Evaluation of Neonatal Abstinence Syndrome Management and Prescribing Patterns

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Evaluation of Neonatal Abstinence Syndrome Management and Prescribing Patterns

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Introduction

- Neonatal abstinence syndrome (NAS) is withdrawal from in utero exposure to opioids, amphetamines, benzodiazepines, selective serotonin reuptake inhibitors or nicotine.
- Pharmacological treatment for NAS includes morphine, methadone, phenobarbital, and clonidine.
- St. Cloud Hospital utilizes the Modified Finnegan Score to assess NAS but does not have a standardized protocol for managing this condition.

Method

- IRB-approved, retrospective chart review of patients with an ICD-10 code for NAS from August 22, 2015 to August 22, 2018.
- Exclusion criteria:
  - Unconfirmed NAS diagnosis
  - NAS not pharmacologically managed

Results

- 70 Identified
- 36 Excluded
  - 30: No medications
  - 6: Dx not confirmed
- 34 Included
  - 25 Morphine
  - 2 Clonidine
  - 7 Morphine + Clonidine

Patient Characteristics

<table>
<thead>
<tr>
<th>Medication(s)</th>
<th>Average Daily Wean Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphine*</td>
<td>5.4 (0-15)</td>
</tr>
<tr>
<td>Clonidine*</td>
<td>2.5</td>
</tr>
<tr>
<td>Morphine + Clonidine**</td>
<td>Morphine: 5.6 (0.6-15)</td>
</tr>
</tbody>
</table>

*One patient excluded
**Two patients excluded

Methods

- IRB-approved, retrospective chart review of patients with an ICD-10 code for NAS from August 22, 2015 to August 22, 2018.
- Exclusion criteria:
  - Unconfirmed NAS diagnosis
  - NAS not pharmacologically managed

References


Evaluation

- Many patients managed non-pharmacologically.
- Most commonly prescribed medication for withdrawal was morphine.
- Clonidine was utilized as additive therapy in patients with higher NAS scores.
- Patients who required dual therapy typically had a longer LOT and LOS.
- Medication wean rates were inconsistent and lower than expected.
- Calculating wean rates proved difficult.
- Assessment of medications for NAS was limited to inpatient use.
- Other limitations include a lack of standardization for nurses to record NAS scores and a small study population.

Conclusion

- Results of this study provide baseline descriptive statistics that may aid in evaluation of future NAS treatment plans or protocols at St. Cloud Hospital.

Disclosure

- Authors of this presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation.
  - Kaylee Erickson: Nothing to disclose
  - Anthony Wieland: Nothing to disclose
  - Kaia Ringwald: Nothing to disclose