Prevalence, severity and impact of opioid-induced gastrointestinal side effects in the EU: results of a patient survey

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Introduction

Opioids are considered the gold standard for treating moderate-to-severe pain; however therapy can be complicated by opioid-induced gastrointestinal (GI) side effects associated with constipation, straining, small/hard stools and incomplete evacuation and other GI symptoms (abdominal pain/discomfort, bloating and decreased appetite).

The morbidity associated with these GI side effects can be significant, usually resulting in treatment non-compliance or discontinuation of therapy.

Despite these known effects, few data are available regarding the prevalence, frequency and severity of opioid-induced GI side effects, as well as their impact on quality of life (QOL) and activities of daily living (ADLs).

Objective

To assess, via a patient survey, the prevalence, frequency and severity of opioid-induced GI side effects and their impact on QOL and ADLs in patients receiving opioid therapy for chronic pain and taking laxatives.

Methods

Study population

Patients from France, Germany, Spain, Italy and the UK, who were receiving opioids and taking laxatives, and who had participated in a previous survey (the National Health and Wellness Survey in 2005) were invited to complete a follow-up questionnaire. The Patient Reports of Opioid-related Bowel Effects (PROBE) questionnaire was administered via the internet in January 2006.

Data analysis

Subsequent data analysis included only responses from patients reporting use of their main opioid on 4 or more days per week, and who had participated in a previous survey (Table 1). The majority of patients (75–94%) reported experiencing moderate-to-severe GI side effects associated with opioid use (Table 2).

Prevalence, bothersomeness, frequency and severity

Constipation and associated symptoms of straining, small/hard stools and incomplete evacuation were the most frequently reported GI side effects, despite the use of laxatives in this population (Table 3).

The majority of patients (75–94%) reported experiencing moderate-to-severe opioid-induced GI side effects (Figure 2); 75–94% of patients experienced moderate-to-great bothersomeness and were on a daily basis. The bothersomeness ranking was determined based on the relative number of patients reporting each side effect (Table 3).

Conclusions

Similarly, the majority of patients (52–82%) reported that GI side effects had a moderate-to-great negative impact (i.e., score of 2–4 on a scale of 0–4 on ADLs (Figure 4).

A moderate-to-great impact on ADLs was most commonly reported by respondents who did not have a main opioid identified, were excluded from subsequent data analysis.

Note: constipation (n=199); straining (n=102); too small/hard stools (n=73); incomplete evacuation (n=57); heartburn (n=80); passing gas (n=70); bloating (n=53); lower abdominal pain (n=45); reflux/regurgitation (n=36); decreased appetite (n=17); upper abdominal pain (n=11).

Impact on QOL and ADLs

The majority of patients (52–82%) reported that GI side effects had a moderate-to-great negative impact (i.e., score of 2–4 on a scale of 0–4 on QOL (Figure 3). 

Modest impact: 0 score (no impact)

Mild impact: moderate impact: severe

Impacts on QOL and ADLs

1. Constipation
2. Straining
3. Too small/hard stools
4. Incomplete evacuation
5. Heartburn
6. Passing gas
7. Bloating
8. Lower abdominal pain
9. Reflux/regurgitation
10. Decreased appetite
11. Upper abdominal pain

Note: constipation (n=199); straining (n=102); too small/hard stools (n=73); incomplete evacuation (n=57); heartburn (n=80); passing gas (n=70); bloating (n=53); lower abdominal pain (n=45); reflux/regurgitation (n=36); decreased appetite (n=17); upper abdominal pain (n=11).

Figure 1. Opioid-induced GI side effect frequency

Table 2. Prevalence and bothersomeness ranking of opioid-induced GI side effects

<table>
<thead>
<tr>
<th>GI side effect</th>
<th>Prevalence, n (% of patients)</th>
<th>Bothersomeness ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constipation</td>
<td>202 (57)</td>
<td>1</td>
</tr>
<tr>
<td>Straining</td>
<td>146 (41)</td>
<td>2</td>
</tr>
<tr>
<td>Too small/hard stools</td>
<td>134 (37)</td>
<td>4</td>
</tr>
<tr>
<td>Incomplete evacuation</td>
<td>115 (32)</td>
<td>6</td>
</tr>
<tr>
<td>Heartburn</td>
<td>110 (30)</td>
<td>3</td>
</tr>
<tr>
<td>Passing gas</td>
<td>102 (28)</td>
<td>5</td>
</tr>
<tr>
<td>Bloating</td>
<td>97 (27)</td>
<td>7</td>
</tr>
<tr>
<td>Lower abdominal discomfort</td>
<td>78 (21)</td>
<td>8</td>
</tr>
<tr>
<td>Reflux/regurgitation</td>
<td>63 (17)</td>
<td>9</td>
</tr>
<tr>
<td>Decreased appetite</td>
<td>63 (17)</td>
<td>10</td>
</tr>
<tr>
<td>Upper abdominal pain</td>
<td>54 (14)</td>
<td>11</td>
</tr>
</tbody>
</table>

Bothersomeness ranking was determined based on the relative number of patients reporting each side effect.

Figure 3. Impact of opioid-induced GI side effects on QOL

Figure 4. Impact of opioid-induced GI side effects on ADLs

Acknowledgements

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References


This poster contains information about an investigational compound that has not been approved in Turkey or Europe.

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