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Estimating COVID-19 Infection and Severity Risks in Patients with Chronic Rhinosinusitis: A Korean Nationwide Cohort Study
Lee et al 2262

What is already known about this topic? Chronic rhinosinusitis (CRS) is one of the most common upper airway inflammatory diseases and may be associated with epithelial barrier dysfunction, bacterial colonization, exaggerated immune response, and specific antibody deficiency. Basic studies suggest that CRS may increase coronavirus disease susceptibility or severity; however, the potential association of CRS with coronavirus disease 2019 (COVID-19) susceptibility or severity has not been demonstrated.

What does this article add to our knowledge? In our large-scale, population-based nationwide cohort in South Korea, CRS was associated with an increased risk for severe acute respiratory syndrome coronavirus 2 infection and severe COVID-19. In particular, among patients with CRS, prior intranasal corticosteroid use, the absence of nasal polyps, or nonatopic type were associated with a greater risk for severe acute respiratory syndrome coronavirus 2 infection, and severe COVID-19 outcomes.

How does this study impact current management guidelines? Taken together, our findings suggest that clinicians should be cautious in assessing the prognosis and determining care for patients with CRS amid the COVID-19 pandemic.

The Diagnostic Workup in Chronic Spontaneous Urticaria—What to Test and Why
Metz et al 2274

What is already known about this topic? The guideline recommends limited tests (differential blood count, erythrocyte sedimentation rate, and/or C-reactive protein) in routine diagnostic of patients with chronic spontaneous urticaria (CSU) and an extended diagnostic program based on patient history.

What does this article add to our knowledge? We formulate simple questions that should be asked at the initial consultation of patients with CSU. Answers to these questions can lead to the identification of patients in whom further investigations should be performed.

How does this study impact current management guidelines? Our recommendations can help to prevent unnecessary and potentially expensive testing and can increase diagnostic accuracy and treatment effectiveness.

A Comparative Study of Sex Distribution, Autoimmunity, Blood, and Inflammatory Parameters in Chronic Spontaneous Urticaria with Angioedema and Chronic Histaminergic Angioedema
Sabaté-Brescò et al 2284

What is already known about this topic? Chronic histaminergic angioedema (CHA) is classified as a form of nonhereditary and mast cell–mediated recurrent angioedema dependent on mast cells. However, when dealing with the nosology of urticarial disorders, it is typically considered as part of the definition of chronic spontaneous urticaria (CSU). CHA does share clinical features and approaches to treatment with CSU, which adds to the confusion.

What does this article add to our knowledge? This work compares for the first time CHA and CSU (considering those patients with hives and angioedema) side by side, observing some remarkable differences in gender distribution, basophil number, and antibodies against the IgE receptor.

How does this study impact current management guidelines? Until there are further studies that either support or refute what we propose, CHA and CSU should not automatically be considered the same disorder.
The Panorama of Primary Angioedema in the Brazilian Population
Veronez et al 2293

What is already known about this topic? The reality faced by patients with primary angioedema in developing countries is still far from the optimal management mainly due to the poor diagnosis and lack of access to first-line drugs.

What does this article add to our knowledge? In this article, we highlight the genetic variability of the Brazilian population represented by the unique high incidence of hereditary angioedema with F12 mutation, the presence of new mutations in hereditary angioedema with C1 inhibitor deficiency, and potential new mutations in the ANGPT1 gene.

How does this study impact current management guidelines? Our data reinforce an urgent need of coordinated multicenter studies and unified registers to establish reliable prevalence estimations for primary angioedema, as well as the access to more affordable drugs and specific diagnosis.

Randomized Trial of the Efficacy and Safety of Berotralstat (BCX7353) as an Oral Prophylactic Therapy for Hereditary Angioedema: Results of APeX-2 Through 48 Weeks (Part 2)
Wedner et al 2305

What is already known about this topic? Berotralstat (BCX7353), a novel oral agent for prophylaxis of hereditary angioedema attacks, was shown to be effective and have a favorable benefit-to-risk profile over 24 weeks in part 1 of the APeX-2 study.

What does this article add to our knowledge? Part 2 of the APeX-2 study confirmed the safety, tolerability, and effectiveness of berotralstat through 48 weeks of treatment. Patients who were rerandomized from placebo to berotralstat had substantial declines in hereditary angioedema attack rates.

How does this study impact current management guidelines? As a once-daily oral therapy, berotralstat provides an effective alternative to current targeted prophylactic therapies for patients with hereditary angioedema that eliminates the treatment burdens associated with intravenous or subcutaneous administration.

Real-World Effectiveness of Anti–IL-5/5R Therapy in Severe Atopic Eosinophilic Asthma with Fungal Sensitization
Dhariwal et al 2315

What is already known about this topic? Severe asthma with fungal sensitization (SAFS) and allergic bronchopulmonary aspergillosis are complex clinical phenotypes associated with poorly controlled type 2 inflammation. The effectiveness of biologic agents targeting IL-5/IL-5 receptor alpha in patients with SAFS and bronchopulmonary aspergillosis remains unclear.

What does this article add to our knowledge? We describe the first real-world experience of treatment with mepolizumab and benralizumab in a large cohort of patients with SAFS. Patients with SAFS and bronchopulmonary aspergillosis have significant improvements in clinical outcomes following treatment, which are of the same magnitude as those observed in other type 2 high severe asthma phenotypes.

How does this study impact current management guidelines? Targeting eosinophilic inflammation is an effective therapeutic intervention in patients with SAFS, leading to improvements in asthma symptoms and reductions in exacerbation frequency and prednisolone use.

Community Use of Epinephrine for the Treatment of Anaphylaxis: A Review and Meta-Analysis
Miles et al 2321

What is already known about this topic? Pre–hospital use of epinephrine is crucial in improving anaphylaxis outcomes; however, community use of epinephrine for the treatment of anaphylaxis is low.

What does this article add to our knowledge? This article aims to determine rates of epinephrine administration in the pre–hospital setting, report barriers of epinephrine use, and assess strategies that contribute to increased epinephrine use.

How does this study impact current management guidelines? Knowledge of rates of epinephrine use in the pre–hospital setting along with identification of barriers to its use will contribute to the development of policies and guidelines.
Impact of Technology-Based Interventions on Patient-Reported Outcomes in Asthma: A Systematic Review
Doshi et al 2336

What is already known about this topic? Many technology-based interventions (TBIs) have been used for asthma management, but their impact on patient-reported outcomes (PROs) is unclear.

What does this article add to our knowledge? TBIs improve PROs overall, but comparing interventions across studies will require widespread standardization of PROs in clinical trials.

How does this study impact current management guidelines? Management guidelines should include TBIs to improve certain aspects of asthma management, especially treatment self-efficacy. Guidelines should also encourage the use of standardized PROs in clinical trials.

Heterogeneity of Paucigranulocytic Asthma: A Prospective Cohort Study with Hierarchical Cluster Analysis
Deng et al 2344

What is already known about this topic? Asthma is a heterogeneous disease that can be divided into 4 different inflammatory phenotypes, of which paucigranulocytic asthma (PGA) remains largely unexplored.

What does this article add to our knowledge? We identified 3 important clinical subtypes of PGA (“mild PGA,” “PGA with psychological dysfunction and rhinoconjunctivitis and other allergic diseases,” and “smoking-associated PGA”). Of them, “smoking-associated PGA” has high risk of severe exacerbation.

How does this study impact current management guidelines? Our study indicates that heterogeneity definitely exists in PGA, the subtypes of which are characterized by distinct features and are of relevance in clinical practice.

Household Cleaning and Poor Asthma Control Among Elderly Women
Dumas et al 2358

What is already known about this topic? Although avoidance of environmental triggers is recommended in asthma management, environmental determinants of poor asthma control are insufficiently known. Cleaning products may have adverse respiratory effects, but data on their association with asthma control are scant.

What does this article add to our knowledge? In this study of 2223 elderly women with asthma, weekly use of sprays or chemicals for home cleaning and frequent use of multiple disinfectants and cleaning products were associated with poor asthma control.

How does this study impact current management guidelines? Limiting the use of disinfectants and cleaning products may help improve asthma control in adult patients. Given the ubiquitous use of these products, our results may have an important impact in asthma management.

Characterization of Asthma Trajectories from Infancy to Young Adulthood
Ödling et al 2368

What is already known about this topic? Asthma has many underlying biological pathways that lead to different disease trajectories.

What does this article add to our knowledge? Subjects in the adolescent-onset and persistent asthma trajectory groups have equal burdens of asthma control and severity in adolescence and young adulthood.

How does this study impact current management guidelines? Through the defined and characterized asthma trajectories, we found that the adolescent-onset and persistent asthma trajectory groups are vulnerable groups that health care professionals need to identify, to optimize care.
Digital Health Technology in Asthma: A Comprehensive Scoping Review
Mosnaim et al 2377

What is already known about this topic? Digital technology provides an opportunity to improve and individualize asthma self-management significantly across a variety of intervention types; however, the impact of different digital intervention characteristics has yet to be assessed.

What does this article add to our knowledge? Significant heterogeneity exists in study designs, patient populations, and outcomes measurement for digital interventions; more alignment is needed to measure impacts accurately on different dimensions of care and to guide future successful interventions.

How does this study impact current management guidelines? This scoping review does not directly affect current guidelines for asthma self-management, but it is hoped that it will inform the design of future digital intervention studies.

Multivariate Association of Child Depression and Anxiety with Asthma Outcomes
Kulikova et al 2399

What is already known about this topic? Depression and anxiety are common among children with asthma. Sex differences may exist in asthma outcomes between boys and girls.

What does this article add to our knowledge? Large effect size (37.2%) is present in the relationship between depressive and anxiety symptoms and asthma outcomes. Girls may overperceive asthma symptoms compared with boys despite no differences in lung function measures.

How does this study impact current management guidelines? Consider incorporating questions about psychiatric symptoms as part of routine asthma management with a focus on perception of asthma symptoms between boys and girls.

Management of Hypersensitivity Reactions to Nondextran Iron Products: New Insights Into Predisposing Risk Factors
Steveling-Klein et al 2406

What is already known about this topic? Hypersensitivity reactions (HSRs) to intravenous nondextran iron products (NDIPs) are rare, but can be serious. Predisposing risk factors have not been fully elucidated. Suggested factors include atopy, allergic asthma, history of HSRs to other drugs, and elevated tryptase.

What does this article add to our knowledge? We observed a similar frequency of atopy, but a more frequent history of urticaria as well as a tendency for a more frequent history of HSRs to other drugs in patients with HSRs to NDIPs compared with tolerant controls. Most patients showed tolerance when reexposed to NDIPs using a low-reactogenic administration protocol.

How does this study impact current management guidelines? A history of urticaria and HSRs to drugs, but not atopy, represent potential risk factors for HSRs to NDIPs. We provide an algorithm for stratification of patients receiving NDIPs taking into account risk factors and HSR severity.

Prevalence of Antibiotic Allergy Labels in a Tertiary Referral Center in Belgium
Gilissen et al 2415

What is already known about this topic? Antibiotic allergy labels (AAL) appear in 10% to 15% of US patients’ charts and subsequently affect future health care decisions. However, large-scale analyses of the prevalence and characteristics in European centers are scarce.

What does this article add to our knowledge? With an overall prevalence of 3% of patients who consulted our center, being 1% of outpatients and 7% of those hospitalized, AAL are reported less when compared with literature.

How does this study impact current management guidelines? Varying prevalences of AAL might impact the outcome of delabeling strategies that should be tailored to the local AAL “epidemic.” Improved documentation of AAL can help minimizing the burden of incorrect AAL.
CD3−CD4+ Lymphocytic Variant Hypereosinophilic Syndrome: Diagnostic Tools Revisited
Carpentier et al 2426

What is already known about this topic? Diagnosis of lymphocytic variant hypereosinophilic syndrome (HES), made on the basis of lymphocyte phenotyping and T-cell receptor gene rearrangement analysis, can be challenging in routine settings and is often delayed.

What does this article add to our knowledge? This study evaluating diagnostic tools for CD3−CD4+ L-HES indicates that adapting the T-cell phenotyping protocol to stain CD2, CD5, CD45RO, and/or CD95 and acquire more events is the most reliable means of identifying patients.

How does this study impact current management guidelines? Earlier detection of aberrant T cells in patients presenting with HES will improve management of this variant that warrants follow-up for development of lymphoma and therapeutic regimens adapted to its T-cell–driven pathogenesis.

A Cost-Effectiveness Analysis of Epinephrine Autoinjector Risk Stratification for Patients with Food Allergy—One Epinephrine Autoinjector or Two?
Shaker et al 2440

What is already known about this study: Food-allergic individuals are routinely prescribed 2 epinephrine autoinjectors (EAI) for use in the event of anaphylaxis, but the economic value of this practice has not been determined.

What does this article add to our knowledge: Compared with using a risk-stratified approach, routinely prescribing 2 EAI devices to anyone with food allergy is cost-effective only if the cost of a single unit of an EAI is less than $80 (US) or $18 (UK), unless the probability of requiring a second epinephrine dose for anaphylaxis exceeds 25%.

How does this study impact current management guidelines: In resource-constrained settings, limiting prescription of 2 EAI devices to patients with a previous history of anaphylaxis and/or those who have previously required multiple doses of epinephrine to treat anaphylaxis may be appropriate, unless EAI device cost is significantly reduced.

The Psychosocial Burden of Food Allergy Among Adults: A US Population-Based Study
Warren et al 2452

What is already known about this topic? Previous studies of small clinically recruited adult allergy patients or mixed convenience samples of children and adults suggest that food allergy–related quality of life may vary by demographic, geographic, and clinical allergic disease characteristics.

What does this article add to our knowledge? This is the largest study evaluating food allergy–related quality of life within a nationally representative sample of US adults and establishes population-level norms for the Food Allergy Independent Measure, a commonly used patient-reported outcomes measure.

How does this study impact current management guidelines? This study identifies factors associated with greater psychosocial burden among US adults with food allergy and underscores the importance of clinical diagnosis and understanding patients’ perceptions of severity and health care utilization to inform food allergy management.

Indirect Treatment Comparison of Biologics in Chronic Rhinosinusitis with Nasal Polyps
Peters et al 2461

What is already known about this topic? Add-on anti-interleukin-4/interleukin-13 and anti-immunoglobulin E biologics previously demonstrated efficacy versus intranasal corticosteroids in patients with chronic rhinosinusitis with nasal polyps (CRSwNP); however, no comparative head-to-head studies are available.

What does this article add to our knowledge? This article presents results from the first Bucher indirect treatment comparison of biologics in CRSwNP, demonstrating significantly greater improvements in key symptoms and objective measures of disease with dupilumab compared with omalizumab.

How does this study impact current management guidelines? Although indirect treatment comparisons have limitations, results suggest that patients with CRSwNP may have greater improvements in key CRSwNP outcomes with dupilumab versus omalizumab. Nevertheless, it will be important to confirm these findings in head-to-head clinical studies.