Conclusion

The inhalation aerosol therapy composed of essential oils, hypertonic saline, corticosteroids, and antibiotics is more effective than intranasal corticosteroid therapy in the treatment of chronic rhinosinusitis.

Introduction

• Chronic rhinosinusitis is a disease that, due to its frequency in the modern society, is closely related to high direct and indirect costs. It is generally considered that chronic rhinosinusitis affects 5 to 15% of the general population. The most commonly used first line of treatment includes topical intranasal corticosteroids and nasal saline irrigation.

• Recently, intranasal nebulized medications have been widely prescribed for topical treatment of chronic rhinosinusitis. Specially formulated medication compounds are delivered directly to nasal and somewhat sinus mucosa.

The goal

• To evaluate efficacy of inhalation aerosol therapy in the treatment of chronic rhinosinusitis.

• 69 patients diagnosed of chronic rhinosinusitis were randomly divided in two groups. First group was treated with intranasal corticosteroids and hypertonic nasal saline irrigations. Second group of patients was treated with nebulized medications.

• Agents used in the inhalation therapy were:
  – solution of Eucalyptus (0.8%) and L- Menthol (2.6%) (3 ml)
  – hypertonic saline (5 ml)
  – corticosteroids (Dexamethasone 4 mg) and 
  – antibiotics (Gentamycin 80 mg).

Results

• After the treatment all the patients filled the Glasgow Benefit Inventory (GBI) questionnaire. It measures the change in health status produced by medical intervention.

• The GBI values in the inhalation aerosol therapy group were statistically higher than in corticosteroid/saline group (p=0.002).

Research has been expanded in order to further evaluate efficacy of inhalation aerosol therapy.