Prevalence of Swallowing Dysfunction in Severe Asthma: Preliminary Results

Cristina Sallesc, MSc,1 Regina T. Ramos, PhD,2 Adelmir Souza-Machado, MD,PhD,1 Carla Dalto, PhD,3 Paula Almeida, MSc,1 and Alvaro Cruz, MD1,2 Programa de Pós-graduação em Ciências da Saúde, Faculdade de Medicina da Bahia, ProAR - Núcleo de Excelência em Asma da Universidade Federal da Bahia, Salvador, Brazil; 2Faculdade de Medicina, Universidade Federal da Bahia (UFBA), Salvador, Brazil; 3Faculdade de Medicina da Bahia, ProAR - Núcleo de Excelência em Asma da Universidade Federal da Bahia, (UFBA), Salvador, Brazil; 4Faculdade de Medicina, Universidade Federal da Bahia, Salvador, Brazil; 5Medicine, Faculdade de Medicina, ProAR - Núcleo de Excelência em Asma da Universidade Federal da Bahia, Salvador, Brazil.

Background: The widespread use of inhaled corticosteroids (ICS) for the treatment of persistent asthma, although highly effective, may be associated with local side effects. The aim of this study was to evaluate swallowing function in patients with severe persistent asthma, by nasal fibroscopy.

Methods: Sixty-four patients with severe asthma with a mean age of 55.11 years, using inhaled corticosteroids without spontaneous complaints related to swallowing, participated in the study. The participants were evaluated using nasal fibroscopy. Each participant was offered diet boluses (3, 5 and 10 ml) such as thin liquids, pasty and solids, and their swallowing function was determined according to the following criteria: (1) premature oral leakage to the pharynx; (2) laryngeal penetration; (3) tracheal aspiration; and (4) pharyngeal stasis.

Results: Nineteen (25.3%) of the patients with severe asthma presented premature oral leakage or pharyngeal stasis of the bolus after swallowing or laryngeal penetration.

Conclusions: Patients with persistent asthma presented subclinical manifestations of abnormal swallowing, when analyzed using nasal fibroscopy, possibly associated with neuromuscular dysfunction caused by inhaled corticosteroids.

The Impact of Administration of Leukotriene Receptor Antagonists, Pranlukast-EK to Infants with Bronchial Asthma

Norifumi Ogawa, MD, PhD,1 Kentaro Mikami, MD,1 Masahiko Sato, MD, PhD,2 Kenniti Mezawa, MD, PhD,3 Satoshi Iwata, MD, PhD,4 Reiko Takazawa, MD,5 Akiihiro Oshiba, MD, PhD,5 Akira Hoshioka, MD, PhD,5 and Takeshi Noma, MD, PhD3. Department of Pediatrics, Chiba Aiyukai Memorial Hospital, Nagareyama, Japan; 2Department of Pediatrics, Sato Pediatric Clinic, Yokohama, Japan; 3Pediatrics, Mezawa Kid Clinic, saitama, Japan; 4Department of Pediatrics, Iwata Pediatric Clinic, Hijagishi, Murayama, Japan; 5Department of Pediatrics, Tokyo- kita Insurance Hospital, Tokyo, Japan; 6Department of Pediatrics, Tokyo Kousett-Nenkin Hospital, Tokyo, Japan; 7Department of Pediatrics, Chiba Children’s Hospital, Chiba, Japan; 8Department of Pediatrics, kitasato University School of Medicine, Sagamihara, Japan.

Background: Bronchial asthma develops by the age of 3 years frequently in childhood in industrialized countries. Pranlukast hydrate, leukotriene receptor antagonists, has been shown to be clinically effective for the treatment of hypersensitivity and childhood asthma. The generic drugs for PLK were universally used in the market, and the effect of the drug also restrain the bronchial asthma onset of infants having an established allergic factor clinically, which necessitates the analysis of the mechanisms of allergic diseases and development of the effective treatment. Therefore we examined influence of administration of Pranlukast-EK (PLK-EK) on the symptom onset of a mild and moderate type of bronchial asthma.

Methods: The 116 patients, who accepted at least 2 to 3 times wheeze after birth, were enrolled ranging from 6 months to 6 years in age. They were treated with Pranlukast-EK (7-10 mg/kg) daily (71 cases, group A) or with suplatast tosilate as a reference (45 cases, group B). The severe and moderate type of patients, who were continuously treated with corticosteroids were excluded. The clinical evaluation was concerning frequency of coughing and wheeze, and that of the β2-receptor agonist inhalation consumption in every 4 months with an asthma diary. In addition, allergic tests; eosinophilic count and IgE value were determined in every 4 months.