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ALTERNATIVES TO OPIOIDS



Objectives

- Appreciate our current opioid epidemic
 - Explore the ALTOSM Program
 - Work through cases
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- I have no financial disclosures

Pop Quiz

Hot Shot



- **#1 prescribed medication nationally for the past 6 years**
 - Vicodin
- 168,000 adolescents between 12-17 years old are addicted to prescription opioids



1.9 million

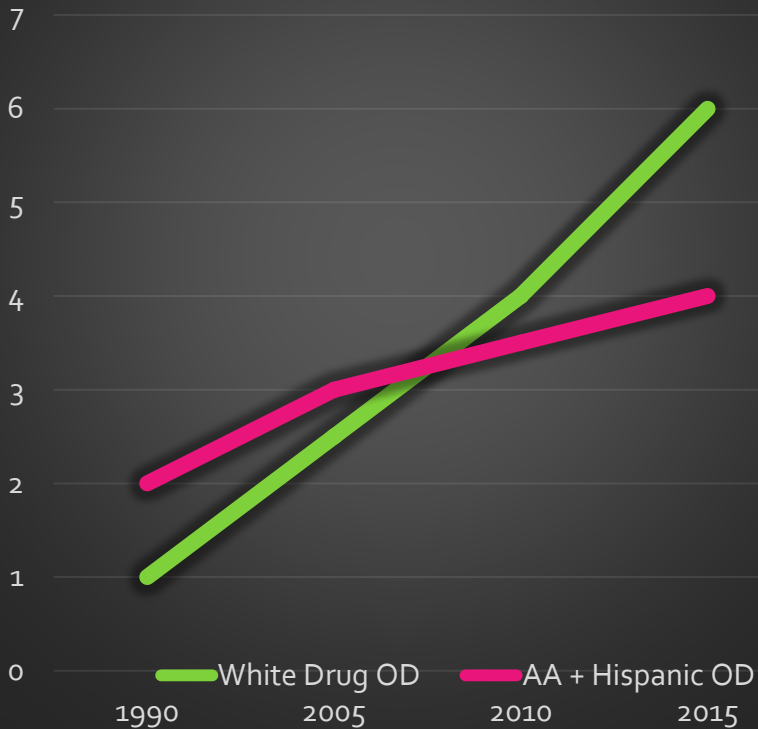
94%

51

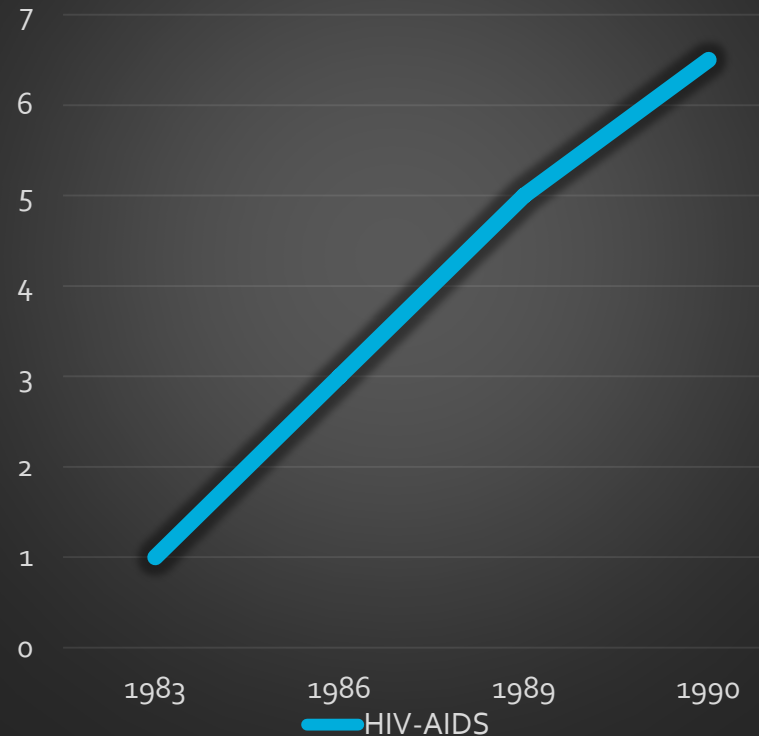
18,893

“Opioid overdose deaths in the US resemble a new infectious disease”

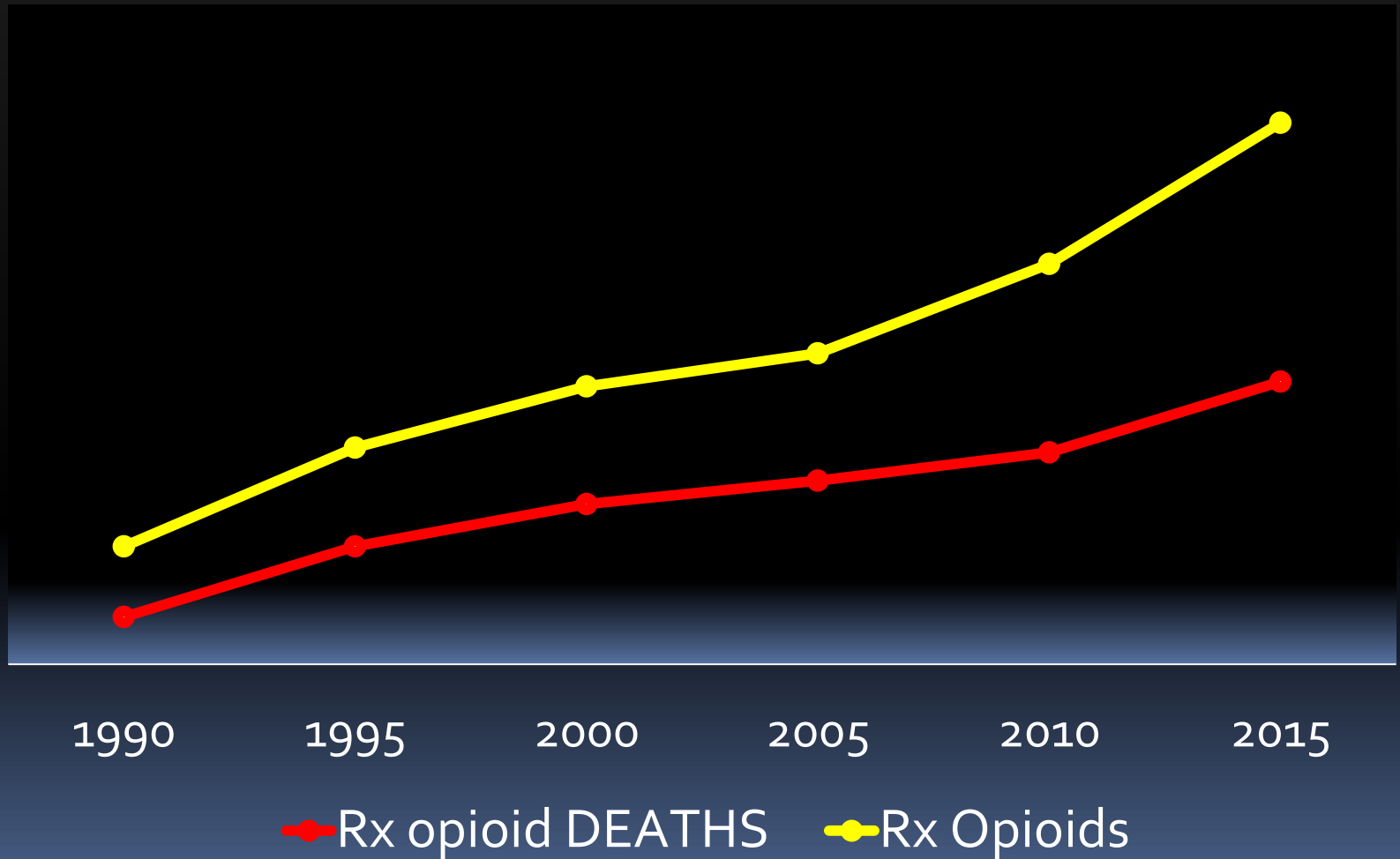
Death Rate Prescription Opioid OD 1990-2015



Death Rate HIV-AIDS 1983-1990

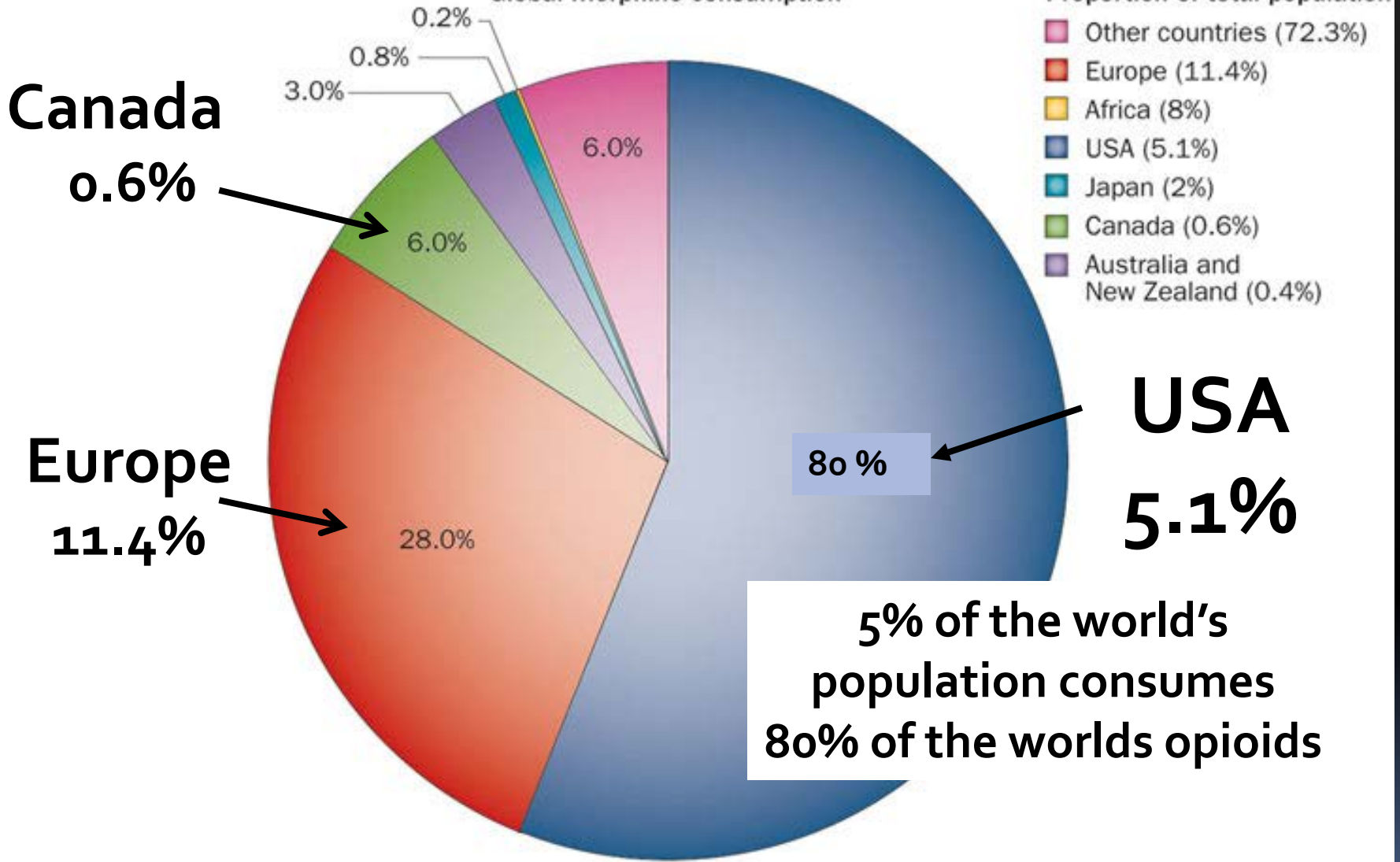


Opioid Prescribing Habits vs. Prescription Opioid OD Deaths



Global morphine consumption

Proportion of total population



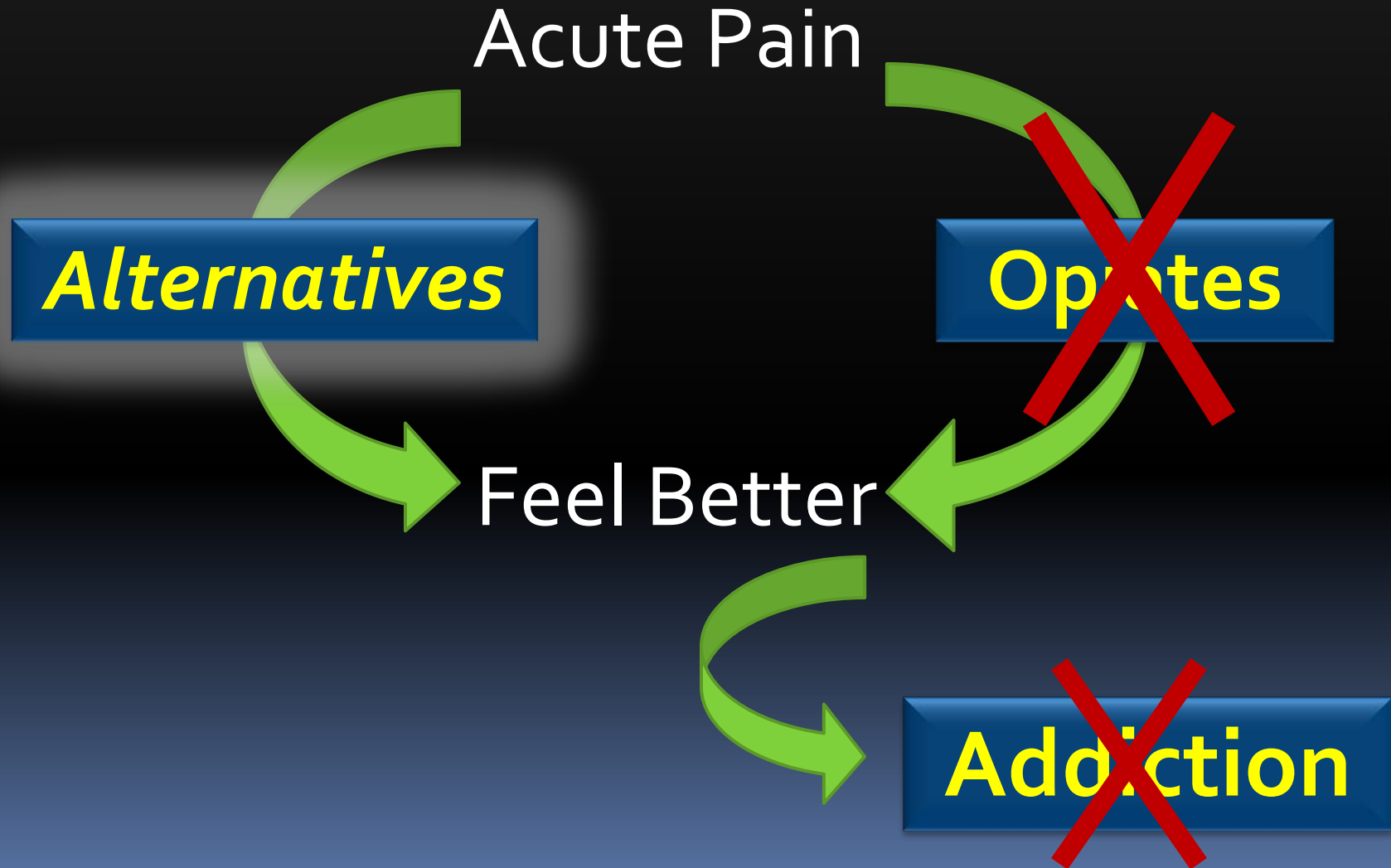
Canada
0.6%

Europe
11.4%

USA
5.1%

5% of the world's population consumes 80% of the world's opioids


What can we do in the ER?



Opioids are necessary.....

.....but they are not the solution for all pain

- **THINK** before you prescribe
- **USE** alternatives whenever possible
- **CARE** about the patient

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- **CHANGE** the way we look at pain
 - **EDUCATE** our colleagues and our patients
 - **CREATE** a new model for acute pain management

Take Home Point #1

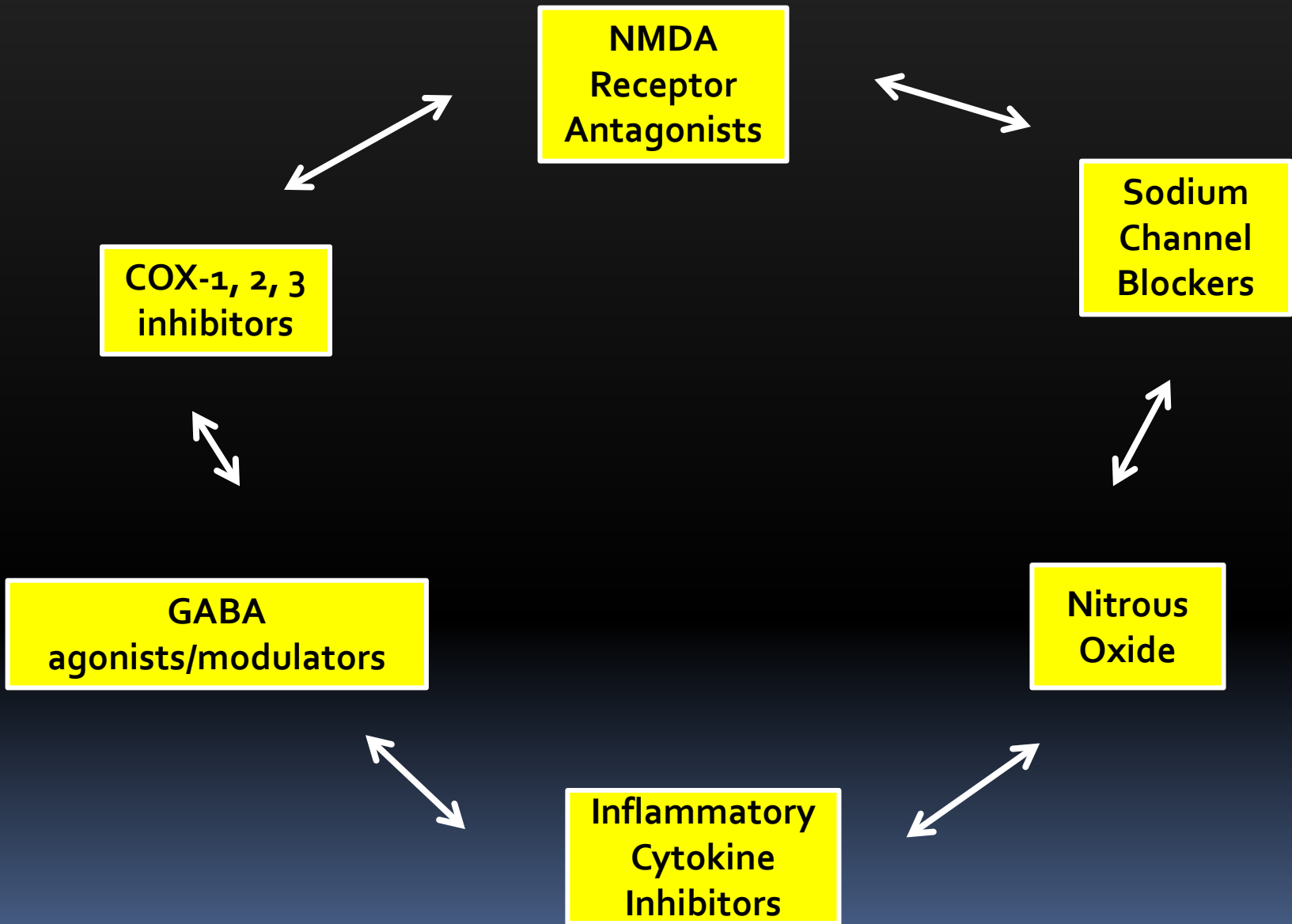
- Clinicians cannot continue to prescribe opioids as they have been
- Clinicians must focus not only on judicious and responsible opioid prescribing but also the investigation of viable alternatives for pain management

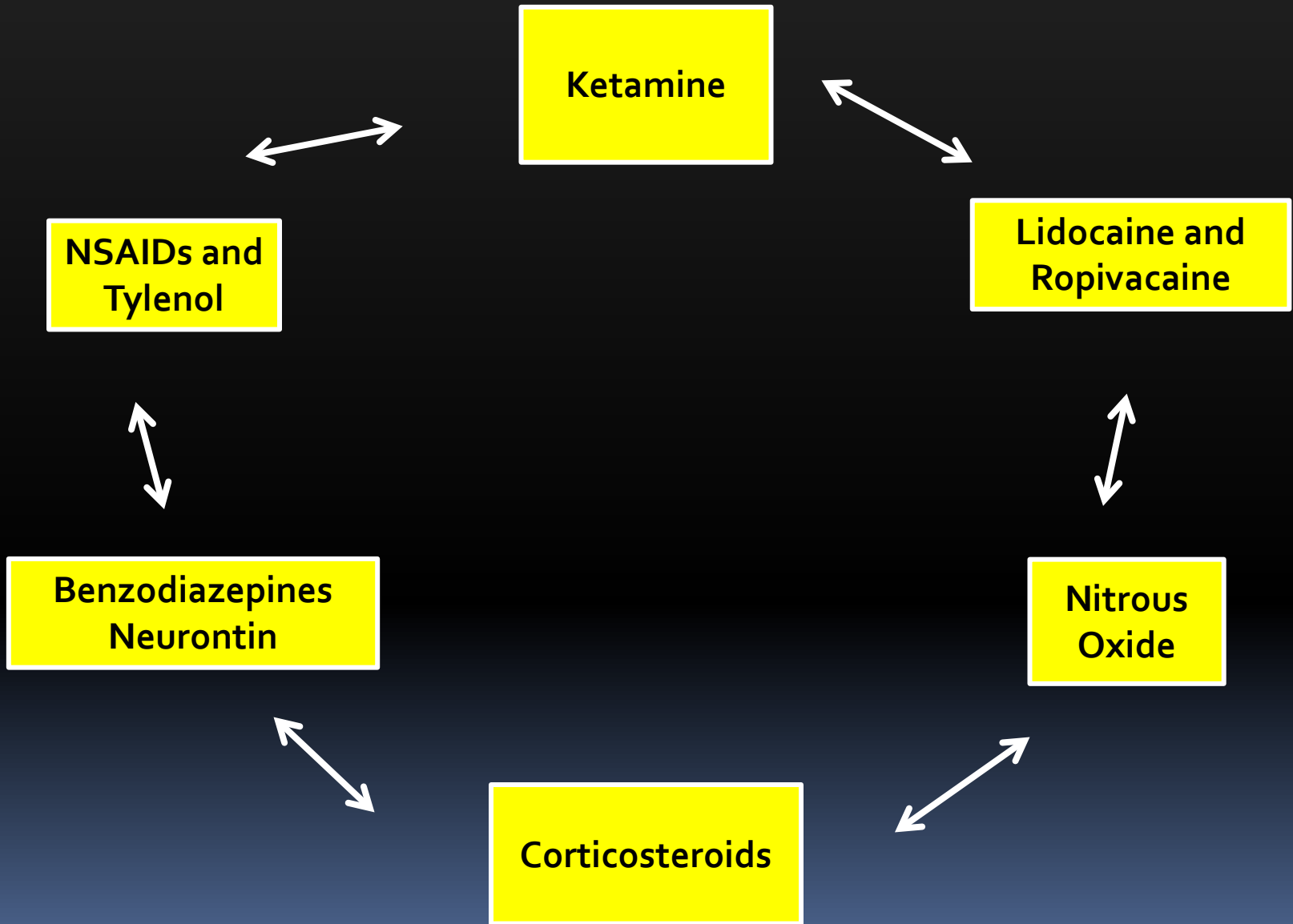
The ALTOSM Program

- “ALternatives To Opiates”
 - St. Joseph’s Regional Medical Center, Paterson, NJ went live January 4, 2016
- Multi-modal non-opiate approach to analgesia for specific conditions

The ALTOSM Objectives


- The goal is to utilize non-opiate approaches as first line therapy, and educate our patients.
 - Opiates will be **second line** treatment
 - Opiates can be given as a **rescue medication**
 - Discuss **realistic** pain management goals without patients
 - Discuss **addiction potential** and side effects with using opiates







Targeted Treatment

- By identifying the generator of pain physicians can target treatment to that area
 - Flooding the body with opioids only masks that pain to the brain, but does not actually address the underlying case
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Case 1

- 57 M presents with 2 days of acute low back pain after moving a sofa. Has tried ibuprofen once per day without much relief.
 - PMHx- high cholesterol
 - NKDA
 - What's the best treatment for him?

Acute Low Back Pain

- Opioids are not first line, especially in the ED
- Early opioids prescribing
 - Increase rate of MRI
 - Significantly higher medical costs
 - 29% more likely to end up on chronic opioids

Alternatives

- NSAIDS
 - Trigger Point Injection
- Tylenol
- Topicals
 - Muscle Relaxants
 - Lidoderm, Voltaren, Flector

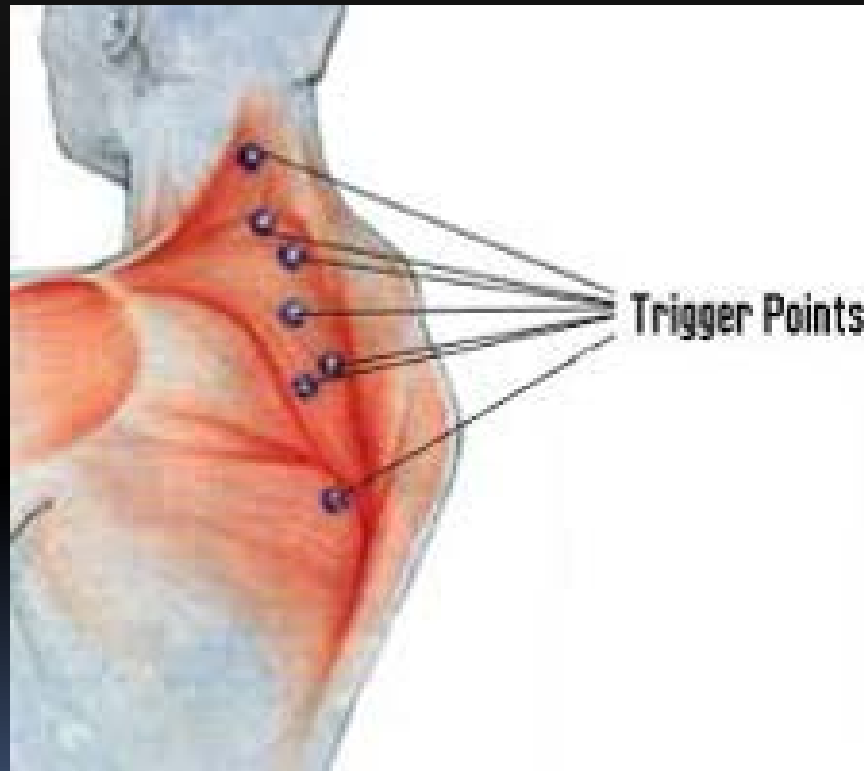
Topicals

- Lidoderm patches
- Diclofenac gel improves pain associated with OA of the knee and musculoskeletal injuries

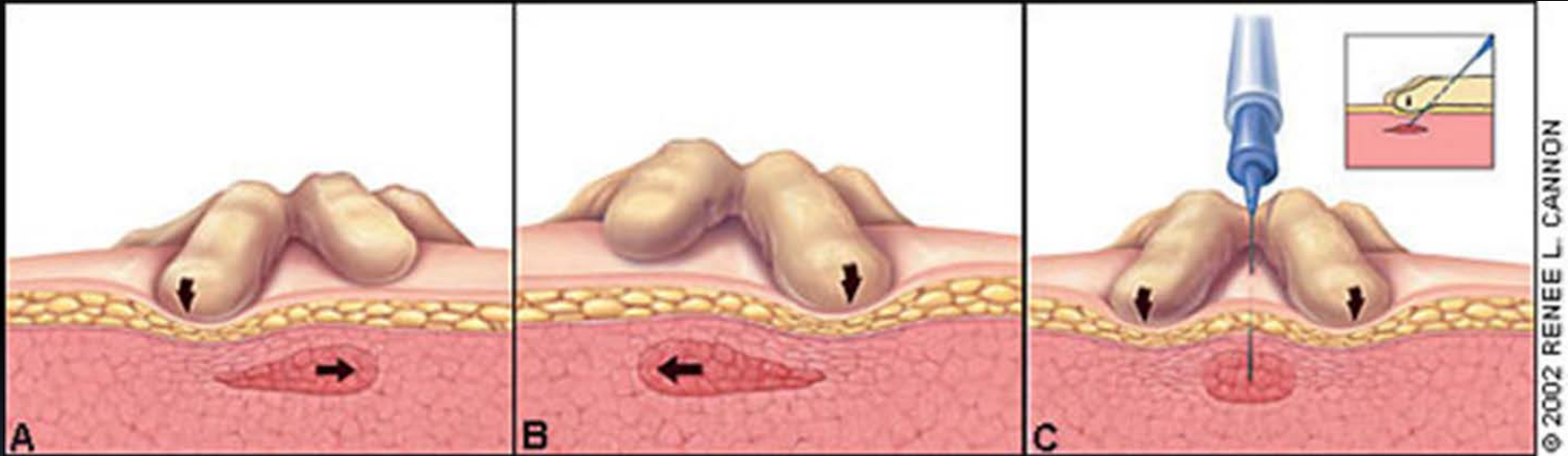


Trigger Point Injection

Definition



Trigger Point Injection Technique



Take Home Point # 2

- Most acute low back pain does not require opioids
 - St Joseph's has reduced opioids by ~38%
- NSAIDs + Tylenol + Topicals
- **Trigger Point Injections**

Fastest Toilet

55 mph



Case 2

- JA 28 year old male presents with severe kidney stone pain. He has a history of kidney stone pain in the past and is in recovery for heroin addiction, 7 months clean.
- Last time he has a kidney stone, he received morphine, he states it took him weeks to overcome the craving for heroin

Alternatives

- He asks if there is an alternative to morphine, he states at another facility they said “no” and he was torn between pain relief and a potential relapse.
- Is there evidence to support the use of alternatives for kidney stone pain?

Intravenous Lidocaine

- Intractable cancer pain
 - Improved pain with fewer side effects, compared to opiates alone
 - Little to no toxicity
 - Improved quality of life
- Post-surgical pain relief, meta-analysis
 - Reduced pain at rest, with movement, and with cough
 - No statistical difference in adverse events


Lidocaine vs. Morphine

Renal Colic

- Lidocaine had lower pain scores compared to morphine at 5, 10, 15, and 30 minutes post-administration
- No difference in adverse events



Take Home Point #3

- Intravenous lidocaine is a safe and effective alternative for renal colic.
 - St. Joe's has reduced opioid prescribing for renal colic by about 50%
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WTF fun fact #4511

In Sweden, it is illegal to name your baby Metallica, Superman, Veranda, Ikea or Elvis

wtffunfact.com



More is not always better

- What about pain relief for people who are already on high doses of opioids?
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Case 3

- 57 M with chronic sciatica pain presents with an acute painful flare.
 - He takes MS Contin 100 mg PO BID and oxycodone 30 prn.
- No red flags on his exam but he is in severe distress.
- Management?



Your Brain on Opioids

- The neurochemistry of the brain changes when exposed to chronic opioids
- More opioids does not equal better relief
- Allodynia
- Hyperalgesia
- Chronic Pain

Opioid Tolerant Patients

- NSAID + Tylenol
- Gabapentin
- Valium or Flexeril
- **Ketamine infusion + drip**

Ketamine for Analgesia

- Antagonize the excitatory NMDA receptor
 - Produces pain relief
 - At a very low dose
- Opioid sparing effect
- No vital sign changes, no additional monitoring

Take Home Message #3

- Ketamine can be used in conjunction with opioids or as a sole agent for analgesia in the emergency department for acute and chronic pain.
 - Supported by American College of Emergency Physicians



Case 4

(last case)

- 23 M comes to ED with a LARGE abscess. He has had them before and is pleading with you to “put me to sleep”! He needs something strong but has to drive home.
- What do you do?

Nitrous Oxide



Nitrous Oxide

- Tasteless colorless gas administered in combination with oxygen via mask or nasal hood
 - Maximum concentration 70% N₂O
- Rapid onset and elimination
 - <60 seconds

Nitrous Oxide Evidence

- It indicated for any and every painful condition
- All ages




Stitches
Spinal Tap
IV placement
Incision & Drainage
Foreign Body removal
Burn/Wound Care

Contraindications

- Lung disease
- Vitamin B₁₂ deficiency
- Ear infection
- Intestinal Obstruction
- Altered level of consciousness
- 1st and 2nd trimester pregnancy




Take Home Point #4

- Nitrous Oxide is a fast acting easily administered pain medication, ideal for the management of acute painful procedures
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Keep exposure to a minimum

- The use of alternatives for pain management decreases unnecessary exposure of potential harmful medications to our patients.
 - Opioids are important but should not be reflexively prescribed
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ALTOSM Partnerships

- St. Joseph's Opioid Overdose Prevention and Naloxone Distribution Program
 - Eva's Village
 - Peer Counselors
 - Straight and Narrow Program
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Summary

- Clinicians have to unite in prescribing alternatives whenever possible
 - Prevention is KEY!
 - Support patients who suffer from the disease of addiction
 - Educate our patients on the potential dangers of medications prescribed
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If you'd like to know more

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THANKS