PHARMACOLOGICAL PROPERTIES AND INDICATIONS OF MOMETASONE FUROATE INTRANASAL SPRAY FOR THE TREATMENT OF INFLAMMATORY DISEASES OF THE NASAL CAVITY AND PARANASAL SINUSES

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Abstract. The nasal cavity is a key component of the human respiratory system. Its disorders predominantly inflammatory in nature, significantly impair patients' quality of life and causes a significant economic burden. Treatment of inflammatory conditions requires anti-inflammatory therapy. In both allergic rhinitis (AR) and chronic rhinosinusitis (CRS), the basis of treatment is intranasal corticosteroids (InCS), which suppress inflammation, activate the expression of anti-inflammatory factors and restore the disorders caused by inflammation. InCS are widely used in the field of rhinology for allergic and nonallergic rhinitis, acute rhinosinusitis and CRS with or without nasal polyps. Among intranasal corticosteroids, mometasone furoate holds a leading position in ensuring optimal treatment outcomes. Mometasone furoate is a potent, locally active and effective synthetic InCS, has a highly lipophilic nature and high affinity for glucocorticoid receptors and minimal systemic bioavailability. The effectiveness of mometasone furoate in the treatment of inflammatory diseases of the nose has been demonstrated by many clinical studies and in its practical application with a level of evidence Ia. Mometasone furoate has been proven to be effective in the treatment of inflammatory diseases of the nose and paranasal sinuses, namely in AR, acute uncomplicated rhinosinusitis, diffuse bilateral CRS, nasal polyposis, otitis media with effusion in patients with adenoid hypertrophy. Mometasone furoate is safe, it does not reach high systemic concentrations and does not cause clinically significant side effects, which characterizes its systemic safety. Local side effects of mometasone furoate are similar in frequency to placebo, and their duration is limited. Mometasone furoate is available in an aqueous form without alcohol and is unscented, which contributes to greater patient adherence with treatment. According to the physicochemical properties of the liquid preparation and the design of the sprayer, Momixon nasal spray is the optimal preparation, characterized by low viscosity and effective deposition in the nasal cavity.

Key words: nose, paranasal sinuses, rhinitis, rhinosinusitis, inflammation, glucocorticosteroids, intranasal steroids, intranasal mometasone furoate, efficacy, safety.