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ORIGINAL PAPER

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# Efficacy and Safety of Oral Spray Containing Lysozyme and Cetylpyridinium: Subjective Determination of Patients with Tonsillopharyngitis

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## ABSTRACT

**Introduction:** Tonsillopharyngitis (sore throat) is a common disease mainly related to the seasonal common cold. To relieve unpleasant symptoms and discomfort of acute tonsillopharyngitis associated with common cold, patients usually take some non-prescription drugs. **The aim:** The primary aim of this study was to assess subjective determinations of the efficacy and the safety/tolerability of an oral spray comprising a combination of lysozyme chloride and cetylpyridinium chloride in those patients.

**Material and methods:** The study involved 1727 patients with tonsillopharyngitis associated with common cold and treated with the studied drug, in the period from December 2014 through March 2015. **Results:** In total, 95% of patients rated the studied drug to be well, very well and excellently effective. In 32% of patients, the symptoms were relieved 10 minutes after the application of the spray. Significant correlations were found between the two subjective assessments of the drug efficiency with the total of 74.11% (95% CI: 73.41, 77.47%) of patients who said that the feeling of pain in the throat completely disappeared after the drug administration, evaluated the impact/effect of the drug was very good or good (Pearson Chi Square=391.401,  $p < 0.001$ ). The effectiveness was significantly better in patients with up to two episodes of common cold a year (Pearson Chi Square=6.101;  $p = 0.014$ ). The studied drug was rated to be well, very well and excellently tolerated by 97% of patients. **Conclusion:** According to patients' subjective assessment, the combination of lysozyme chloride and cetylpyridinium chloride in a formulation of spray can quickly, efficiently and safely resolve the symptoms of acute tonsillopharyngitis associated with common cold.

**Keywords:** tonsillopharyngitis, lysozyme, cetylpyridinium, oral spray, efficacy, safety/tolerability.

## 1. INTRODUCTION

Tonsillopharyngitis (a sore throat) is a common disease mainly related to the seasonal common cold. Although tonsillopharyngitis usually resolves on its own, without complications in adults, it is important to relieve symptoms which most commonly affect the quality of life and daily activities. Most often, cough can make breathing difficult, leading to difficulties during sleeping or performing physical exercises (1). Significant influence of common cold on lifestyle habits was reported in 52% of 2505 patients in the

USA as follows: their productivity was reduced by an average of 26.4%; 44.5% were absent from work or school for at least 1-2 days; 93% had difficulties in their sleep, and the majority of respondents complained of nasal congestion and cough (2). Another four-region online questionnaire survey, conducted in four European countries, showed the sore throat to be a major discomfort for the patients with common cold (3). To relieve unpleasant symptoms and discomfort of tonsillopharyngitis and to improve the quality of life, those patients usually take symptomatic treatment, most