ALTO: Alternatives to Opioids

For the treatment of acute pain

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Let’s talk about...

- ALTO: what, why, & how
- Patient Education & Expectation setting in pain management
- Opioid prescribing guidelines
- Next steps for you!
Overdose Death Rates Involving Opioids, by Type, United States, 2000-2017

Rx = 36%

### HHS 5-Point Strategy to Combat the Opioids Crisis

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<th>Prevention</th>
<th>Recovery</th>
<th>Harm Reduction</th>
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<td>Reduce initial exposure to &amp; use of opioids</td>
<td>MAT (Buprenorphine), N.A., Community support programs</td>
<td>Needle exchange, safe injection teaching/facilities, Naloxone</td>
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**Better** addiction prevention, treatment, and recovery services  
**Better** data  
**Better** pain management  
**Better** targeting of overdose reversing drugs  
**Better** research
141 Million ED Visits for PAIN 42% Receive Opioids
What's in Your Toolbox?

Opioids and...
What's in Your Toolbox?

Opioids and...

Lots of stuff... and also opioids.
ALTO Goals

• Utilize **nonopioid** approaches as **first-line therapy**

• Utilize **opioids** as **second-line** or rescue medication

• Discuss **realistic pain management goals** with pts

• Discuss **addiction potential & side effects** with pts
ALTO Goals

- Optimize treatment by targeting multiple pain receptors – COX1/2/3, NMDA, Na Channel, GABA, Mu, etc.

Including but not limited to:

<table>
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<th>NSAIDs</th>
<th>Acetaminophen</th>
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<td>Lidocaine</td>
<td>Nitrous Oxide</td>
<td>Corticosteroids</td>
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<td>Benzodiazepines</td>
<td>Gabapentin</td>
<td>Haldol</td>
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80% Opioid Prescriptions (2% vs. 17% nationally)

38% Opioid use in the ED
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ALTO Protocol: Renal Colic

Immediate/First-Line Therapy:
- APAP 1000 mg PO
- Ketorolac 15 mg IV
- 1 L 0.9% NS bolus

Second-Line IV Therapy:
- Lidocaine 1.5 mg/kg IV (max 200 mg)

30 min Cardiac Monitor

Contraindications:
- Lidocaine Allergy
- Seizure history
- Known cardiac disease
ALTO Protocol: MSK & Opioid Naïve Back Pain

JAMA studies show:
Naproxen = Naproxen + Oxy
Naproxen = Naproxen + Diazepam

*Oxy & Benzo added nothing*

Non-IV Therapies:
APAP 1000 mg PO + ibuprofen 600 mg PO

Ibuprofen 400mg Q6hrs
- or -
Naproxen 500mg BID

Ibuprofen 400mg + APAP 1g >> Ibu or APAP alone
ALTO Protocol: MSK & Opioid Naïve Back Pain

Muscle Relaxer

1x in ED for sleep aid

Not for pain. No Rx!
ALTO Protocol: MSK & Opioid Naïve Back Pain

Musculoskeletal Pain

Non-IV Therapies:
- APAP 1000 mg PO + ibuprofen 600 mg PO
- Cyclobenzaprine 5 mg PO OR diazepam 5 mg PO
- Gabapentin 300 mg PO

Lidocaine patch (max 3 patches)

or Diclofenac gel Q6-Q8hrs

Consider in Renal & Anti-Platelet Patients!

Lidocaine 3.6% patch is OTC, $2-$4/patch!
ALTO Protocol: MSK & Opioid Naïve Back Pain

Musculoskeletal Pain

Non-IV Therapies:
- APAP 1000 mg PO + ibuprofen 600 mg PO
- Cyclobenzaprine 5 mg PO OR diazepam 5 mg PO
- Gabapentin 300 mg PO
- Lidocaine patch (max 3 patches)
- Ketamine 50 mg IN

Trigger point injections with lidocaine 1%
ALTO Protocol: MSK & Opioid Naïve Back Pain
TRIGGER POINT INJECTION
ALTO Protocol: MSK & Opioid Naïve Back Pain
TRIGGER POINT INJECTION

Trigger point relaxes
ALTO Protocol: Opioid *Tolerant* Back Pain

Musculoskeletal Pain

Nonopioid therapies:
- APAP 1000 mg PO
- Cyclobenzaprine 10 mg PO
- Diphenhydramine 50 mg PO
- Lidocaine patches
- Trigger point injections with lidocaine 1%

Grab the Opioids!
ALTO Protocol: Opioid *Tolerant* Back Pain

Musculoskeletal Pain

Non-pharmacological:
- APAP 1000 mg PO
- Cyclobenzaprine 10 mg PO
- Lidocaine (patches)
- Trigger point injections with lidocaine 1%

Grab the opioids!
ALTO Protocol: Opioid *Tolerant* Back Pain

**Musculoskeletal Pain**

**Non-IV Therapies:**
- APAP 1000 mg PO + ibuprofen 600 mg PO
- Cyclobenzaprine 5 mg PO OR diazepam 5 mg PO
- Gabapentin 300 mg PO
- Lidocaine patch (max 3 patches)

**Ketamine 50 mg IN**
- Trigger point injections with lidocaine 1%

**IV Therapy Options:**
- Ketamine 0.2 mg/kg IV ± 0.1 mg/kg/hr gtt
- Ketorolac 15 mg IV
- Dexamethasone 8 mg IV
- Diazepam 5 mg IV
ALTO Protocol: Opioid *TOLERANT* Back Pain

Ketamine

ketamine brain continuum

0.1-0.3mg/kg IV
Max 30mg

2mg/kg IV
(Sedation)
ALTO Protocol: Opioid *Tolerant* Back Pain

- May see Altered Sensorium
- No emergence phenom
- No cardiac monitor

Non-IV Therapies:
- APAP 1000 mg PO + ibuprofen 600 mg PO
- Cyclobenzaprine 5 mg PO OR diazepam 5 mg PO
- Gabapentin 300 mg PO
- Lidocaine patch (max 3 patches)
- Ketamine 50 mg IN
  - Trigger point injections with lidocaine 1%

IV Therapy Options:
- Ketamine 0.2 mg/kg IV ± 0.1 mg/kg/hr gtt
- Ketorolac 15 mg IV
- Dexamethasone 8 mg IV
- Diazepam 5 mg IV

- 0.5mg/kg IN
  - Max 50mg
  - 1cc per nare

- 0.1-0.3mg/kg IV
  - 0.3mg/kg IM
  - Max 30mg
ALTO Protocol: MSK & Back Pain

First Line, All Patients

Non-IV Therapies:
- APAP 1000 mg PO + ibuprofen 600 mg PO
- Cyclobenzaprine 5 mg PO OR diazepam 5 mg PO
- Gabapentin 300 mg PO
- Lidocaine patch (max 3 patches)
- Ketamine 50 mg IN
- Trigger point injections with lidocaine 1%

IV Therapy Options:
- Ketamine 0.2 mg/kg IV ± 0.1 mg/kg/hr gtt
- Ketorolac 15 mg IV
- Dexamethasone 8 mg IV
- Diazepam 5 mg IV

Second Line, Opioid Tolerant
ALTO Protocol: Acute on Chronic Pain

Immediate/First-Line Therapy:
- Metoclopramide 10 mg IV
- Prochlorperazine 10 mg IV
- Diphenhydramine 25 mg IV
- Dicyclomine 20 mg PO/IM

Second-Line Therapy:
- Haloperidol 2.5-5 mg IV
- Ketamine 0.2 mg/kg ± 0.1 mg/kg hr gtt
- Lidocaine 1.5 mg/kg (max 200 mg)

NSAIDs + APAP

Gabapentin
ALTO Protocol: Headache

Step 1: Headache Cocktail
- IVF Bolus
- APAP + NSAID
- Anti-emetic
- Anti-histamine

Immediate/First-Line Therapy:
- 1 L 0.9% NS + high-flow oxygen
- Ketorolac 15 mg IV
- Metoclopramide 10 mg IV
- Dexamethasone 8 mg IV
- Trigger point injection with lidocaine 1%

Alternative Options:
- APAP 1000 mg PO + ibuprofen 600 mg PO
- Sumatriptan 6 mg SC
- Promethazine 12.5 mg IV OR prochlorperazine 10 mg IV
ALTO Protocol: Headache

Step 1: Headache Cocktail
- IVF Bolus
- APAP + NSAID
- Anti-emetic
- Anti-histamine

Option: Sphenopalatine Ganglion Block
ALTO Protocol: Headache

Step 1: Headache Cocktail

If < 50% Reduction in Pain...

Immediate/First-Line Therapy:
- 1 L 0.9% NS + high-flow oxygen
- Ketorolac 15 mg IV
- Metoclopramide 10 mg IV
- Dexamethasone 8 mg IV
- Trigger point injection with lidocaine 1%

Alternative Options:
- APAP 1000 mg PO + ibuprofen 600 mg PO
- Sumatriptan 6 mg SC
- Promethazine 12.5 mg IV OR prochlorperazine 10 mg IV
- Haloperidol 5 mg IV
- Magnesium 1 g IV
- Valproic acid 500 mg IV
- Propofol 10-20 mg IV bolus every 10 min

If Tension Component:
- Cyclobenzaprine 5 mg OR diazepam 5 mg PO/IV
- Lidoderm transdermal patch
ALTO Protocol: Headache

Step 1: Headache Cocktail

If < 50% Reduction in Pain...

Immediate/First-Line Therapy:
- 1 L 0.9% NS + high-flow oxygen
- Ketorolac 15 mg IV
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If Tension Component:
Cyclobenzaprine 5 mg OR diazepam 5 mg PO/IV
Lidoderm transdermal patch
ALTO Protocol: Procedural Pain Control

• Large *abscess* drainage
• Fracture/joint dislocation/hernia *reduction*
• Obtaining peripheral or central *IV Access*
• *Foreign body* removal
• Complex *laceration repair*
• Fecal *disimpaction*
ALTO Protocol: Procedural Pain Control

Immediate/First-Line Therapy:
- APAP 1000 mg PO
- Ketamine 50 mg IN
- Nitrous oxide (titrate up to 70%)

Ultrasound-Guided Regional Anesthesia:
- Lidocaine perineural infiltration (max 4 mg/kg)
ALTO Protocol: Procedural Pain Control

Contraindications:
- Claustrophobia
- COPD/Asthma
- Active Otitis Media or Sinus disease
- Bowel obstruction patients
- 1st or 2nd Trimester Pregnancy
- Confused or Psychotic patients

Immediate/First-Line Therapy:
- APAP 1000 mg PO
- Ketamine 50 mg IN
- Nitrous oxide (titrate up to 70%)

Procedural Pain Control
- No IV or monitor
- No NPO
- Out of system in 60s

Extremity Fracture/Joint Dislocation
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<tr>
<td>Ketamine</td>
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<td>Dicyclomine (Bentyl)</td>
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<tr>
<td>Haloperidol (Haldol)</td>
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<tr>
<td>Ketorolac (Toradol)</td>
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<tr>
<td>Prochlorperazine (Compazine)</td>
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<tr>
<td>Diphenhydramine (Benadryl)</td>
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<tr>
<td>Magnesium</td>
</tr>
<tr>
<td>Dexamethasone (Decadron)</td>
</tr>
<tr>
<td>Sumatriptan (Imitrex)</td>
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Side Note: Don’t forget non-medication treatments too!

- Heat / Cold / Elevation
- Massage / Relaxation
- Laughter / Distraction
- Music / Meditation / Imagery

Great Info @ https://www.ahna.org/Home/Resources/Holistic-Pain-Tools
Let’s talk about...

- ALTO: what, why, & how
- Patient Education & Expectation setting in pain management
- Opioid prescribing guidelines
- Next steps for you!
We are **not** going to get your pain to Zero today.

Goal is to move from **INTOLERABLE** pain to **TOLERABLE** pain.

It’s my job to **keep you safe**. While opioids may make you feel better now, in the long run they **aren’t safe or effective** at controlling pain. I’m not willing to do something I know isn’t safe for you.

The body needs **time to heal**.

You may have some pain for a **long time**... And **some pain is ok**.
Let’s talk about...

- ALTO: what, why, & how
- Patient Education & Expectation setting in pain management
- **Opioid prescribing guidelines**
- Next steps for you!
All Rx opioids One Provider / Pt

No replacing lost/stolen Rx

No long-acting or controlled-release opioids (e.g. fentanyl patch, methadone)

Use opioid database/registry

Acute on chronic pain → minimal number pills as bridge to PCP

New Rx → Max 3 days opioids + ALTO education!!!
Let’s talk about...

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- Patient Education & Expectation setting in pain management
- Opioid prescribing guidelines
- Next steps for you!
Next Steps for Your Site with ALTO:

• Identify **ALTO Champion Dyad** – Clinician + RN – who will lead education and quality efforts
• Work with pharmacy → ALTO meds **on formulary**
• Work with IT → user-friendly **Order Set** in EHR
• **Educate** re: **Opioid Prescribing Guidelines & ALTO**
• Quality Improvement / Track successes
Resources

- Info, Resources, Stats re: opioids
  [https://www.hhs.gov/opioids/](https://www.hhs.gov/opioids/)
- Tips/Tricks for different ALTO meds/techniques
- ACEP Opioid Toolkit
- Info about [Lidocaine for Renal Colic](http://www.aliem.com/2018/06/trigger-point-injection-musculoskeletal-pain/)
- ACEP info re: [Sub-dissociative Ketamine](http://www.aliem.com/2018/06/trigger-point-injection-musculoskeletal-pain/)
- ACEP Acute Pain Policy Statement

- [Colorado ALTO Checklists](http://www.aliem.com)
- Public Health Institute: [www.phi.org](http://www.phi.org)
- ED Bridge: [https://ed-bridge.org/](https://ed-bridge.org/)
- Videos/Other helpful “how-to” articles: [www.aliem.com](http://www.aliem.com)

Full references available on request.
Thank you!

Questions? Contact either of us!
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