

**Methods:** All children had undergone surgical treatment depending on type of anatomical abnormality: endoscopic septoplasty (41), submucosal turbinoplasty (22), adenoidectomy (5), endoscopic resection of the middle turbinate (3). All patients were evaluated prior to surgery (rhinomanometry, endoscopy, blood tests, CT, etc.).

**Results:** After surgical treatment all children have noted a significant improvement in nasal breathing, positive results also revealed by rhinometry and acoustic rhinometry as well as endoscopic appearance. Therefore the presence of endonasal anatomical abnormalities in children with AR is seen very frequent and is often underestimated, however it requires prompt surgical correction in order to optimize conservative therapy, as well as to improve the quality of life. It is shown that after surgery children with AR have less complaints, conservative therapy is more efficient due to better drug delivery into nasal cavity. To evaluate the effectiveness of surgical treatment, along with clinical and endonasal endoscopic criteria it is recommended to perform rhinometry.

#### PP013

##### EXTRINSIC ALLERGIC ALVEOLITIS – HOME EXPOSURE CAN'T BE FORGOTTEN...

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**Introduction:** Extrinsic allergic alveolitis (EAA) is a complex syndrome caused by a nonatopic immunologic response to an inhaled agent. It is characterized by diffuse inflammation of lung parenchyma and airways in a previously sensitized patient. A wide spectrum of inhaled antigens can trigger EAA, including avian antigens. Pediatric incidence is unknown. A comprehensive environmental history and high index of suspicion are the mainstay for diagnosis. The key to effective treatment is identifying the offending agent and avoiding exposure.

**Case report:** The authors report a case of a female adolescent (16 years old) with history of infant recurrent wheezing. She presented to the emergency department with persistent cough and moderate exertion dyspnea in the past month, being previously treated with clarithromycin, inhaled budesonide and salbutamol without clinical improvement. Her father is a pigeon fancier. On examination she had respiratory distress, tachycardia and hypoxemia (oxygen saturation of 88% in room air). Pulmonary auscultation revealed bilateral basal crackles. Initial investigations revealed: hemoglobin 14.2 g/dL, white cell count  $9.86 \times 10^9/L$  (71% neutrophils, 15.5% lymphocytes and 4.7% eosinophils), platelet count  $338 \times 10^9/L$ , C-reactive protein of 58.3 mg/L. Chest radiography demonstrated interstitial pattern. Chest computed tomography of revealed bilateral ground-glass

attenuation. Pulmonary function test demonstrated restriction and a reduced capacity for diffusing carbon monoxide. Bronchoalveolar lavage presented with lymphocytosis, CD4/CD8 ratio less than one. IgE pigeon precipitating antibodies were positive. She was admitted under oxygen therapy, clarithromycin and deflazacort. During hospitalization, her symptoms improved. She completed 15 days of oral corticosteroid and was discharged asymptomatic.

**Discussion:** Extrinsic allergic alveolitis is classically considered occupational illnesses, however home contact cannot be forgotten. Reaching the diagnosis can be difficult because symptoms are often nonspecific and common. Corticosteroids do not change the long-term prognosis, nor reduce the need of identifying the causative antigen and elimination of exposure. Nevertheless, it can speed the clinical resolution.

#### PP014

##### PROBIOTICS & ATOPY

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In theory, increased levels of Probiotics may induce a 'barrier' influence against common pathogens and antigens. The survival issues of Probiotics are associated with their establishment in the competitive gut ecosystem. Since the generation of immunophysiologic regulation in the gut depends on the establishment of indigenous micro flora and the therapeutic interventions based on the consumption of cultures of beneficial live micro organisms that act as Probiotics. Among the possible mechanisms of Probiotics therapy is promotion of a nonimmunologic gut defense barrier, which includes the normalization of increased intestinal permeability and altered gut micro ecology. The role and effect of probiotics in infant feeding, on the mucosal permeability & microbial flora composition and in turn on the stabilization of Th1/Th2 & IgE production has been tested. Another possible mechanism of Probiotics therapy is improvement of the intestine's immunologic barrier, particularly through intestinal immunoglobulin A responses and alleviation of intestinal inflammatory responses, which produce a gut-stabilizing effect. Many Probiotics effects are mediated through immune regulation, particularly through balance control of pro inflammatory and anti-inflammatory cytokines. Probiotics can be used as innovative tools to alleviate intestinal inflammation, normalize gut mucosal dysfunction, and down-regulate hypersensitivity reactions. The clinical trials with probiotics, especially in the treatment of atopic eczema, have yielded encouraging results. Experimental studies have found that probiotics exert strain-specific effects in the intestinal lumen and on epithelial