Introduction and Objectives

Introduction

- Irritable Bowel Syndrome (IBS) is a gastrointestinal disorder characterized by visceral hypersensitivity and pain, negatively impacting a patient’s quality of life.1,2
- Medications are used to appropriately manage IBS-related pain.
- Opioid-based medications may be prescribed but can cause potential complications such as narcotic bowel syndrome or an opioid dependency.

Objective

- The goal of this study was to examine opioid usage within an IBS cohort stratified by type of visit and patient-reported pain scores.

Study description

- De-identified patient records from the Cerner Health Facts® EHR database between January 2011 and December 2016 were extracted.
- Each patient visit (age ≥ 18 years) with a principal inpatient or outpatient ICD-9/10 diagnosis of IBS between 2011 and 2016 were included in the analysis.
- Visit-based data for medications were examined for this cohort – ‘Opioid analgesics’ were identified as per the VA drug classification system (2016).4
- Pain scores (Numeric Pain Scale 0-10) during a visit were classified as: 0 to <4 = “Mild”; 4 to <7 = “Moderate”; 7 to 10 = “Severe”; “None” if no scores.
- The highest pain score per visit was used to assign a pain group (Mild / Moderate / Severe) for every visit.

Methods

- Opioid analgesics were prescribed in 7.2% (N=3,686) of the total visits and in 68% (N=1,747) of all inpatient stays.

This large database analysis examines patient-reported pain scores and opioid usage for IBS visits. These results provide initial insights into potentially relevant practices for prescribing medications in multiple settings of patient care, inpatient and outpatient.

Our research highlights high opioid-use in a subset of IBS patient visits.

Conclusion

- Given the current opioid epidemic, there may be opportunities for improved prescribing.

Results

- The study included 51,499 IBS visits (78% female, 22% male), with a mean (SD) age of 48.84 (18.32) years.
- Of the total visits, 5% (N=2,565) were inpatient stays while the rest were outpatient visits.

Table 1-3. Demographics across patient visits

<table>
<thead>
<tr>
<th>Gender</th>
<th>Inpatient</th>
<th>Outpatient</th>
<th>Total</th>
<th>Inpatient</th>
<th>Outpatient</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 to &lt;36</td>
<td>26%</td>
<td>28.49%</td>
<td>28.36%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36-65</td>
<td>49.79%</td>
<td>50.7%</td>
<td>50.72%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65+</td>
<td>24.21%</td>
<td>20.75%</td>
<td>20.92%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean age (SD)</td>
<td>50.37 (18.65)</td>
<td>48.76 (18.30)</td>
<td>48.84 (18.32)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Opioid analgesics were prescribed in 43.6% (N=667) of visits with a severe pain score (N=1,530) and December 2016 were extracted.

Table 4. Pain score classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Pain Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
<td>0 to &lt;4</td>
</tr>
<tr>
<td>Moderate</td>
<td>4 to &lt;7</td>
</tr>
<tr>
<td>Severe</td>
<td>7 to 10</td>
</tr>
</tbody>
</table>

Conclusion

- Opioid analgesics were prescribed in 7.2% (N=3,686) of the total visits and in 68% (N=1,747) of all inpatient stays.
- Opioid analgesics were prescribed in 43.6% (N=667) of visits with a severe pain score (N=1,530).

Figure 1. IBS cohort stratification by visit type, opioid administration and patient-reported pain scores (N = 51,499 visits)

Visit Type

- Total Visits = 51,499

Outpatient

- Total Visits = 47,813
- No Opioids

Inpatient

- Total Visits = 3,686
- Opioids

Conclusions

- This large database analysis examines patient-reported pain scores and opioid usage for IBS visits.
- These results provide initial insights into potentially relevant practices for prescribing medications in multiple settings of patient care, inpatient and outpatient.
- Our research highlights high opioid-use in a subset of IBS patient visits.
- Given the current opioid epidemic, there may be opportunities for improved prescribing.

References

3. Cerner Health Facts 2017 EHR database (Kansas City, MO, USA).