ACUTE PAIN MANAGEMENT: PATIENTS WITH ASTHMA

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Introduction

Asthma is a disease characterized by recurrent attacks of breathlessness and wheezing, which vary in severity and frequency from person to person. Asthma attacks all age groups but often starts in childhood. This condition is due to inflammation of the air passages in the lungs. In an attack, the lining of the passages swell causing the airways to narrow and reducing the flow of air in and out of the lungs. [1]. In some patients with asthma acetylsalicylic acid (ASA), ibuprofen and other nonsteroidal anti-inflammatory drugs (NSAID), induce unique nonallergic reaction, which could trigger asthma exacerbations [2, 3].

Material and Methods

80 patients (44 male and 36 female) who took their anti-asthma drugs in 3 public pharmacies of Community health center ‘Dr. Jovan Jovanovic – Zmaj’, Stara Pazova, Serbia, were included in study. Patients were randomly chosen, they had to fill out close ended, anonymous questionnaires with 10 questions. For children aged between 0 and 11 years, parent’s knowledge was investigated. Data were collected from 20.02. until 20.03.2013. Obtained results indicate that more than half of patients (61,25%) didn’t know that pain relief medications can provoke asthma attacks. This is very disturbing fact because majority of patients have asthma more than 1 years. Only 11,5% acknowledged that they know all about ASA and ibuprofen potential to induce bronchicconstriction. Study shows that significant number of patients (7,5%) confirmed that they had breathing problems after taking ibuprofen and ASA. Our results are in correspondence with literature findings, although we included very low number of children in study [3].

Results and discussion

In Serbia, pain relief medications can be bought without prescription. These medications are considered as relatively safe. From our investigation, the most patients use analgesic only a couple times a year (38,75%). To manage the pain, these patients rather take acetaminophen (33,75%) and other NSAIDs like diclofenac and naproxen (30%) than ASA (8,75%) or ibuprofen (20%). There were six patients who use more than one pain relief medications. The most patients claim that they choose their pain medication after consulting physician (64,2%). Among these 13 children included in study, there was one reported case of induced asthmatic attack after using ibuprofen. Our results are in correspondence with literature findings, although we included very low number of children in study [3].

Our results suggest that patients must be educated to avoid use of ASA, ibuprofen and COX-1 inhibitors in order to prevent potential life-threatening asthma exacerbations. 40% of patients, when experience pain, first come to pharmacies. Due to fact pharmacists at public pharmacies are the most available health workers, we must show readiness to promote healthy educate the people and conduct correct use of medicine.

Table 1: Patients by age and duration of asthma disease

<table>
<thead>
<tr>
<th>age</th>
<th>Duration of asthma disease</th>
<th>less than 1 year</th>
<th>from 1 to 5 years</th>
<th>more than 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>from 12 to 26 years</td>
<td>1</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>from 27 to 64 years</td>
<td>0</td>
<td>8</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>more than 65 years</td>
<td>1</td>
<td>3</td>
<td>16</td>
</tr>
</tbody>
</table>

Figure 1. Frequency of using pain relief medicine at patients with asthma

Results also show that parents with children with asthma are not well educated about their children’s disease. Although most of parents (92,3%) claim that they choose pain medication after consulting pediatrician, just few (33,03%) acknowledged that they know that ibuprofen can induce unique nonallergic reaction, precipitate asthmatic attacks. To manage children’s pain and fever parents prefer acetaminophen (67%) than ibuprofen (33%). Among these 13 children included in study, there was one reported case of induced asthmatic attack after using ibuprofen. Our results are in correspondence with literature findings, although we included very low number of children in study [3].

Figure 2. Patient’s choice of medicine for pain management

Material and methods

Figure 3. Way the patients choose pain relief medicine

Figure 4. The way patients choose analgesic alone

Figure 5. Patients knowledge about potential of pain relief drugs triggering asthma attack

Figure 6. Patients who have troubles with breathing after taking pain relief medicine

Figure 7. Ibuprofen and ASA share in triggering asthma exacerbations

Conclusion

Reference:
2. Andrew Szumilin, Desidree G. (reviewers), Aspirin-induced asthma. Allergen in asthma and rhinitis, Allergy Curr. Opin. 1990; 104:5-13

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