**Asthma Disease Status, COPD, and COVID-19 Severity in a Large Multiethnic Population**

Huang et al 3621

*What is already known about this topic?* Past studies evaluating asthma and coronavirus disease 2019 (COVID-19) severity have had inconsistent findings and lack consideration of asthma disease status.

*What does this article add to our knowledge?* Increased risks for severe COVID-19 outcomes were observed for asthma patients who required recent clinical care, but not for those who did not require clinical care. Medication treatment for asthma appeared to lower this risk.

*How does this study impact current management guidelines?* These findings suggest that asthma patients, especially those who require clinical care, should continue taking control medications during the COVID-19 pandemic.

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**Penicillin Allergy Label Increases Risk of Worse Clinical Outcomes in COVID-19**

Kaminsky et al 3629

*What is already known about this topic?* In coronavirus disease-2019 (COVID-19), antibiotic use is common. Penicillin (PCN) allergy is prevalent and affects antibacterial treatment options, risking poorer response to treatment and increased side effects.

*What does this article add to our knowledge?* In COVID-19, PCN allergy is associated with increased risks for worse outcomes including hospitalization, intensive care requirement, acute respiratory failure, and mechanical ventilation.

*How does this study impact current management guidelines?* Patients with PCN allergy could be prioritized as a higher-risk group for COVID-19 for the development of risk mitigation strategies, including antibiotic stewardship programs to minimize unnecessary antibiotic use in these patients.

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**Pragmatic Randomized Controlled Trial for Stepping Down Asthma Controller Treatment in Patients Controlled with Low-Dose Inhaled Corticosteroid and Long-Acting β2-Agonist: Step-Down of Intervention and Grade in Moderate Asthma Study**

Kim et al 3638

*What is already known about this topic?* The optimal step-down strategy remains unclear in well-controlled patients receiving low-dose inhaled corticosteroid/long-acting β2-agonist.

*What does this article add to our knowledge?* Two current guideline-recommended step-down strategies are not noninferior to maintaining treatment in patients well-controlled with low-dose inhaled corticosteroid/long-acting β2-agonist. A higher rate of patients experiences loss of control after 6 months after step-down.

*How does this study impact current management guidelines?* Step-down can be attempted when patients are stable, but appropriate monitoring and supervision are necessary with precautions for loss of control.
FEF25-75% Is a More Sensitive Measure Reflecting Airway Dysfunction in Patients with Asthma: A Comparison Study Using FEF25-75% and FEV1%

Qin et al

What is already known about this topic? An abnormal forced expiratory flow between 25% and 75% of vital capacity percent predicted (FEF25-75%) value indicative of small airway dysfunction has been proposed as a risk factor contributing to asthma development and progression.

What does this article add to our knowledge? FEF25-75% is more sensitive at reflecting airway hyperresponsiveness, inflammation, and disease severity as compared with forced expiratory volume in 1 second in predicted (FEV1%) in patients with asthma, in particular in those patients with small airway dysfunction (SAD) who present with normal FEV1%.

How does this study impact current management guidelines? Our data suggest that monitoring FEF25-75% in asthmatic patients with SAD who present with normal FEV1% has relevance as a primary clinical outcome in disease management.

Real-World Assessment of Asthma Specialist Visits Among U.S. Patients with Severe Asthma

Most et al

What is already known about this topic? The 2007 guidelines of the U.S. National Heart, Lung, and Blood Institute recommend that patients with severe asthma be referred to an asthma specialist, such as an allergist or pulmonologist, for systematic assessment or comanagement.

What does this article add to our knowledge? Asthma specialist care appeared to be underutilized by commercially insured U.S. patients with severe asthma, with only 38% having an observed specialist visit within 2 years.

How does this study impact current management guidelines? There is a need to increase specialist consultation/comanagement for patients with severe asthma. This can be aided by recognizing patient characteristics associated with a reduced likelihood of specialist visits.

Improving Asthma Symptoms Among Inner-City Women During Pregnancy: A Prospective Cohort Intervention

Yoo et al

What is already known about this topic? Asthma exacerbations are common during pregnancy, and self-management education can be effective in reducing the unpredictable variability of asthma control in this population.

What does this article add to our knowledge? Our study expands current knowledge by demonstrating the benefits of an integrated subspecialty care model on objective measurements of asthma control in an understudied population of urban minority pregnant women.

How does this study impact current management guidelines? Our results inform prenatal care algorithms for pregnant women with asthma and elucidate opportunities to improve the quality of asthma management for a vulnerable population.

Associations of Snoring and Asthma Morbidity in the School Inner-City Asthma Study

Gunnlaugsson et al

What is already known about this topic? Asthma and sleep-disordered breathing are associated conditions with a bidirectional relationship. They are common in childhood and disproportionately affect those of minority race and ethnicity.

What does this article add to our knowledge? Expands the knowledge of the association of asthma and sleep-disordered breathing assessed by report of snoring frequency in relation to asthma morbidity and health care utilization among school-age children of minority racial and ethnic background.

How does this study impact current management guidelines? Report of snoring frequency is easily assessed and can identify those at risk for worse asthma morbidity and increased health care utilization. Given the variation in snoring frequency over time, repeated assessments of snoring should be performed.
Specialist Care in Individuals with Asthma Who Required Hospitalization: A Retrospective Population-Based Study
Kendzerska et al 3686

What is already known about this topic? Individuals who are at risk for severe asthma exacerbations should receive specialist care; however, the care pattern for such patients in the real world is unclear.

What does this article add to our knowledge? We described the pattern of care among individuals with asthma who required hospitalization and identified factors associated with receiving asthma specialist care.

How does this study impact current management guidelines? Living in a rural area or a low-income neighborhood was the strongest factor associated with a reduced likelihood of receiving specialist care. This suggests that access to care is an important barrier to receiving the recommended care.

Urticaria: The 1-1-1 Criterion for Optimized Risk Stratification in β-Lactam Allergy Delabeling
Sabato et al 3697

What is already known about this topic? Low-risk patients can benefit from delabeling based on direct challenges. However, there is still no consensus about the risk status to assign to patients who have experienced an urticarial eruption associated with β-lactam treatment.

What does this article add to our knowledge? An urticarial eruption appearing within 1 hour after the first dose and with a maximal duration of 1 day is significantly more frequently observed in patients with a positive skin test/serum specific IgE assay.

How does this study impact current management guidelines? Patients who meet the 1-1-1 criterion are not eligible for a direct challenge, but should be referred for prior skin tests and serum specific IgE measurement.

Improvement in Health-Related Quality of Life in Food-Allergic Patients: A Meta-Analysis
Cao et al 3705

What is already known about this topic? Food allergy can affect patients’ health-related quality of life (HRQoL) owing to increased anxiety and social and economic restrictions. In recent studies, OIT and OFCs have been shown to be associated with improving patients’ HRQoL.

What does this article add to our knowledge? Both OIT and OFC were significantly associated with improved HRQoL. Five OIT studies found a significant improvement in HRQoL in the OIT group compared with the placebo group.

How does this study impact current management guidelines? Our study underscores the potential benefits of OIT and OFC in improving patients’ quality of life, which should be considered when balancing the pros and cons of treatment in clinical practice.

Characterizing Biphasic Food-Related Allergic Reactions Through a US Food Allergy Patient Registry
Gupta et al 3717

What is already known about this topic? The incidence of biphasic food-related allergic reactions ranges from 1% to 20% of anaphylactic reactions. Most of these estimates come from individuals undergoing oral food challenges or physician-confirmed biphasic anaphylaxis.

What does this article add to our knowledge? This study provides valuable data on respondent-reported biphasic food-related allergic reactions that will inform patients and families about the probable severity of a biphasic response, depending on the reported initial reaction severity.

How does this study impact current management guidelines? Patient education on biphasic food-related allergic reactions should consider the individual’s initial reaction severity.
Clinical Predictors and Outcomes of Oral Food Challenges Illustrate Differences Among Individual Tree Nuts
Hsu et al

What is already known about this topic? Tree nuts are common food allergens and have a higher likelihood of triggering a severe reaction compared with other food allergens. Little is known regarding differences between tree nut allergenicity and decision point thresholds for individual tree nuts.

What does this article add to our knowledge? Patients are more likely to pass almond and hazelnut challenges than cashew or walnut.

How does this study impact current management guidelines? Almond and hazelnut could be challenged more aggressively, and cashew and walnut challenged more conservatively.

Detection of Food Allergens in School and Home Environments of Elementary Students
Maciag et al

What is already known about this topic? Food allergen proteins are detectable in table wipes and vacuumed floor samples in inner-city US elementary schools.

What does this article add to our knowledge? Milk, egg, peanut, and tree nut allergens are readily detectable in environmental samples from US elementary schools, but at lower levels than in students’ homes.

How does this study impact current management guidelines? Further investigation is needed to determine the clinical implications and possible impact on school policies.

Lanadelumab Efficacy, Safety, and Injection Interval Extension in HAE: A Real-Life Study
Buttgereit et al

What is already known about this topic? Recently, the monoclonal antibody against kallikrein lanadelumab was approved for the prophylaxis of hereditary angioedema attacks. It showed very good efficacy in clinical trials. In patients who are attack-free, dose reductions can be considered.

What does this article add to our knowledge? Outside of clinical trials, lanadelumab was safe and effective in larger cohorts of patients with hereditary angioedema and acquired C1 inhibitor deficiency. Moreover, our protocol for extending injection intervals improved disease control and quality of life.

How does this study impact current management guidelines? The presented approach for the extension of injection intervals of lanadelumab should be considered early on because it can minimize the burden of therapy without losing efficacy.

Diversity in Serine/Threonine Protein Kinase-4 Deficiency and Review of the Literature
Cagdas et al

What is already known about this topic? Serine/threonine kinase-4 (STK4) deficiency is an autosomal recessive combined immunodeficiency characterized by cutaneous viral infections, recurrent pneumonia, and atopy, like Dedicator of Cytokinesis Protein 8 (DOCK8) deficiency.

What does this article add to our knowledge? Intermittent neutropenia and rheumatic features (leukocytoclastic vasculitis, lupus, amyloidosis, etc.) are common in STK4 deficiency. Increased effector memory T cells and significantly increased plasmablasts may be causative for autoimmunity in the disease.

How does this study impact current management guidelines? Antimicrobial prophylaxis and monthly immunoglobulins are the mainstays of the therapy. Immunomodulatory therapies, steroids, and rituximab aid the control of autoimmune or inflammatory manifestations. However, we still need more data regarding hematopoietic stem cell transplantation in STK4 deficiency.
Hematopoietic Cell Transplantation Rescues Inflammatory Bowel Disease and Dysbiosis of Gut Microbiota in XIAP Deficiency
Ono et al 3767

What is already known about this topic? X-linked inhibitor of apoptosis protein (XIAP) deficiency, an inborn error of immunity, is often associated with refractory inflammatory bowel disease, and it can be cured only with allogeneic hematopoietic cell transplantation.

What does this article add to our knowledge? XIAP deficiency-associated inflammatory bowel disease is associated with the dysbiosis of the gut microbiota. Allogeneic hematopoietic cell transplantation was found to ameliorate gut inflammation and dysbiosis in patients with XIAP deficiency.

How does this study impact current management guidelines? Refractory inflammatory bowel disease associated with XIAP deficiency can be rescued with allogeneic hematopoietic cell transplantation.

Prevalence of Pol d 1 Sensitization in Polistes dominula Allergy and Its Diagnostic Role in Vespid Double-Positivity
Bilò et al 3781

What is already known about this topic? Although Polistes venom allergy is common, diagnosis of primary sensitization versus vespid cross-reactivity is challenged by the availability of only Pol d 5 as a Polistes molecule in diagnostics.

What does this article add to our knowledge? Pol d 1 is the most frequent allergen in Polistes-sensitized patients (97% to 100%). The diagnostic accuracy of Pol d 1 is good for detecting primary sensitizations in double-sensitized patients (area under the curve: 87% to 99%).

How does this study impact current management guidelines? Pol d 1 can increase the diagnostic accuracy of Polistes primary sensitizations if implemented in clinical practice, reducing the use of cumbersome and expensive in vitro testing (ie, CAP-inhibition and basophil activation tests) and unnecessary double-venom immunotherapies.

The Association of Prenatal Vitamin D Sufficiency With Aeroallergen Sensitization and Allergic Rhinitis in Early Childhood
Chen et al 3788

What is already known about this topic? Vitamin D has known immunomodulatory effects starting in utero. The role of prenatal vitamin D sufficiency in the development of childhood allergic rhinitis and aeroallergen sensitization is unclear.

What does this article add to our knowledge? Prenatal vitamin D sufficiency in the third trimester and high-dose vitamin D supplementation may attenuate the risk for childhood allergic rhinitis and aeroallergen sensitization, especially among those with concurrent asthma or history of maternal atopy.

How does this study impact current management guidelines? In populations with atopic risk, prenatal vitamin D supplementation may be beneficial in reducing offspring risk for allergic disease. Further studies on the prevention of allergic disease should consider the role of prenatal vitamin D.

Defining the Allergic Endotype of Chronic Rhinosinusitis by Structured Histopathology and Clinical Variables
Brown et al 3797

What is already known about this topic? An association exists between chronic rhinosinusitis (CRS) and atopy. However, past studies have evaluated this link with conflicting results that could have been due to small sample sizes or not capturing and analyzing confounding factors.

What does this article add to our knowledge? This study investigates the associations between atopy and several clinical and histopathologic variables in CRS in a comprehensive way using a statistical model. Our results demonstrate that atopy in CRS is significantly linked to certain sinus tissue pathologic features and is associated with higher disease burden, patient-reported symptoms, and poorer quality of life.

How does this study impact current management guidelines? Linking atopy and established metrics of CRS disease, including tissue eosinophilia and sinonasal outcome test and modified Lund-Mackay scores, independent of nasal polyp and asthma diagnosis, positions allergic status as a clinical feature that can help identify CRS patients who may benefit from differential treatments.