Implementation of an opioid reduction protocol utilizing alternatives for the treatment of pain in the emergency department of a level 1 trauma center

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BACKGROUND

• Drug overdose is the leading cause of accidental death in the US, with 47,055 lethal drug overdoses in 2014. Of those deaths, 18,893 overdose deaths were related to prescription pain relievers, and 10,574 were related to heroin.
• In 2012, healthcare providers wrote 259 million prescriptions for opioids, enough for every American to have their own bottle.
• Four out of 5 heroin users start out abusing prescription opioids.
• The ALTO approach is a multimodal approach to pain management where non-opioid meds are used as 1st line therapy.

PAIN TREATMENT PATHWAYS

MUSCULOSKELETAL PAIN

Non-IV Options
APAP 1000 mg PO + IBU 600 mg PO
Cyclobenzaprine 5 mg OR diazepam 5 mg PO
Gabapentin 300-600 mg PO
Lidocaine Patch TD
Ketamine 50 mg IN
Trigger point injection 1-2 mL lidocaine 1%

IV Options
Ketamine 0.2 mg/kg IV over 5 min
Ketorolac 15 mg IV
Dexamethasone 8 mg IV
Diazepam 5 mg IV

PURPOSE

The purpose of this study was to evaluate the impact of an opioid reduction protocol in the ED on the change of opioid usage and effect on pain and satisfaction scores in patients that may be at increased risk for abuse.

METHODS

• Work with IT to create ED ALTO order set
• Nursing and physician education on new medications and scripting
• Update high risk med admin policy
• Update conscious sedation policy to ensure ketamine admin w/out timeout
• Stock medications in ED
• Program smart pumps for new medications

OUTCOMES

• Change in opioid use ED-wide pre and post implementation of opioid reduction protocol
• Patient satisfaction scores pre and post implementation using the above dates

RESULTS

A retrospective chart review was conducted at a 368 bed, level 1 trauma medical center

We evaluated a total of 32,496 (14,800 in 2015, 14,964 in 2016) visits to the ED

OUTCOMES

Patients Receiving Opioids During ED Stay

<table>
<thead>
<tr>
<th>Year</th>
<th>Patients</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>n=4720</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>n=3604</td>
<td></td>
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</tr>
</tbody>
</table>

OUTCOMES

Reduction of IV Opioid Usage

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>October</td>
<td>1.84</td>
<td>1.35</td>
</tr>
<tr>
<td>November</td>
<td>1.84</td>
<td>1.55</td>
</tr>
<tr>
<td>December</td>
<td>2.02</td>
<td>1.6</td>
</tr>
</tbody>
</table>

OUTCOMES

PRESS GANEY PATIENT SATISFACTION SCORES

How well was your pain controlled?
2015: 56.3% 2016: 59.2% (p=0.83)

How likely are you to recommend this ED?
2015: 71.0% 2016: 71.3% (p=0.96)

OUTCOMES

REFERENCES


*Authors of this presentation have nothing to disclose concerning potential financial or personal relationships.