An investigation of the sensitivity of the Rome IV criteria for opioid-induced constipation
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Constipation prevalence

Oosten et al, 2015
OIC prevalence

- Variable prevalence due to:
  - Lack of consensus on definition
  - Different assessment methods used
  - Different study populations

- Significant impact on psycho-social functioning:
  - Increased rates of presenteeism and absenteeism (Bell et al., 2009)
  - Increased rates of visits to healthcare providers (Bell et al., 2009)
Study aims

- To investigate the prevalence of OIC using a range of different diagnostic criteria
- To determine the sensitivity and specificity of the Rome IV criteria for OIC in a heterogenous group of patients with cancer pain
Methods

- 6 UK sites (hospices and tertiary cancer centre)
- 350 consecutive patients
- Eligibility criteria:
  - Any stage of cancer
  - Taking regular opioids for >1 week for cancer pain
  - Age >18 years
Methods

Written questionnaire:

- Simple question (“are you constipated?”)
- Camilleri definition
- EAPC definition (constipation)
- Rome IV criteria
- Comprehensive Specialist Palliative Care (SPC) clinician assessment
- MSAS-SF assessment: (Have you had constipation in the last week?)
EAPC definition

“Does the following statement describe your bowel function: ‘The passage of small, hard faeces infrequently and with difficulty?’

Larkin et al, 2008
Camilleri definition

“A change since initiating opioid therapy from baseline bowel habits that is characterised by any of the following:

- reduced bowel movement frequency,
- development or worsening of straining to pass bowel movements
- a sense of incomplete rectal evacuation,
- harder stool consistency”

Camilleri et al, 2014
## Demographics

<table>
<thead>
<tr>
<th></th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>64 (range 29-93)</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>female</td>
<td>171</td>
</tr>
<tr>
<td>male</td>
<td>179</td>
</tr>
<tr>
<td><strong>ECOG</strong></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>1</td>
<td>136</td>
</tr>
<tr>
<td>2</td>
<td>105</td>
</tr>
<tr>
<td>3</td>
<td>71</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
</tr>
</tbody>
</table>
Prevalence of constipation

Number of patients assessed as "constipated" using different criteria

<table>
<thead>
<tr>
<th>Assessment Criteria</th>
<th>Number of Patients (n = 350)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple Question</td>
<td>100</td>
</tr>
<tr>
<td>MSAS</td>
<td>200</td>
</tr>
<tr>
<td>EAPC</td>
<td>50</td>
</tr>
<tr>
<td>SPC Assessment</td>
<td>200</td>
</tr>
</tbody>
</table>
Prevalence of OIC

Number of patients assessed as having OIC using different criteria

- Camilleri: 200
- Rome IV: 50
- SPC Assessment OIC: 200
## Sensitivity and specificity

<table>
<thead>
<tr>
<th>Assessment tool</th>
<th>Sensitivity %</th>
<th>Specificity %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rome IV criteria</td>
<td>37.4</td>
<td>98</td>
</tr>
<tr>
<td>Camilleri definition</td>
<td>85.7</td>
<td>73.2</td>
</tr>
</tbody>
</table>
Implications for clinical practice

- Asking a simple question will lead to under-diagnosis
- Significant variation according to assessment tool
- Camilleri definition appears a useful screening tool. If Camilleri “positive”, suggest specialist assessment
- Rome IV criteria does not appear a sensitive tool for diagnosis
Thank you

@DrCharlotteL