ACUTE PAIN MANAGEMENT: PATIENTS WITH ASTHMA

I. Ranković 1, J. Milanović1, M. Merdović 2

1 Community health center dr Jovan Jovanović Zmaj, Stara Pazova, Pharmacy Nova Pazova,

2 Pharmacy Bor

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].

Aim

The aim of this work is to investigate the knowledge and use of pain relief medications at patients with asthma.

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 choosen, 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.

Table 1: Patients by age and duration of asthma disease

age / Duration of asthma disease	less than 11 year	from 12 to 26 years	from 27 to 64 years	more than 65 years
less than 1 year	5	1	0	1
from 1 to 5 years	7	4	8	1
more then 5 years	1	7	31	14

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%). Those patients who choose analgesic alone (22,2%), prefer NSAID (33,33%) than acetaminophen (27,78%), ASA (22,22%) and ibuprofen (16,67%).

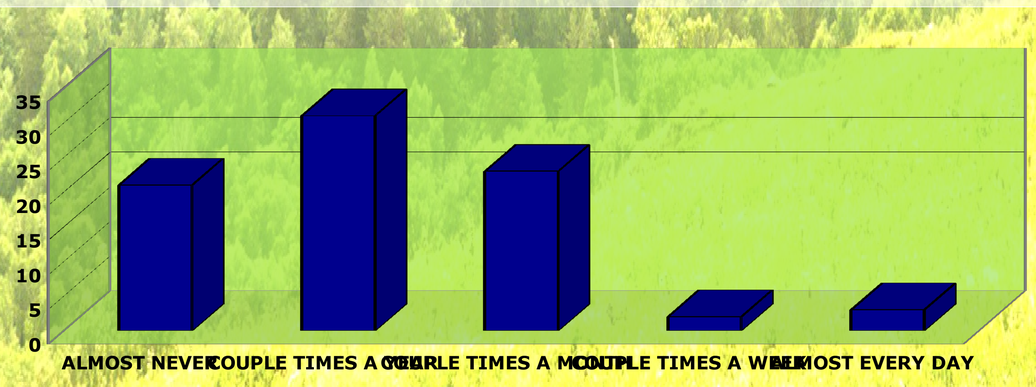

Figure 1. Frequency of using pain relief medicine at patients with asthma

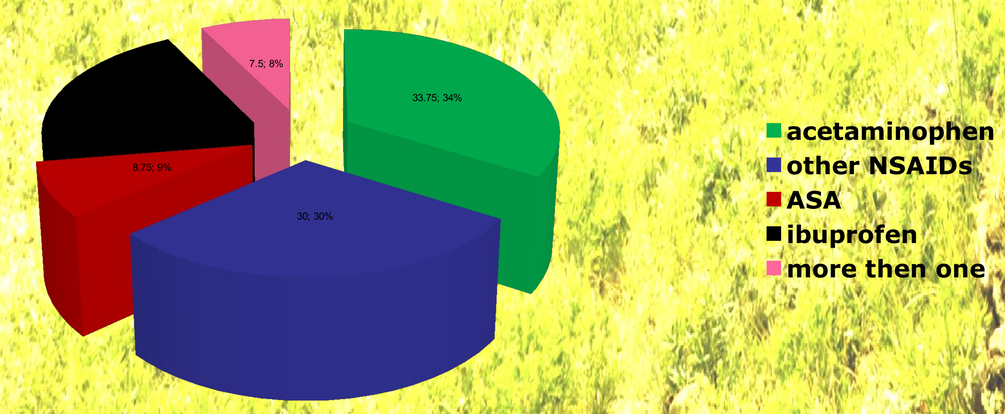

Figure 2. Patient's choice of medicine for pain management

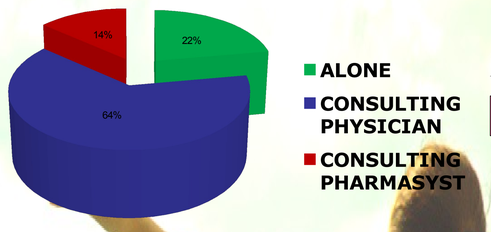

Figure 3. Way the patients choose pain relief medicine

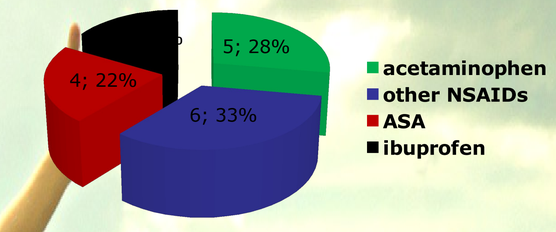

Figure 4. The way patients choose analgesic alone

Obtained results indicate that more than half of patients (61,25%) didn't know that pain relief medications can provoke asthmatic attacks. This is very disturbing fact because majority of patients have asthma more than 5 years. Only 17,5% acknowledged that they know all about ASA and ibuprofen potential to induce bronchoconstrictions. Study shows that significant number of patients (7,5%) confirmed that they had breathing problems after taking ibuprofen (75%) and ASA (25%).

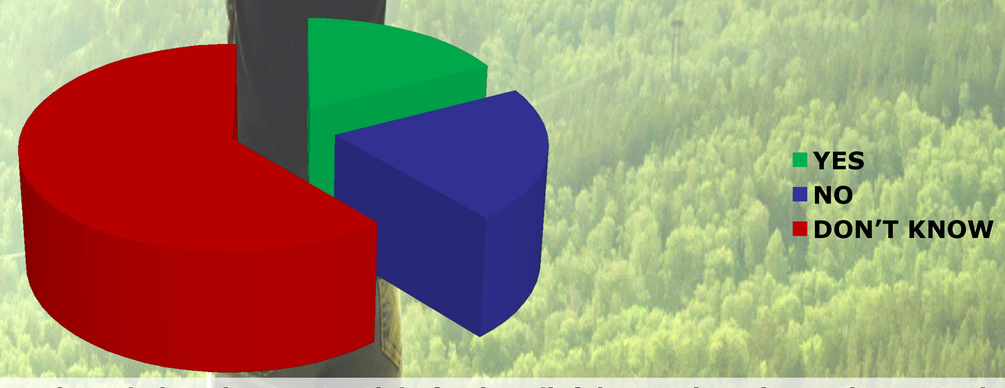

Figure 5. Patients knowledge about potential of pain relief drugs triggering asthma attack

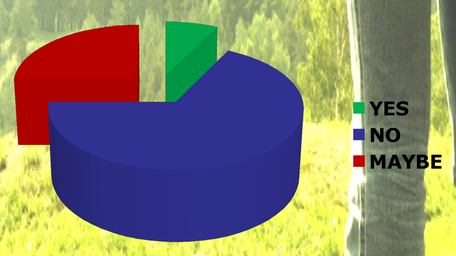

Figure 6. Patients who have troubles with breathing after taking pain relief medicine

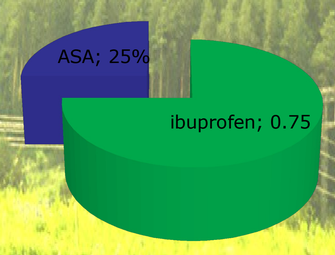

Figure 7. Ibuprofen and ASA share in triggering asthma exacerbations

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 (23,03%) 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].

Conclusion

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 health, educate the people and conduct correct use of medicine.

Reference:
1. Asthma: definition , World Health Organization, [cited 2013]; http://www.who.int/respiratory/asthma/definition/en
2. Andrew Szczeklik, Donald D. Stevenson, Aspirin-induced asthma: Advances in pathogenesis and management, J Allergy Clin Immunol, July 1999; 104:5-13
3. Dipak Kanabar, Stephen Dale, Mariyam Rawat, A review of ibuprofen and acetaminophen use in febrile children and the occurrence of asthma-related symptoms, J. Clin Thera 2007, vol 29; 2716-2722

✉Corresponding author: rankoviciva@gmail.com