

editorial

Is Steroids Effective as Adjuvant Therapy in Patient with Pharyngitis ?

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Sore Throat is highly common disease most often affects person situated in close quarters. Common symptoms include sore throat, pain on swallowing, and fever. The classic finding on physical examination is the presence of white exudates on swollen tonsils. It is important to treat this self-limited illness in order to prevent rheumatic fever. (1) Acute pharyngitis accounts for 13% of outpatient visits to health care providers in the United States, and it accounted for an estimated 15 million patient visits in 2006. Group A streptococcus (*Streptococcus pyogenes*) is responsible for 5 to 15% of cases of pharyngitis in adults and 20 to 30% of cases in children. Streptococcal pharyngitis occurs most commonly among children between 5 and 15 years of age. In temperate climates, the incidence is highest in winter and early spring. The economic burden of streptococcal pharyngitis among children in the United States has been estimated at \$24 million to \$539 million per year, with a substantial fraction of the associated costs attributable to parents lost time from work. Streptococcal pharyngeal infection not only causes acute illness but also can trigger the postinfectious syndromes of poststreptococcal glomerulonephritis and acute rheumatic fever. Rheumatic fever is currently uncommon in most developed countries, but it remains the leading cause of acquired heart disease among children in many resource-poor areas such as sub-Saharan Africa, India, and parts of Australasia. (2)

In a Scottish survey 31% of respondents reported at least 1 episode of sore throat within the last 12 months; most did not seek medical attention (3). Physicians frequently assume that patient seeking care expect a course of antibiotics. It has been shown, however, the pain relief is more important for patients, and patients who hope for antibiotics may in fact want treatment for pain (4). Thus, a major treatment goal for patient complaining of sore throat is to relieve pain and alleviate difficulties in swallowing.

Viral or bacterial infections that cause a sore throat generate pain through inflammation of the pharynx and the surrounding lymphatic tissue. Although antibiotic treatment may shorten the duration of symptoms in a bacterial throat infection (from 3.3 to 2.7), the benefits are considered moderate. (5) Gargling, drinking warm liquids, and oral antipyretic or analgesic drugs are common supportive treatments available over the counter. (6).

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The anti-inflammatory action of steroids might be effective to relieve symptoms caused by inflammation and has been studied in other upper respiratory tract infections. Steroids might, therefore, represent a useful clinical option to meet patients' needs. Administering intramuscular or oral steroids for acute pharyngitis is not common practice; however, several randomized controlled trials, mainly from the United States and few countries (Israel, Turkey), have studied the effectiveness of steroids.

In a systematic review of the effects of steroids as adjuvant therapy for acute pharyngitis in ambulatory patients and discuss the implications for practice. They found 8 randomized controlled trials (RCTs) with a total of 806 patients. There were 5 RCTs with adult patients and 3 with children. All RCTs found a statistically significant faster reduction of pain relief from steroid use compared with placebo. The trial used different steroids (dexamethasone, betamethasone, prednisone), and most participants had received antibiotics at least initially. Analgesic medication, such as acetaminophen, was allowed in all studies, but this factor was not always controlled. No serious adverse side effects were reported. (7)

In conclusion, steroids are effective in relieving pain in acute pharyngitis. Although no serious adverse effects were observed, the benefits have to be balanced with possible adverse drug effects. There are safe and effective over-the-counter medications to relieve throat pain. Most patients received concomitant antibiotics; however, reducing prescription of antibiotics for generally benign upper respiratory tract infection is a public health goal. Also, further study to establish both the safety of steroids without antibiotic coverage and the additional benefits of steroids when used with regular administration of over-the-counter analgesic medication is recommended.

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