Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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First-Dose mRNA COVID-19 Vaccine Allergic Reactions: Limited Role for Excipient Skin Testing
Wolfson et al 3308

What is already known about this topic? An expert-informed risk stratification protocol was recommended to guide clinical care after mRNA COVID-19 vaccine reactions. However, at the time, no supportive evidence was available.

What does this article add to our knowledge? Most individuals after first-dose mRNA COVID-19 vaccine reactions, regardless of excipient skin testing result, were able to receive the second mRNA COVID-19 vaccine dose safely. Refresh Tears were irritating and should not be used for skin testing to polysorbate 80.

How does this study impact current management guidelines? More data are needed on the value of skin prick testing to PEG in evaluating patients with mRNA COVID vaccine anaphylaxis, and the positive predictive value remains unknown. Most patients may be able to proceed to second vaccination without skin testing.

COVID-19-Related Food Insecurity Among Households with Dietary Restrictions: A National Survey
Guillaume et al 3323

What is already known about this topic? A food allergy or celiac disease diagnosis requires dietary elimination of specific foods and creates unique barriers to obtaining adequate nutrition.

What does this article add to our knowledge? This is the first study to examine patterns of food insecurity by household dietary restriction status in the context of a global pandemic.

How does this study impact current management guidelines? Our findings reinforce the importance of routine household food insecurity screening among patients diagnosed with food allergy or celiac disease.

Association of Varying Clinical Manifestations and Positive Anti–SARS-CoV-2 IgG Antibodies: A Cross-Sectional Observational Study
Silverberg et al 3331

What’s already known about this topic? Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection induces variable anti–SARS-CoV-2 IgG antibody responses. Clinical predictors of anti–SARS-CoV-2 IgG antibody responses are not fully understood.

What does this study add to our knowledge? Prolonged fever, anosmia, and receiving supplemental oxygen therapy and more severe disease phenotypes had strongest associations with positive IgG antibodies to the SARS-CoV-2 nucleocapsid protein.

How does this study impact current management guidelines? These symptom patterns can help predict the likelihood of having positive antibodies to SARS-CoV-2, and potentially guide occupational and clinical recommendations regarding vaccination and social distancing requirements.

Comparison of Nonesophageal Eosinophilic Gastrointestinal Disorders with Eosinophilic Esophagitis: A Nationwide Survey
Yamamoto et al 3339

What is already known about this topic? Unlike for eosinophilic esophagitis (EoE), the prevalence, putative phenotypes, and natural courses of non—esophageal eosinophilic gastrointestinal disorders (non-EoE EGIDs) remain poorly understood.

What does this article add to our knowledge? Continuous type was 64% (95% confidence interval [CI]: 55-72) in non-EoE EGIDs and 66% (95% CI: 58-74) in EoE. Restriction of activity, weight loss, surgery, and hypoproteinemia in non-EoE EGIDs were more frequent in pediatric patients than adult patients.

How does this study impact current management guidelines? Most non-EoE EGIDs were persistent and severe, especially in children. These findings will promote development of treatment strategies that do not inhibit growth and have fewer long-term side effects.
Sex Differences in Blood Transcriptional Profiles and Clinical Phenotypes in Pediatric Patients with Eosinophilic Esophagitis
Erwin et al

*What is already known about this topic?* The clinical presentation of eosinophilic esophagitis (EoE) is different in males and females.

*What does this article add to our knowledge?* Patients with EoE have a distinct gene expression profile from controls, and the transcriptome is not the same in males and females.

*How does this study impact current management guidelines?* This study provides a framework to classify EoE patients at diagnosis in order to measure severity and plan targeted therapy.

Small Airway Dysfunction Links Asthma Severity with Physical Activity and Symptom Control
Abdo et al

*What is already known about this topic?* Small airway dysfunction is a disease feature in asthma.

*What does this article add to our knowledge?* Older age, obesity, and the related systemic inflammation, type 2 inflammation, and smoking are independent predictors of SAD. Obesity contributes to SAD in itself and through systemic inflammation. Small airway dysfunction affects physical activity mainly through symptom control. The effect of obesity on symptom control and physical activity is partially mediated by SAD. Obesity and physical activity also affect symptom control independently from SAD.

*How does this study impact current management guidelines?* This knowledge advances our understanding of the relations among SAD, asthma control, and physical activity. Symptom control could be achieved by treating SAD by reducing airway inflammation, through weight loss, and by increasing physical activity.

The Effect of a Theory of Planned Behavior Education Program on Asthma Control and Medication Adherence: A Randomized Controlled Trial
Şanlıtürk and Ayaz-Alkaya

*What is already known about this topic?* The theory of planned behavior explains all behaviors over which people can exert self-control. The key component to this model is behavioral intent, which is influenced by attitude.

*What does this article add to our knowledge?* The theory of planned behavior—based education program is effective and useful regarding disease control, medication adherence, proper inhaler use, and exposure avoidance for individuals with asthma.

*How does this study impact current management guidelines?* The theory of planned behavior has the potential to help patients with asthma change their behavior and reduce asthma attacks by incorporating proper inhaler use, disease control, and medication adherence. It could be used in education programs.

Long-Term Follow-Up of Cluster-Based Diisocyanate Asthma Phenotypes
Mason et al

*What is already known about this topic?* Asthma is a heterogeneous disease consisting of different phenotypes. In a previous study, we found that occupational asthma (OA) due to diisocyanates is also heterogeneous at diagnosis and is broken into 3 clusters. There are no data on the outcome of cluster-based diisocyanate asthma phenotypes.

*What does this article add to our knowledge?* Age at diagnosis is the strongest predictor of diisocyanate OA remission. Cluster allocation at diagnosis seems to have an impact on the outcome of diisocyanate OA because patients in cluster 2 showed the most favorable prognosis.

*How does this study impact current management guidelines?* Age at diagnosis could be used as a prognostic tool in OA. Therefore, early recognition of the disease by specific inhalation challenge should be encouraged.
Occupational Asthma Caused by Quaternary Ammonium Compounds: A Multicenter Cohort Study
Migueres et al

What is already known about this topic? Occupational asthma caused by quaternary ammonium compounds (QACs) has been documented in workers exposed to cleaning and disinfectant products, although the underlying mechanisms remain largely unknown.

What does this article add to our knowledge? This retrospective study demonstrates that asthmatic reactions induced by QACs are associated with increases in nonspecific bronchial hyperresponsiveness and sputum eosinophils that are consistent with a respiratory sensitizing mechanism.

How does this study impact current management guidelines? This report further indicates that exposure to QACs should be considered a potential cause of sensitizer-induced occupational asthma among workers involved in cleaning and disinfection tasks.

Asthma Remission Disparities Among US Youth by Sexual Identity and Race/Ethnicity, 2009-2017
Curry et al

What is already known about this topic? There are reported disparities in asthma remission by sex and race/ethnicity. Asthma remission negatively associates with asthma severity, smoking, and increased weight. Minority stress theory and intersectionality are imperative frameworks to study population health.

What does this article add to our knowledge? Sexual minority and/or racial/ethnic minority youth tend to be at a higher risk for nonremitting asthma. Traditional risk factors and victimization are associated with increased odds of nonremitting asthma among these populations.

How does this study impact current management guidelines? Asthma management guidelines should include population-level disparities on the basis of marginalization. Clinicians should stay up-to-date on cultural responsiveness training and implement the National Standard for Culturally and Linguistically Appropriate Services in practice.

A Systematic Review of the Effect of Physical Activity on Asthma Outcomes
Kuder et al

What is already known about this topic? Low levels of physical activity are associated with poorer asthma outcomes. Engaging in regular physical activity might have a beneficial impact in adults with asthma.

What does this article add to our knowledge? Physical activity is safe among adults with asthma with varying severity levels. Physical activity favors improvements in lung function, asthma control, quality of life, and serologic inflammatory markers.

How does this study impact current management guidelines? Our findings suggest that, in addition to the general health benefits of physical activity, regular physical activity may be a potential nonpharmacologic treatment in adults with asthma.

Increased Risk of Atrial Fibrillation in Patients with Atopic Triad: A Nationwide Population-Based Study
Choi et al

What is already known about this topic? Chronic inflammatory disease is associated with an increase in atrial fibrillation.

What does this article add to our knowledge? This article showed that the atopic triad is associated with an increased risk for atrial fibrillation. To the author’s best knowledge, this is the first study to show that multiple atopic conditions cause a higher incidence of atrial fibrillation.

How does this study impact current management guidelines? The atopic triad conditions, including asthma, atopic dermatitis, and/or allergic rhinitis, are associated with an increased risk for atrial fibrillation. Increased vigilance for atrial fibrillation in atopic patients is warranted.
Intolerance to Angiotensin Converting Enzyme Inhibitors in Asthma and the General Population: A UK Population-Based Cohort Study
Morales et al

What is already known about this topic? Many people are intolerant to angiotensin converting enzyme inhibitors owing to cough and require switching to an angiotensin-II receptor blocker. Angiotensin converting enzyme inhibitors may affect airway hyperresponsiveness in asthma, possibly mediated by bradykinin or cough reflex sensitivity.

What does this article add to our knowledge? People with asthma are generally at increased risk for switching to angiotensin-II receptor blockers from angiotensin converting enzyme inhibitor therapy, and the risk is greatest in those with more severe asthma. The absolute risk for switching varies by age, sex, and body mass index.

How does this study impact current management guidelines? Angiotensin-II receptor blockers could be considered first-line in older people with asthma or young people with more severe asthma, including those with other high-risk characteristics.

Reintroduction of Antituberculous Drugs in Patients with Antituberculous Drug-Related Drug Reaction with Eosinophilia and Systemic Symptoms
Oh et al

What is already known about this topic? Antituberculous (anti-TB) drug-induced drug reactions with eosinophilia and systemic symptom (DRESS) usually appear as multidrug hypersensitivity reactions resulting in limited anti-TB drug choices at resuming anti-TB treatment and increased treatment interruption.

What does this article add to our knowledge? Resuming anti-TB medication based on desensitization protocols may be a safe and effective option for those with anti-TB drug-related DRESS compared with changing all the drugs and graded challenge method.

How does this study impact current management guidelines? Desensitization protocol to resume anti-TB medication in patients with DRESS might contribute to the control of TB by enabling effective and safe anti-TB treatment if it can be appropriately performed and closely monitored.

Development of the Food Allergy Anxiety Scale in an Adult Population: Psychometric Parameters and Convergent Validity
Coelho et al

What is already known about this topic? Anxiety is a frequent dysregulated psychological functioning experienced by individuals with food allergy.

What does this article add to our knowledge? Our research provides the first food allergy—specific measure to properly assess the impact of anxiety, the Food Allergy Anxiety Scale.

How does this study impact current management guidelines? The Food Allergy Anxiety Scale is a powerful tool, which might lead to a better comprehension on how this psychological distress works, and consequently, the development of better strategies to reduce its impact.

Heterogeneity in Parent Preferences for Peanut Desensitization Therapy
Hung et al

What is already known about this topic? Current approaches to managing peanut allergy include avoidance, emergency medications for accidental exposure, and most recently, oral immunotherapy.

What does this article add to our knowledge? This study quantifies parent preferences related to novel peanut desensitization therapies and differed by parent age, child age, income, parent perception of child’s ability to manage allergic reactions, past reactions, and effect on precautionary behaviors.

How does this study impact current management guidelines? Parents’ acceptability thresholds for treatment effectiveness and tolerability help quantify the perceived value of therapies and should be taken into account when considering treatment options.
Crohn’s-like Enteritis in X-Linked Agammaglobulinemia: A Case Series and Systematic Review
Khan et al

What is already known about this topic? Inflammatory bowel disease (IBD) in X-linked agammaglobulinemia (XLA) presents in a Crohn disease (CD)—like fashion but with an immunologically distinct pathogenesis. This often presents a diagnostic challenge because the clinical presentation overlaps with classic IBD or infectious enterocolitides. Therapy in such situations is tailored employing borrowed strategies from classic IBD, albeit with variable clinical outcomes.

What does this article add to our knowledge? This study describes the clinical characteristics, diagnostic pitfalls, complications, and treatment challenges in patients with XLA-associated IBD. It typically presents with a CD-like fistulizing and stricturing disease process, but with lower incidence of granuloma formation, perianal involvement, or other extraintestinal manifestations. Unlike CD, therapeutic response with tumor necrosis factor—alpha inhibitors may be less durable and there is growing body of evidence advocating for using drugs with alternative therapeutic targets.

How does this study impact current management guidelines? This study describes and systematically reviews the current and emerging evidence that can be utilized to optimally diagnose and tailor effective treatment strategies in XLA associated inflammatory bowel disease.