Short Review   **Published Date:- 2021-12-20**

[Cytokine intoxication as a model of cell apoptosis and predict of schizophrenia - like affective disorders](#)

For a long time there was no explanation of a study which had revealed that people with schizoaffective disorders and in particular suicidal attempts rarely get cancer. But now, we can assume that there are diseases that are "mirrored" because they occur with reverse/feedback pathophysiological mechanisms so that they are, in fact, antagonists.

Research Article   **Published Date:- 2021-08-11**

[An algorithm to safely manage oral food challenge in an office-based setting for children with multiple food allergies](#)

Background: In France, from 30% to 35% of children suffer from multiple food allergies (MFA). The gold standard to diagnosis a food allergy is the oral food challenge (OFC) which is conducted in a hospital setting due to risk of anaphylaxis.
The aim of this study was to evaluate an algorithm to predict OFCs at low risk of anaphylaxis that could safely be performed in an office-based setting.
Methods: Children with MFA and at least one open OFC reactive or non-reactive to other allergens were included. The algorithm was based on multiple clinical and biological parameters related to food allergens, and designed mainly to predict "low-risk" OFCs i.e., practicable in an office-based setting. The algorithm was secondarily tested in a validation cohort.
Results: Ninety-one children (median age 9 years) were included; 94% had at least one allergic comorbidity with an average of three OFCs per child. Of the 261 OFCs analyzed, most (192/261, 74%) were non-reactive. The algorithm failed to correctly predict 32 OFCs with a potentially detrimental consequence but among these only three children had severe symptoms. One hundred eighty-four of the 212 "low-risk" OFCs, (88%) were correctly predicted with a high positive predictive value (87%) and low negative predictive value (44%). These results were confirmed with a validation cohort giving a specificity of 98% and negative predictive value of 100%.
Conclusion: This study suggests that the algorithm we present here can predict "low-risk" OFCs in children with MFA which could be safely conducted in an office-based setting. Our results must be confirmed with an algorithm-based machine-learning approach.

Research Article   **Published Date:- 2021-04-08**

[Immunological background for treatments with biologicals in CRSwNP](#)

Background: Chronic rhinosinusitis (CRS) is a heterogeneous and multifactorial inflammatory disease of the nasal and paranasal mucosa. To date, no internationally standardized uniform classification has been developed for this disease.

Usually, a phenotype classification according to CRS with (CRSwNP) and without (CRSsNP) polyposis is performed. However, through a variety of studies, it has been shown that even within these phenotypes, different endotypes of CRS exist, each with a different underlying inflammatory pathophysiology. In this mini-review, we aim to outline the essential immunological processes in CRSwNP and to highlight the modern therapeutic options with biologics derived from this disease.

Methods: Current knowledge on the immunological and molecular processes of CRS, especially CRSwNP, was compiled by means of a structured literature review. Medline, PubMed, national/international trial and guideline registries as well as the Cochrane Library were all searched.

Results: Based on the current literature, the different immunological processes involved in CRS and nasal polyps were elaborated. Current studies on the therapy of eosinophilic diseases such as asthma and polyposis are presented and their results discussed.

Conclusion: Understanding the immunological basis of CRSwNP may help to develop new personalized therapeutic approaches using biologics. Currently, 2 biologics (dupilumab, omalizumab) have been approved for the therapy of CRSwNP (polyposis nasi) in Europe.

Research Article **Published Date:- 2021-03-19**

[Higher venom-specific IgE levels differentiate children with previous local large reactions from children with previous systemic reactions of different severity](#)

Introduction: Risk factors for systemic reactions (SRs) from hymenoptera venom (HV) allergy are well known in the adult population but they have been little studied in the pediatric one.

Method: The aim of our study was to identify risk factors for SRs in a population of children allergic to HV, comparing a series of clinical (age, gender, atopy, asthma) and laboratory (total IgE, tryptase, venom-specific IgE levels) variables between patients with at least two large local reactions (LLRs) and patients with SRs of different severity for the identified insect. We selected a population of HV allergic children aged < 15 years with LLRs or SRs stratified according to Mueller grades after stinging.

Results: The population included 80 children, 35 with at least 2 LLRs and 45 with SRs. The level of specific IgE for vespid (Polistes dominula, Vespula species) venoms was significantly higher (p = 0.0321) in children with SRs (Mueller grade II+III+IV) than in those with LLRs and the same significance was also found for specific IgE for Apis mellifera, considering SRs group (Mueller grade I+II+III+IV) in respect with LLRs group (p = 0.0001).

Conclusion: The main difference in our pediatric population was the highest level of specific IgE in children with a history of SRs compared to those with a history of LLRs for both vespids and honey bees. These results, once confirmed on a larger population, could suggest the opportunity to follow the behavior of venom specific IgE in children with LLRs to reveal a risk to develop future more serious reactions.

Short Communication **Published Date:- 2021-02-26**

[Cyn d 1 airborne allergen in a Southern Brazilian city](#)

By researching the factors related to exposure to indoor and outdoor allergens, such seasons, climate changes and particulate matter, allergists can screen the sensitization profile of individuals according to their exposures and conduct preventive treatment and individualized immunotherapy. Molecular allergology has improved aerobiological screening of allergenic components toward more specific results on allergic exposure, sensitization, and symptoms [1,2]. The Enzyme-Linked Immunosorbent Assay (ELISA) is a colorimetric enzyme immunoassay technique used to quantify soluble substances such as proteins, peptides, antibodies, and hormones. Due to its high sensitivity and specificity, ELISA can quantify substances at low concentrations, such as allergens [3].

Research Article   **Published Date:- 2021-02-17**

[A retrospective cohort study to evaluate the relationship of airway hyperresponsiveness to type 2 biomarkers in persistent asthma](#)

Airway hyperresponsiveness (AHR) is a hallmark of persistent asthma measured using direct or indirect airway bronchial challenge testing. The purpose of this study is to investigate the putative relationships between type 2 inflammatory biomarkers, airway geometry (FEV1 and FEF25-75) and specific IgE (RAST or skin prick) to AHR. We performed a retrospective analysis of our database (n = 131) of patients with asthma. Of these subjects, 75 had a histamine challenge and 56 had a mannitol challenge. Fractional exhaled nitric oxide (FeNO) and specific immunoglobulin E (IgE) but not blood eosinophils were significantly higher in patients with AHR to either histamine or mannitol. FEV1 % and FEF25 - 75 % were significantly lower in patients with AHR. Elevated Type 2 biomarkers including FeNO and specific IgE but not blood eosinophils were associated with AHR.

Highlights: FeNO and specific IgE but not blood eosinophils are raised in patients with airway hyperresponsiveness.

Research Article   **Published Date:- 2021-02-05**

[Helping asthmatic children through bonding therapy](#)

Disruptions in Maternal-infant Bonding are shown to be the mediating variable between maternal distress and the subsequent expression of childhood asthma. When the mothers' bonding is repaired, their children's asthmatic symptoms diminish or remit. This study evaluated 16 asthmatic children before and after their mothers were treated with Bonding Therapy. Fourteen improved on 11 measures, including reduction in the STEP classification system and medication use. Thirteen children were able to stop all medications. Surprisingly, all mothers scores on the Beck Depression Inventory improved through Bonding Therapy, suggesting that impaired bonding can lead to maternal depression or even Postpartum Depression. The link between bonding disruptions and airway inflammation are discussed. Bonding Therapy is described.