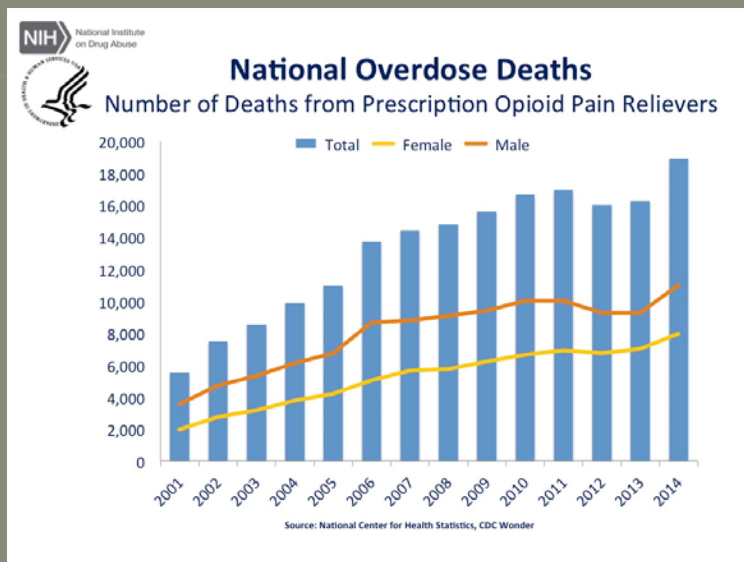
- Top 5 in prescribing
- Top 5 in deaths
- Major push for regulation and monitoring
- Required PMP checks
- Registering of pain management clinics
- Pill mills

Governmental intervention

- CDC Guidelines
- Released March 2016
- Opioid overdoses and deaths
- Emphasis on high dose opioids
- First governmental guidelines
- Voluntary
- Reducing opioid consumption
- Access to treatment

So How Did We Get Here?

- Pain as the 5th vital sign, started by the American Pain Society in 1995
- Big push from the VA in october 2000.
- From 1999-2014 rate of opiod overdose of quadrupled
- CMS recently published a study showing that including pain management as part of quality indicators did not contribute to death,
  - However deaths HAVE trended up since the push for pain as the 5th vital

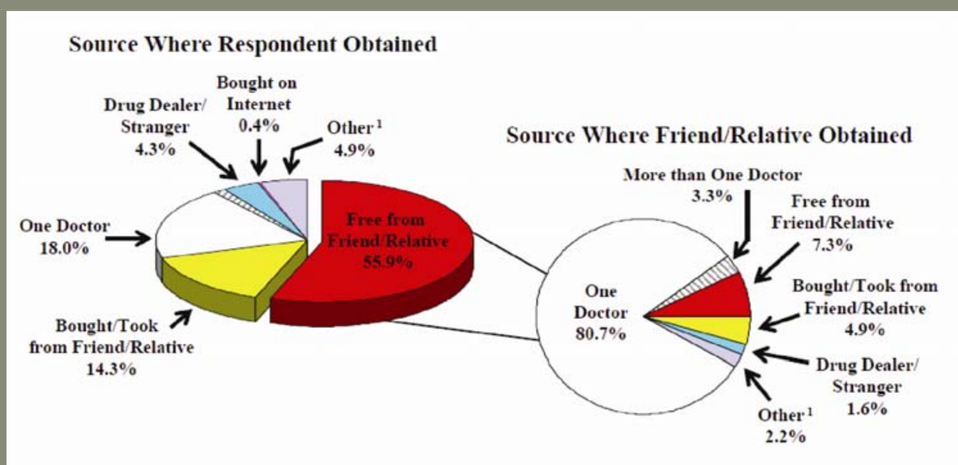


National Center on Addiction and Substance Abuse

- 15.2 million abuse prescription drugs (2.5 X increase in 10 years)
- 20% of patients obtaining opioids for chronic pain abuse the medication
- 10-20% of these patients abuse illicit drugs
- Increased prescribing of opioids linked to misuse, abuse and deaths
- Absolute link between increased prescribing and availability for abuse

Supply

- Explosion in the use of prescription opioids in response to the “under treatment” of pain
- Retail grams of opioids sold show significant increase
- Since 2004 risk has escalated without increased evidence of benefit
- Sources of opioids
- Number one source is from family and friends
- The medicine cabinet is our greatest threat



Why is the Government Getting Involved

- Major reason for CDC involvement
- Significant escalation
- Diversion: most deaths are from “non-prescribed” opioids
- Lethal combinations especially with benzodiazepines
- Good data to support dose linked relationship
- Without question the number one reason for governmental intrusion

Impact

- Physicians and nurses are being held accountable for patient death from overdose.
- Patients are suing physicians for becoming addicted to opiods.

2014

- White House recently unveiled a “multi-agency” plan to address the prescription drug epidemic
- Physician education
- Patient education
- Expanding monitoring systems
- Appropriate disposal of unused opioids
- Focus on “pill mills”
- Still only addresses Schedule II medications with emphasis on long acting opioids

CDC Emphasis

- Directed at primary care physicians
- Opioids not recommended for routine use
- Does not include end of life, cancer pain and palliative pain care
- Management of pain is a multidisciplinary problem requiring numerous modalities to address physical and psychosocial aspects

Goals

- Non-pharmacological approach
- Non-opioid approach
- Emphasis on Behavioral therapies
- Functional therapies
- Adjunctive medications
- Patient and provider expectation
- Opioids are a “last resort” option

What Does that Mean to Me?

- The main goal is education.
- Tell patients why you are not writing pain medicine.
- Tell patients that pain medicine only leads to tolerance and side effects.

Education

- Let patients know, that “good feeling” is euphoria
- Euphoria= getting high
- Goal is not to remove pain but improve function.
- Don’t use pain medicine as a sleep medicine

Do Pain Meds Ever Really Fix Anything?

- Evidence is scant
- Opioid use may be the most important factor impeding recovery of function
- Opioids do not consistently and reliably relieve pain and can decrease quality of life
- The routine use of opioids cannot be recommended
- As you can see the government is preparing a case to come down hard on us.

Opioid Induced Hyperalgesia

- Increased sensitivity to noxious or non-noxious stimuli
- Sensitization of pro-nociceptive mechanisms
- Hypersensitivity and allodynia
- Confused with tolerance
- Caused with rapid escalation and high dose therapy
- Activity at the NMDA receptor in dorsal horn

Last Ditch Effort

- Informed consent and discussion of risk vs. benefit
- Therapeutic trial of 4-6 weeks
- Exhaustion of other modalities
- Insufficient data on starting dose
- “ Start low go slow”
- Conversion tables
- Ongoing monitoring and assessment of benefit vs. risk, expectations and alternative modalities
- Consider a taper or wean even in functional patients

Remember…

- Narcotics are not a life saving measure.
- You are not obligated to write.
- Patients are being put at risk
- Increased risk:Benzodiazepine use with opioids
- Significant increase in deaths and ER visits

- Providers should prescribe lowest possible dose
- Additional precautions at > 50 MED's
- Should avoid > 90 MED's

Safety Lines

- Rate of Death 2X at >50MME
- Rate of Death 9X at >100MME

- Pay attention to a pattern of activity that suggests abuse and address
- Monitor closely through follow up and documentation
- Use available tools:
- PMP website
- UDS and pill counts
- Pharmacies
- Obligated to protect yourself, your patient and society from opioid abuse and diversion

- WEAN!
- Contact law enforcement agencies
- Refer the patient for appropriate help
- Treat withdrawal if indicated
  - Do not treat withdrawl with more drugs, use clonidine and zofran
- Contact other physicians and pharmacies
- 30 day supply of opioids maximum
- Certain circumstances, consider referral
- "Under no circumstances may a physician dispense with the knowledge the drug will be abused or diverted" *(DEA 2006)*
  - *If a patient has abused/diverted drugs in past it is a felony to prescribe again if there is a chance at diversion*

What the DEA considers inappropriate

- Inadequate attention
- Inadequate monitoring
- Inadequate patient education and consent
- Unjustified dose escalations
- Excessive opioid dosing
- Not using tools for risk mitigation

What Have We Done?

- Removal of morphine from routine orders decreased the rate of falls by 50%
- Decreased the number of rapid responses by 33%
- Decreased the number of code blues associated with rapid responses another 15%

What Are We Doing

- Removing Demerol
- Pharmacy to start calling when safety limits are reached.
- If a patient is not NPO or post surgery there is not a reason for them to be getting IV pain medicine (see attached chart)
- Movement towards opiod free ER
  - Hoping to remove Dilaudid formulary and order things in morphine equivalents

Results

- HCAHPS (Patient Satisfaction rates) increased 2.89% (p=0.025)
- Length of Hospital Stay reduction decreased 15.09% (p=0.0023)
- Falls decreased 17.31%
- Adverse Drug Events per 1,000 patient days down 20.69%
- No significant change in mortality
- Saved $3.1 million

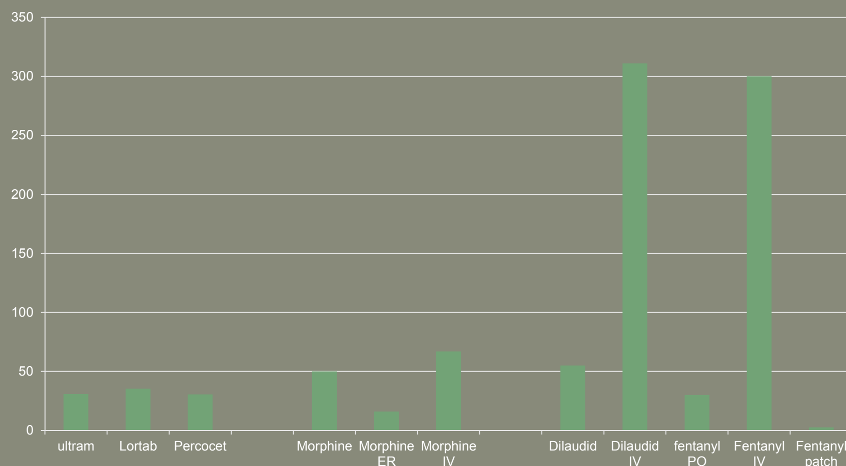
Next question

- Why the different doses and routes?

Peak Evaluation

- This is how high and how fast it hits
- Think about it as the higher the number the greater the risk of side effects like respiratory arrest.
- Think Vanc trough, past a point the number is too high and you risk toxicity
- Or think alcohol
- 3 Beers vs a shot of Everclear
  - You end up with the same BAC at an hour but it is a function of how quick it hits you and the risk of side effects

IV vs PO



Studies have shown these to be equivalent doses

Drug	PO	IV
Ultram	75mg	n/a
Lortab	7.5mg	n/a
Percocet	5mg	n/a
Morphine	7.5mg	1.875mg
Dilaudid	.75mg	.1875mg
Fentanyl	75mcg	18.75 mcg

- People saying that an opiod equivalent dose doesn't work as well for them are falling victim to secondary events.
- "But IV makes me feel so much more relaxed"

What Does a Safe Dose Look Like?

- 50MME/day Oral Meds=2x (100mme =9X)
- Ultram 100 mg q4-6 t ½ 7 hours
- Lortab 10mg q4-6 t ½ 4 hours
- Percocet 5mg q4 t ½ 4 hours
- Percocet 10mg q 8 t ½ 4 hours
  - Not recc dose bc t ½ < dosing frequency
- Morphine 10mg q 4-6 t ½ 5 hours
- Dilaudid 2mg q 12 t ½ 2.5 hours
  - So this is a never drug bc safe timing is much less than t ½
- Fentanyl 25mcg q 12 t ½ 4 hours
  - Another never dose

What Does a Safe Dose Look Like? 50 MME/day (and double for 9X risk)

- Morphine 2.5mg q 4 hours
- Morphine 5 mg q 8 hours
- Dilaudid 0.25mg q 4hours
- Dilaudid .5 mg q 8 hours
- Fentanyl 50mcg x1

- This is why it is imperative to switch to Oral as soon as possible
- There is no unlearning this information

Change is coming

- We are going to review some common pain complaints from the:
  - Clinic
  - ER
  - Hospital
  - Palliative
- And current guidelines with secondary therapies.

Regardless of the Place

- Start with a thorough history and physical.
- Make your documentation “Bullet proof”
  - PQRSTA on all, this is now a legal requirement at initiation and changes
  - Neuropathic:burning/numb/heavy/tingling
  - Nociceptive:Sharp/aching/throbbing
- Do what is best for the patient.
- Pain scale is the hardest.
  - Document appearance and rating, discuss descrepancies.
- Focus on education, no can be pain free all the time.
  - You should be striving for improved function, not complete pain relief.
  - Is there an underlying psychiatric component?

Risk Mitigation

- Medical Necessity
  - Even if just increasing dose
- Risk factors for abuse
- Co-morbidity
- Failure of conservative therarpies
- Informed consent
  - Big new one, does patient understand risk
- Primary Endpoint
  - Quality of life activities
- Indications for initial screening?

Changes and Follow up

- CDC suggest follow up at least every 6 months [9]
- Many states are requiring this for licensure.

New Patients,Weaning, Withdrawl

- A previous prescription for narcotics is not an indication on its own.
- Weaning is not indicated if
  - Opioids not present in UDS
  - Concerns for diversion (lost/stolen/shopping)
  - Risk factors greater than side effects of withdrawl
- Clonidine/Guanfacine and Promethazine at usual dosing to treat withdrawl symptoms
  - Replacement therapy is not indicated [9]

Suggested Weaning schedule

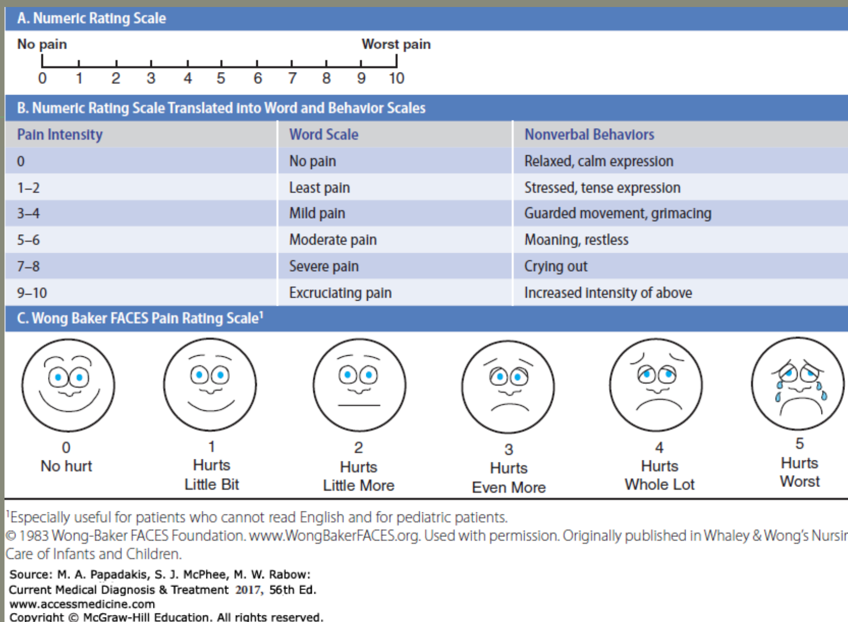
- 2 to 3 week tapering regimen should be adequate in most cases
- daily dose by 10%
- 20% every 3-5 days
- 25% per week
- Avoid reducing the daily dose by > 50% at any given interval

Terminating the physician-patient relationship :

- 1. Giving the patient or patient's representative written notice, which may be by certified mail, return receipt requested, or other reasonable proof. A copy of the letter should be included in the medical record.
- 2. Providing the patient with a brief and valid reason for terminating the relationship.
- 3. Agreeing to continue to provide care for a reasonable period of time (at least 30 days) in order to allow the patient to obtain care from another physician.
- 4. Providing recommendations to help the patient locate another physician of like specialty.
- 5. Offer to transfer records to the new physician upon signed authorization and include an authorization form with the letter.
- 6.A physician assistant or nurse practitioner may not independently terminate the physician-patient relationship.

Screening tools

- Brief Risk Interview (BRI)
- Diagnosis, Intractability, Risk, Efficacy (DIRE)
- Opioid Risk Tool (ORT)
- Current Opioid Misuse Measure (COMM)
- Pain Medication Questionaire (PMG)
- Screener and Opioid Assesment for Patients with Pain-revised (SOAPP)
  - Preferred screener, less risk for deception



A. Numeric Rating Scale

No pain — Worst pain

0 1 2 3 4 5 6 7 8 9 10

B. Numeric Rating Scale Translated into Word and Behavior Scales

Pain Intensity	Word Scale	Nonverbal Behaviors
0	No pain	Relaxed, calm expression
1–2	Least pain	Stressed, tense expression
3–4	Mild pain	Guarded movement, grimacing
5–6	Moderate pain	Moaning, restless
7–8	Severe pain	Crying out
9–10	Excruciating pain	Increased intensity of above

C. Wong Baker FACES Pain Rating Scale[1]

0	1	2	3	4	5
No hurt	Hurts Little Bit	Hurts Little More	Hurts Even More	Hurts Whole Lot	Hurts Worst

[1]Especially useful for patients who cannot read English and for pediatric patients.

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Nociceptive-less than 6 weeks

- Applies to most of these but is still a step wise approach [6]
  - Non-pharmacologic interventions
    - RICE,Manipulation,Rehab, offload, brace/splint
  - Nsaids (acetaminophen, ibuprofen, ketorlac)
    - Don't forget topicals such as voltaren gel.
    - Consider adjunct such as muscle relaxants.
  - Opioids
    - Only after escalation and a true effort
    - Consider CBT, trigger point injections, blocks (surgery as we move in to chronic)

Neuropathic Pain [7]

- Antidepressants
  - Nortriptyline, Desipramine
- Calcium-Channel alpha2 delta ligands
  - Gabapentin
  - Pregabalin
- SSNRI
  - Duloxetine
  - Venlafaxine
- Lidocaine topical or Capsaicin
- Anticonvulsants
  - Phenytoin,Carbamazepine, Oxcarbazepine
- Then Opioids
  - But should be followed by referral for intervention

Chronic pain-any source

- Set your goals: focus on function and life not pain relief
- Multidisciplinary: medication, counseling physical therapy, blocks, surgery
- Actually follows the same path as neuropathic pain

- **The beneficial effect of opioids for chronic non-cancer pain is modest at best, and no measures have been identified to predict a good response.** [7]
- We can all think of patients who do better but most will ultimately have complications.
- When was the last time some was cured with a long term regimen of narcotics?

Addiction Therapy

- Not the focus of this lecture, but just and FYI
- Patients adhere to Suboxone just as well as methadone.
- It has a higher rate of relapse once discontinued.
- Patients who stay on it longer tend to have less relapse.
- Both have the same rate of diversion/illicit use in the first six months (48.1%) [8]

Breakthrough Pain

- Occasional break through pain is to be be expected
  - If a patient is using breakthrough medicine more than 50% of the time than you need to increase their long acting

Caveat

- These suggestions are based on appropriate History, Physical, and diagnosis.
- If the regimen isn’t working re-evaluate.

- Key point that recurs in pain management is opioids are the last line treatment.

Previous Paradigm [11]

- Nonopioid analgesic agents (eg, aspirin, acetaminophen, nonsteroidal anti-inflammatory drugs [NSAIDs], COX-2 Inhibitors)
- ●Tramadol
- ●Opioids
- ●Alpha 2 adrenergic agonists
- ●Antidepressants (tricyclics and serotonin-norepinephrine reuptake inhibitors [SNRIs])
- ●Antiepileptic drugs (gabapentin, pregabalin, and other anticonvulsants)
- ●Muscle relaxants
- ●N-methyl-d-aspartate (NMDA) receptor antagonists
- ●Topical analgesic agents

New Paradigm[11]

- Nonopioid analgesic agents (eg, aspirin, acetaminophen, nonsteroidal anti-inflammatory drugs [NSAIDs], COX-2 Inhibitors)
- Topical analgesic agents
- Alpha 2 adrenergic agonists
- Antidepressants (tricyclics and serotonin-norepinephrine reuptake inhibitors [SNRIs])
- Antiepileptic drugs (gabapentin, pregabalin, and other anticonvulsants)
- Muscle relaxants
- Tramadol
- Opioids
- N-methyl-d-aspartate (NMDA) receptor antagonists

Start low and go slow

- Should be one of the last options
  - Informed consent
  - Greater than 3-5 days increases chance of addiction
- Rates of addiction are 8-12% of those started on narcotic prescription past this point
- 1:100 will die, 1:100 will develop a heroin addiction, 40% will misuse in some manner[10]

Palliative Care

- Focus on the patients goals [5], sedation is acceptable if that is consisent with end of life goals.
- **tolerance** (requiring increasing dosage to achieve the same analgesic effect
- **dependence** (requiring continued dosing to prevent symptoms of medication withdrawal
- **pseudo-addiction,**defined as exhibiting behaviors associated with addiction but only because their pain is inadequately treated.

Specific palliative pain

- Metatstatic Bone:
  - Bisphosphonates, RANKL inhibitors, and nerve blocks.
- Spinal compression/Brain Mets:
  - Dexamethasone, prednsionse

Route Pearls

- Pills,oral solutions, compounded (suckers), buccal patches
- Transdermal patches
  - Realize that the fentanyl patch is mcg per hour
  - Takes 20 hours to reach a steady state

Clinic

- Headache (tension type/migraine)
  - Nsaids->NSAIDS w/ caffeine -> Indomethacin/procholperazine/caffeine-> Triptans ->adjuncts (injections, biofeedback)
  - Not opioids [12], high rate of rebound
  - Prevention:Beta-blockers/CCB, TCA (amitryptiline), SSNRI (venalfaxine), anticonvulsants (topamax, valproate, gabapentin)

- Osteoarthritis
  - Physical therapy for strengthening
  - Bracing/Assistive devices
  - Acetaminophen is first line (up to 3 g per day)[13]
  - Intra-articular injection (hyaluronic acid q 6 months or steroids)
  - Surgery
  - Opioids should be reserve for those who are not a surgical candidate [13]

Clinic

- Low back pain
  - Start with non-pharmacologic (manipulation, heat, alt)
    - Aren't you glad you're a DO?
  - Initiate an anti-inflammatory or muscle relaxant
  - Once chronic:Exercise , multidisciplinary approach, stretching, biofeedback , CBT
  - Second line:Duloxetine, tramadol
  - Opioids: Only if the benefits outweigh the risk and even then it is a weak reccomendation [14]

- Postherpetic neuralgia
  - TCA (caution in elderly)->gabapentin/lyrica ->opioids
  - Can use topical Lidocain/Capsaicin as an adjunct

- Trigeminal neuralgia
  - Carbamazepine/oxcarbazepine/baclofen ->add lamotrigine and titrate to 400mg (topamax,tizanidine, or previous combinations)
  - Botox
  - Surgical decompression
  - Rhizotomy/neurectomy/blocks

- Neuropathy
  - Amitryptiline/desipramine/nortriptyline (less cholinergic effects) or or gabapentin/pregablin
  - Second line: Duloxetine/venlafaxine (SSNRI)
  - Third Line: Anticonvulsants,mexiletine, other antidepressants
  - Adjunct: Capsaicin
- Phantom Limb: as above , not testable but mirror-box therapy, nmda, and calcitonin receptor agonist work great

- Ischemic[13]
  - Underlying cause, cilostazol (pletal)->revascularization

Clinic

- Sports/exercise injuries
  - RICE, Nsaids/muscle relaxers, follows same algorithm as low back pain
  - Pain persisting more than 6 weeks warrants a thorough work up for things such as stress fractures
- Gout
  - Nsaids/Indomethacin->Colchicine->Steroids
  - Allopurinal and probenicid for control
    - No allopurinol in acute phase

Hospital/ER Setting

- Chronic pain is the same:
  - Emphasis on reason for admission not opportunity to fix old problems, don't start IV narcotics
- Chest Pain
  - Nitro/Nitro drip, opioids for chest pain is now a class IIb level of evidence and actually interferes with antiplatelet drugs
- Chest Pain-non cardiac
  - Nsaids
- a

Hospital

- Pancreatitis:make sure you have the diagnosis
  - Acute:Hydration, NPO/clears/low fat diet, Morphine is preferred [15], *new to me, avoid demerol for toxic buildup
  - Chronic: PPI, Pancreatic enzymes, Octreotide[10], offending agent abstinence, treat as neuropathic pain, tramadol
- Surgical
  - Surgery!
- Perioperative pain management should focus on lowest acceptable dose without excessive sedation and rapid transition to orals and de-escalation
  - Many areas are limiting post op to 3 days of medication
  - Not testable, just a thought

Hospital/ER

- Sickle cell Crisis
  - Hydration, Oxygenation, Opioids
  - *Address underlying cause, don't miss scary things
- Headache
  - If refractory to the clinical approach
  - Parenteral Ketorolac ->Metoclopramide + diphenhydramine

Hospital/ER

- Migraine
  - Clinic treatement
  - Ketorolac -> prochlorperazine/metoclopramide/Droperidol/Chlorpromazine(give all with diphenhydramine)
  - Dexamethasone to reduce recurrence
  - DHE if refractory (pre-treat with antiemetics)

Insert Practice questions here

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