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A Synopsis of Allergy and Asthma Literature, Resulting from an Unbiased, Comprehensive Review of Twenty Major Medical Journals.

American College of Allergy, Asthma & Immunology

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Remember to Measure IgE in Patients With CVID

Are undetectable IgE levels prognostic in patients with common variable immunodeficiency (CVID)? This research group previously showed that patients with CVID are more likely than healthy adults to have undetectable IgE levels. They hypothesized that patients with CVID with undetectable IgE levels would be at higher risk for noninfectious complications.

The study sample consisted of patients with CVID seen at the University of Virginia Asthma, Allergy, & Immunology Clinic: 60 patients with detectable IgE and 89 with undetectable IgE levels. The overall study sample was 62% female with a median age of 57 years. Because of a difference in age and sex between patients with and without detectable IgE levels, the statistical analyses were adjusted for these demographic characteristics.

Patients with undetectable IgE had lower levels of IgG, IgA, and IgM than patients with detectable IgE levels. They had lower absolute numbers of $CD4^+$ T cells and $CD19^+$ total B lymphocytes and a lower percentage of class-switched memory B cells. These differences in lymphocyte subsets persisted in analyses adjusted for IgG and IgA levels. The authors suggest that this finding supports the theory that undetectable IgE levels reflect a more severe defect in B cell maturation and function in these patients. CVID patients with undetectable IgE levels were more likely to have autoimmune hematologic diseases (eg, autoimmune cytopenias) than were patients with detectable IgE (27% vs 10%, respectively) and were more likely to have any lymphoma (16% vs 5%).

As this was a retrospective study, "an appropriate next step would be a prospective design following patients diagnosed with CVID, with IgE levels drawn at time of diagnosis," the authors write.

COMMENT: As allergists, we order IgE as part of • • •

FEATURE ARTICLES

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The following journals have been selected as the primary focus of review in the preparation of materials within "AllergyWatch®".

- Annals of Allergy, Asthma and Immunology
- Journal of Allergy and Clinical Immunology
- Journal of Allergy and Clinical Immunology: In Practice
- American Journal of Respiratory and Critical Care Medicine
- Chest
- Clinical Experimental Allergy
- Allergy
- International Archives of Allergy and Immunology
- Annals of Internal Medicine
- Pediatrics
- Journal of Pediatrics
- Journal of Asthma
- Journal Allergy & Asthma Proceedings
- Thorax
- Archives of Pediatric and Adolescent Medicine
- New England Journal of Medicine
- JAMA
- Lancet
- Lancet Respiratory
- British Medical Journal
- American Journal of Medicine
- European Respiratory Journal
- Pediatric Allergy and Immunology
- The WAO Journal

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our evaluation of many patients. The authors found that undetectable IgE in patients with CVID predicted noninfectious complications. Because it is readily available and part of our evaluation in many patients, this is useful, as we can then closely monitor these patients for autoimmune cytopenias, lymphoma, and granulomatous complications that are often challenging to treat.

V.H.T.

D'Silva SJ, Patrie J, Noonan E, et al. Undetectable IgE association with noninfectious complications of common variable immune deficiency.
Ann Allergy Asthma Immunol. 2026;136(5):572-577.

Keywords: common variable immunodeficiency, immunoglobulin E

Should Malignancies Like B-Cell Lymphoma Prompt an IEI Workup?

Recent work has shown that the same molecular defect causing an inborn error of immunity (IEI) can promote tumor formation. Cancers are the second leading cause of death in patients with IEIs. In this retrospective study, Bogaert et al used data from the European Society for Immunodeficiencies (ESID) registry to analyze types, management, and outcomes of malignancies in patients with IEIs. Additional data were collected by patient survey.

Of more than 30,000 registered patients, data on malignancies were available for 19,959. Of these patients, 1783 (9%) had malignancies, of which lymphomas accounted for 36%. The most common lymphomas were B-cell non-Hodgkin lymphomas, Hodgkin disease, T-cell non-Hodgkin lymphomas, and Burkitt lymphoma. Prevalences of skin and breast cancers were around 8%. About one-third of the patients in the ESID registry with cancer had common variable immunodeficiency disorders (CVID).

The patient survey cohort included 393 patients, 50% of whom had predominantly antibody deficiencies. Lymphomas (48%) and solid tumors (44%) were the most reported malignancies in this cohort. About 31% of the survey respondents felt that their IEI or primary immune disorder adversely affected their cancer outcomes. When asked why, about 42% responded that their malignancies were related to infections associated with their underlying disease. Most patients received standard treatments according to the type of malignancy, and most were followed up at a hematology/oncology clinic alone or at a combination of hematology/oncology clinic and immunology clinic. About 56% of the respondents reported intensified surveillance after their first malignancy.

These epidemiologic data on the real-world distribution of malignancies in patients with IEIs highlight the need for IEI-specific cancer surveillance and management protocols.

COMMENT: This report from the ESID registry finds that malignancy was the first manifestation of an IEI in 27% of the cohort, with lymphoma as the predominant malignancy type overall. Malignancy was the presenting feature of IEIs in 39% of children. Oncologists and immunologists should consider an IEI workup for classic presentations such as ileocecal B-cell lymphoma in X-linked lymphoproliferative syndrome. Unfortunately, formal guidelines for screening of malignancy in many IEIs such as CVID are lacking, so immunologists should • • •

perform regular surveillance for this potential complication.
G.B.L.

Bogaert DJA, Wolfsberger CH, Attarbaschi A, et al. Epidemiology and management of malignancies in patients with inborn errors of immunity—an ESID registry study of 19,959 patients.
J Allergy Clin Immunol. 2026;157(3):739-753.

Keywords: neoplasms, primary immunodeficiency diseases

Inhaled Corticosteroid Use During Pregnancy and Infant Lung Function

There is a long-reported association between maternal asthma and future risk for asthma, bronchiolitis, and impaired lung health in offspring. Using multivariable regression analysis, Martins Costa Gomes et al examined associations between inhaled corticosteroid (ICS) use during pregnancy and infant lung function.

Lung function was measured in 4- to 6-week-old infants while they slept. In an analysis using a corrected measure of the ratio of time to peak tidal expiratory flow (tPTEF) to expiratory time (tE) (corrected to account for variations in lung volume), the authors found a significant difference in ratio between infants of mothers with asthma who used ICSs during pregnancy and infants of asthmatic mothers who did not use ICSs. The ratio was lower in infants born to mothers with asthma who did not use ICSs than in a control group born to mothers without asthma. However, the difference in ratio was not significant between the control group and infants born to asthmatic mothers who used ICSs. In a multivariable regression analysis, fewer infants born to mothers with asthma who used ICSs had impaired lung function (vs infants born to asthmatic mothers with no ICS use). When stratified by sex, the association between ICS use and less impaired lung function was significant in male infants.

ICS use during pregnancy may improve lung function to a level similar to that in infants born to mothers without asthma. Further study is needed that considers the timing, dose, and cumulative exposure of ICSs.

COMMENT: This report in *Thorax* follows up the group's previous Managing Asthma in Pregnancy trial reported in 2018 (doi:10.1016/j.jaci.2018.02.039), showing that there may be an associated beneficial effect of ICS asthma treatment of pregnant women on the lung volumes of their infants. At a minimum, this work suggests the need to perform validation studies of this infant effect of ICS treatment in pregnant asthmatic women, looking at larger sample sizes and considering randomized trials in other populations. If validated, primary prevention of infant asthma and bronchiolitis while also protecting the mother's respiratory health during pregnancy could be a win-win strategy.
C.A.S.

Martins Costa Gomes G, Collison AM, Karmaus WJJ, et al. Association between maternal asthma and impaired infant lung function is diminished by inhaled corticosteroid use in pregnancy. Thorax. 2026;81(5):439-446.

Keywords: adrenal cortex hormones, asthma, pregnancy complications

Intervening Early in Atopic Dermatitis: PACI Trial Update

The Prevention of Allergy via Cutaneous Intervention (PACI) trial in Japan (covered in the September-October 2024 issue of *AllergyWatch*) reported that early, proactive treatment of atopic dermatitis (AD) with topical corticosteroids reduced the incidence of hen's egg allergy at 28 weeks of age. However, body weight and height were lower in the enhanced treatment group than in the conventional treatment group at 28 weeks. This follow-up study (PACI-ON) reports findings for 91% of the PACI trial cohort followed until 3 years of age.

During the follow-up period, all children were treated for AD or other allergic conditions according to current Japanese clinical practice guidelines; no study interventions were assigned. The prevalence of food allergy at 3 years of age (the primary study outcome) was lower in the enhanced treatment group (30%) than in the conventional treatment group (41%). The prevalence of any food allergy was also lower (47% vs 59%, respectively). Differences in AD severity as measured by the Eczema Area and Severity Index (EASI) and Patient-Oriented Eczema Measure (POEM) between groups were not clinically significant. At 3 years, 36% of the enhanced group and 38% of the conventional group had "clear" skin according to EASI score. Height and weight, which were significantly lower in the enhanced treatment group at 1 year of age, were no longer significantly different at 3 years of age. In an exploratory analysis of the relation between filaggrin (*FLG*) gene mutations and allergic outcomes, the investigators found no evidence of effect modification by *FLG* status. Almost all children in both groups could consume heated hen's egg by 3 years of age.

COMMENT: This follow-up study provides valuable insight for those managing infants with AD. The early enhanced intervention was associated with a lower prevalence of hen's egg allergy at age 3 and was found to be safe based on longitudinal growth patterns. Both groups maintained very good AD control with low prevalence of severe disease. This suggests that early recognition and management with either a proactive or reactive topical corticosteroid approach can maintain remission and improve quality of life. Early AD treatment to prevent epicutaneous sensitization may modify the atopic march trajectory.
S.W.S.

Yamamoto-Hanada K, Saito-Abe M, Sato M, et al. Three-year follow-up of the PACI Randomized Controlled Trial (PACI-ON): effects of early intervention for atopic dermatitis on atopic march.
Allergy. 2026;81(4):1149-1164.

Keywords: atopic dermatitis, food hypersensitivity

No Consistent Evidence of Link Between AD and Academic Performance

Two parallel, population-based cohort studies in Denmark and England studied associations between atopic dermatitis (AD) and academic performance in children. The Danish sample was drawn from the Danish Medical Birth Registry of children born between 1986 and 2000. The UK sample was from the Avon Longitudinal Study of Parents and Children, a birth cohort of children born in 1991 to 1992. Academic performance was measured using scores on final compulsory national examinations. The main study populations included data for more than 800,000 children in Denmark (1.3% with AD) and more than 7500 children in England (43.1% with AD).

In Denmark, children with AD were more often boys; in England they were more often girls. The prevalence of nonpassing grades did not differ between children with and without AD in Denmark. In England, the prevalence of nonpassing grades was higher in children with AD, and this association was primarily explained by children with moderate-declining and moderate-frequent phenotypes of AD severity and activity. The difference in academic performance scores between children with and without AD in Denmark was "negligible." In England, children with AD had higher mean scores, primarily in children with the moderate-declining and moderate-frequent phenotypes. The study found no significant associations with age of disease onset, sex, comorbid asthma or allergic rhinitis, or socioeconomic position.

The authors report "no consistent evidence of an association between childhood AD and academic performance."

COMMENT: AD is thought to negatively affect academic performance in children, potentially through mechanisms including chronic itch and sleep disturbance, comorbid atopic and neuropsychiatric conditions, and social stigma. This study provides evidence that AD, including moderate to severe disease, does not inevitably translate into poor academic outcomes. This may provide some reassurance to parents. Nevertheless, the presence and severity of AD and its potential effects on academic performance should still be assessed on an individual basis. Counseling and treatment approaches should avoid deterministic assumptions and instead be tailored to each child's specific clinical and psychosocial circumstances.

S.Y.J.

Iskandar RJ, Mailhac A, Mulick A, et al. Atopic dermatitis and academic performance. JAMA Dermatol. 2026;162(6):571-582.

Keywords: academic performance, atopic dermatitis (child)

Sympathetic Nerve Dysfunction May Drive Skin Inflammation in AD

Using data extracted from electronic medical records of patients with atopic dermatitis (AD) and experiments in a mouse model of AD, these authors explored the role of the sympathetic nervous system in the inflammatory skin response in AD. The experimental methods included the impression mold technique (which measures sweat gland activity), ultrasound measurement of the superior cervical ganglion, simultaneous recording of electrocardiograms and skin sympathetic nervous activity, immunohistochemistry, and RNA sequencing. *Phox2b-Cre* mice were used for study. Phox2b expression is a marker of sympathetic nervous system activity.

In a small sample of patients with AD and healthy control participants, patients with AD produced less sweat during exercise as measured by the impression mold technique. About 22% of patients surveyed reported reduced sweating, and about 29% reported that their sweating response was restored after dupilumab treatment. Simultaneous noninvasive electrical recording showed that patients with AD had reduced neuroelectrical responses while performing a Valsalva maneuver, which activates the sympathetic nervous system during the forced exhalation. Sympathetic nerve function was restored after dupilumab treatment. Superior cervical ganglia were larger in patients with AD than in healthy control participants.

In the mouse model, histologic studies showed that ganglia were enlarged in AD mice, and levels of the neurotransmitter norepinephrine were reduced in skin lesions. RNA sequencing studies identified 477 differentially expressed genes in superior cervical ganglia, primarily in pathways related to fibrinolysis, metabolic dysregulation, immune activation, and tissue remodeling. In *Phox2b-Cre* mice, activation of *Phox2b+* sympathetic neurons reduced skin inflammation and pruritus in AD, whereas inhibition of sympathetic neurons exacerbated these symptoms.

The study findings suggest a two-way interaction between the sympathetic nervous system and skin inflammation in AD.

COMMENT: In addition to mediating the stress response, the sympathetic nervous system has previously been shown to modulate inflammatory responses. This study finds that patients with AD have evidence of sympathetic dysfunction and decreased skin norepinephrine, which may exacerbate skin inflammation. Restoration of sympathetic activity and norepinephrine supplementation appears to improve skin inflammation in mouse models, suggesting a novel treatment paradigm for AD.

G.B.L.

Yu S, Xu Y, Li Y, et al. Sympathetic nerve dysfunction exacerbates skin inflammation in atopic dermatitis.
J Allergy Clin Immunol. 2026;157(3):677-692.

Keywords: atopic dermatitis, skin, sympathetic nervous system

Vaccine Targeting IgE Protects Against Anaphylaxis in Mice

Anti-IgE biologics such as omalizumab prevent IgE from binding to the high-affinity IgE receptor FcεRI by locking IgE in a "closed" conformation that blocks its binding site. This research group sought to develop an IgE vaccine with similar properties. The conjugate vaccine, called IgE kinoid, incorporates a glycine-to-cysteine mutation (G335C) in the IgE heavy chain that can lock IgE in the closed formation. In this article, Conde et al report findings on vaccination of mice expressing human IgE. In this model, the vaccine prevented both cutaneous and systemic IgE-mediated anaphylaxis.

Mice immunized with IgE kinoid vaccine developed omalizumab-like anti-IgE antibodies. Antibodies in vaccinated mice recognized wild-type IgE but not IgE with a mutated N394 glycosylation site, which is the site required for binding to FcεRI. Further studies used a mouse model in which mice were humanized for both IgE and its receptor FcεRI. Vaccination of these mice protected against systemic anaphylaxis. Concentrations of MCPT6, a tryptase released by mast cells on degranulation, were reduced about 140-fold in vaccinated mice. In an additional model of mice more susceptible to allergic reactions, the researchers showed that vaccination produced high anti-IgE antibody titers with no adverse effects. In a model simulating peanut allergy, the vaccine blocked the increase in IgE concentrations and mast cell degranulation that occurred in unvaccinated mice after sensitization with peanut. Anti-IgE titers remained high in immunized mice for 1 year. In a mouse model of nematode infection, the study showed that IgE vaccination did not interfere with protective type 2 immunity.

These findings in mice suggest that vaccination against IgE could protect against anaphylaxis at a fraction of the cost of humanized monoclonal antibodies.

COMMENT: This IgE kinoid vaccine against an engineered IgE fragment in the closed conformation appears to generate anti-IgE antibodies that inhibit anaphylaxis similar to omalizumab and that last at least 1 year. However, the authors noted that these autoantibodies were able to cross-link IgE bound to FcεRI on mast cells in vitro but did not observe anaphylaxis in their "humanized" mouse model. Given that human patients with severe IgE-mediated allergic disease may have lower thresholds for activation, rigorous follow-up studies are essential before considering human trials. This study was partially funded by Néovacs.

G.B.L.

Conde E, Lamanna E, Mougel A, et al. A vaccine targeting human IgE induces long-term protection against anaphylaxis in humanized mice. Sci Transl Med. 2025;17(827):eads0982.

Keywords: anaphylaxis, immunoglobulin E, vaccines

Risk Factors for Food Allergy in Infants and Children

Despite the growing prevalence of food allergy, data on risk factors for developing food allergy are scarce. Islam et al searched the MEDLINE and Embase databases for studies evaluating risk factors for developing food allergy in children up to 6 years of age. Studies in post-transplant populations or on alpha-gal food allergy were excluded. The studies identified were from 40 countries and were published between 1973 and 2024. Risk factors for IgE-mediated food allergy with high- and moderate-certainty evidence included:

- atopic dermatitis in the first year of life (odds ratio [OR]:3.88)
- allergic rhinitis/conjunctivitis (OR: 3.39)
- wheezing (OR: 2.11)
- delayed introduction of peanut after 12 months (OR: 2.55)
- systemic antibiotics in the first month of life (OR: 4.11)
- maternal history of food allergy (OR: 1.98)
- history of migration of parents (OR: 3.28)
- self-identification as Black (vs White) (OR: 3.93)
- cesarean delivery (OR: 1.16)

Factors with low-certainty evidence included pollution exposure, preeclampsia, maternal use of acid suppressants during pregnancy, and pets in the home. The study authors note that most of the included studies were conducted in higher-income countries, which may limit the generalizability of the findings.

COMMENT: The strength of this systematic review and meta-analysis lies in synthesizing multiple risk factors for food allergy in children across 190 studies involving 2.8 million patients. The main takeaway is that the greatest and most certain risks for developing food allergy include clinical factors such as prior atopic conditions, severe atopic dermatitis, delayed allergen introduction (ie, peanut after 12 months), infant and intrapartum antibiotic exposure, male sex, first-born child, parental/sibling history of food allergy, parental migration prior to birth, self-identification as Black, and cesarean delivery.

S.Y.J.

Islam N, Chu AWL, Sheriff F, et al. Risk factors for the development of food allergy in infants and children: a systematic review and meta-analysis. JAMA Pediatr. 2026;180(5):486-499.

Keywords: food hypersensitivity (child), risk factors

Early Introduction of Allergenic Foods: What Helps, What Hurts?

Current guidelines recommend introducing allergenic foods in infants' diets at 4 to 6 months of age and offering these foods regularly to maintain tolerance. This mixed-methods systematic review identified 5 challenges reported by parents when following these guidelines: • • •

1. Fear of adverse reactions
2. Practical and lifestyle constraints
3. Infant-related feeding difficulties
4. Health care provider access and guidance
5. Parental skepticism

The authors searched 5 scientific and medical databases for relevant studies published from 2008 through July 2024 and searched the gray literature using Google Scholar. They then performed a reflexive thematic analysis of evidence from 9 studies including a total of 4898 parents. Four studies were from the United States, 4 were from Europe, and 1 was from Australia.

The most consistently identified barrier was fear of an allergic reaction in the infant or a family member. Some lifestyle constraints identified by parents were the time and effort needed to sustain early-introduction regimens and difficulty incorporating allergenic foods into family meals. Infant feeding-related challenges included food refusal and picky eating. In one study, 1% of parents reported a lack of access to allergy specialists as a barrier to adhering to early-introduction guidelines. However, the review also found that guidance from primary care providers was a barrier in that some primary care providers advised delaying the introduction of peanuts until after 12 months of age. Educational support and guidance from health care providers was the only facilitator of early introduction.

"The findings underscore the need for clear, consistent, and reassuring messaging from health care professionals around the very low risk of severe reactions occurring during initial allergen introduction," the authors write.

COMMENT: By combining quantitative statistical data with qualitative thematic findings in a single synthesis, this review provides a deeper picture of the complexities related to early introduction of allergenic foods. This work provides clarity on how health care professionals and organizations can better support parents to initiate and sustain this evidence-based practice at home. At least 2 of the themes highlight the integral role of access to allergy specialists.

S.W.S.

Su AYX, Lyu CXY, Chan ES, et al. Parent-reported barriers and facilitators to early and sustained feeding of allergenic foods: a mixed-methods systematic review.
J Allergy Clin Immunol Pract. 2026;14(6):1399-1412.

Keywords: allergens, food allergy, infant food

Time for Myth-Busting of Allergy Misinformation on Social Media

Khadija et al reviewed social media posts containing allergy misinformation on TikTok, Instagram, Facebook, and X. They analyzed the content of the posts and measured engagement, providing allergists with valuable information on common themes of misinformation.

The study analyzed 347 English-language posts from the first 3 months of 2025 with false or misleading claims and with 500 or more interactions (likes, shares, comments, or views)—a combined reach of 12.3 million views. The coding team included a board-certified allergist/immunologist, a social scientist, and a public health researcher. Five content themes emerged: natural or alternative cures, IgG testing, medication fearmongering, food allergy misinformation, and pharmaceutical conspiracy.

The most common type of misinformation were claims promoting unproven natural cures (31% of posts). Posts about natural cures got more engagement and were most popular on visual platforms like TikTok and Instagram. About one-quarter of the posts had content endorsing IgG testing for food allergy. About 18% of posts had content related to "medication fearmongering," with exaggerated or false claims about conventional treatments. Different themes were favored on different platforms. Content related to conspiracy theories was concentrated on X (19%) and Facebook (17%), and content related to natural cures was concentrated on TikTok (39%) and Instagram (35%). Posts promoting natural cures had the most engagement. Language like "shocking," "hidden truth," and "doctors don't want you to know" increased engagement. An analysis of the top 10 comments on each post showed that most comments (62%) supported rather than challenged the content. Only 23% of comments that challenged content cited specific scientific evidence or reputable sources.

The study authors caution allergists to anticipate claims related to IgG testing and natural cures.

COMMENT: The fact that allergy-related misinformation is pervasive across social media platforms with 62% of the comments generating the most engagement supporting false information and only 23% providing scientific evidence is very disturbing. The predominance of natural cure promotion, IgG testing endorsement, and medication fearmongering presents significant challenges for evidence-based allergy care. We need to be ready to direct our patients to websites that provide accurate data, such as the ACAAI website (https://acaai.org/).

S.M.F.

Khadija U, Vohra-Miller S, Jeimy S. Allergy misinformation across social media platforms: content analysis and public response.
J Allergy Clin Immunol Pract. 2026;14(4):952-958.

Keywords: communication, social media

Mold Exposure and Rhinitis in Preschool Children

To test associations between mold exposure and rhinitis in preschool children from lower income families, these authors studied children attending Head Start centers in neighborhoods in New York City with the highest • • •

asthma prevalences. Parents were asked whether they had seen "mold or mildew on surfaces" in the past 12 months and whether their child had symptoms of rhinitis or asthma.

The analysis included 967 children with a mean age of 48 months. About 46% of the children had symptoms of rhinitis but no cold. Although children with asthma were more likely to have rhinitis, about one-fifth of the cohort had rhinitis symptoms but no asthma symptoms. About 18% of the families reported visible mold, most often in the bathroom. More children from homes with mold had rhinitis symptoms (61% vs 43% in homes without mold). In an adjusted analysis, rhinitis was associated with reported mold (prevalence ratio, 1.39; 95% CI, 1.11-1.73), and this association was strongest in the summer.

COMMENT: This brief report found that visible mold in the residences of children attending Head Start peaked in the summer. Interestingly, rhinitis symptoms peaked in the winter months, but multivariant analysis showed prevalence rates increasing in the summer with more frequent mold sightings. The authors suggest that we should be asking about household mold, particularly in children with respiratory symptoms during summer months.

S.M.F.

Feng J, Acosta L, Thompson MA, et al. Mold exposure and rhinitis symptoms among children attending Head Start centers in New York City. Ann Allergy Asthma Immunol. 2026;136(4):417-418.

Keywords: mold, rhinitis

Dupilumab Improves Asthma Symptoms in Patients With Eosinophilic CRS

Patients with asthma often have difficult-to-treat eosinophilic chronic rhinosinusitis (CRS). This prospective study analyzed how treatment of eosinophilic CRS with dupilumab affects asthma control. The authors enrolled 52 patients with comorbid asthma and refractory eosinophilic CRS from a single center in Japan. Patients (mean age of 53 years; 44% male) were treated with 300 mg dupilumab every 2 weeks for more than 2 years.

About 33% of the patients had poorly controlled asthma at baseline as defined by an Asthma Control Test (ACT) questionnaire score ≤19. Of the patients with poorly controlled asthma at baseline, 82% experienced clinically important improvements in ACT score at week 4 and 100% had clinically important improvements at 24 weeks, 1 year, and 2 years. By the 2-year time point, there were no patients with poorly controlled asthma. Dupilumab treatment improved the ratio of FEV_1 to forced vital capacity (FVC) and decreased levels of fractional exhaled nitric oxide (FeNO). Dupilumab improved sinonasal symptoms like nasal obstruction, nasal discharge, postnasal drip, and loss of smell. At 1 year, loss of smell was the most frequently reported uncontrolled symptom (21% of patients). Postnasal drip was correlated with change in ACT score. At 1 year, about 56% of patients achieved all 4 components of clinical remission (ACT score ≥23, no oral corticosteroids, no asthma exacerbations within the past 12 months, and FEV_1 ≥80% predicted), compared with 21% at baseline. At 2 years, the percentage increased to 65%. Patients more likely to achieve remission were younger, had milder airflow limitation, had a higher baseline burden of sinonasal symptoms, and had elevated Lund–Mackay scores for computed tomography imaging of the paranasal sinuses.

COMMENT: When we treat refractory eosinophilic CRS with dupilumab, are we also treating asthma? This prospective cohort suggests the answer may be yes, as nearly two-thirds of patients achieved 4-component clinical asthma remission at 2 years, initiated for upper airway disease alone. The correlation between postnasal drip improvement and ACT scores offers a practical takeaway: Postnasal drip may be more than a nuisance; it may be a proxy for shared lower airway burden. For asthma patients whose control remains elusive, an honest look upstairs could change the treatment calculus entirely.

K.A.

Suzaki I, Tanaka A, Teguchi S, et al. Clinical remission of comorbid asthma during dupilumab treatment in patients with high-burden eosinophilic chronic rhinosinusitis. Ann Allergy Asthma Immunol. 2026;136(4):389-399.

Keywords: asthma, dupilumab, rhinitis, sinusitis

Caffeine May Protect Against Obesity-Related Asthma

In these analyses of data from the National Health and Nutrition Examination Survey (NHANES), caffeine intake had a protective effect against obesity-related asthma. Further analyses in a European population suggested that the association was partially mediated by *Collinsella* species in the gut.

In the NHANES study population, asthma was defined according to whether participants reported having ever been told they had asthma. Obesity was defined by body mass index (in kg/m^2) of 30 or higher. Caffeine intake was measured by dietary recall. The study sample analyzed included 2307 participants with obesity-related asthma, 1444 participants with asthma but no obesity, and 27,935 participants without asthma. The Mendelian randomization analyses used data from Genome-Wide Association Studies to study causal effects between caffeine intake and obesity-related asthma.

The observational study reported a linear inverse association between caffeine intake and asthma risk (odds ratio [OR] = 0.8; 95% CI, 0.78-1.00) and a stronger association with obesity-related asthma risk (OR, 0.81; 95% CI, 0.68-0.96). In the two-sample Mendelian randomization analyses, • • •

genetically predicted coffee consumption (as assessed by single-nucleotide polymorphisms significantly associated with coffee consumption) was inversely associated with risk for both asthma and obesity. The author then used a two-step Mendelian randomization analysis to study the mediation effect of gut microbiota. Of 8 gut microbe genera causally associated with coffee consumption, only *Collinsella* species were negatively associated with risk for obesity-related asthma and accounted for 14.9% of the total effect of coffee. Of 42 core genes associated with the effect of caffeine on obesity-induced asthma, many were involved in corticosteroid response pathways, MAPK signaling, lipid metabolism, and atherosclerosis.

The study author cautions that more is not better when it comes to caffeine intake. In this population, high intakes were associated with risks for asthma and obesity-related asthma in men.

COMMENT: While we know that obesity can worsen asthma in patients, recommendations beyond weight loss or exercise are needed to help improve this. This manuscript poses an interesting hypothesis that caffeine may influence asthma risk via gut microbiota. With growing interest and understanding about the connection between the microbiome and general health, this study provides insight into genetic mechanisms that work via corticosteroid response pathways.

V.H.T.

Wang Y. Caffeine intake is associated with reduced risk of obesity-related asthma through a gut microbiota-mediated genetic mechanism.
J Asthma. 2026;63(5):600-613.

Keywords: asthma, caffeine, obesity

Molecular Pathophysiology of Mucus Plugs in Asthmatic Bronchioles

The molecular-level causes of bronchiolar dysfunction in asthma are not well understood. To address the limitations of computed tomography (CT) imaging, these authors used tissue samples to characterize mucus plugging in bronchioles. The samples were collected from patients with severe asthma undergoing video-assisted thoracoscopic surgery, from deceased organ donors who died of asthma, and from nonasthmatic patients undergoing lung resection.

When the authors compared the amount of mucus plugging in bronchioles, they found significantly higher lumen occlusion percentages in samples from the fatal asthma and severe asthma cohorts. In mRNA expression studies, they found higher expression of *MUC5AC* mRNA in samples from the asthma cohorts than in controls. *MUC5B* expression was not significantly different. Furthermore, the degree of luminal obstruction correlated with *MUC5AC* expression. *MUC5AC* was expressed in proximal and distal bronchioles, but not terminal bronchioles, from patients in the severe asthma and fatal asthma cohorts.

The study next tested expression levels of transcription factors that direct bronchiolar cell fates. Bronchiolar basal cells showed increased expression of NKX2.1 and FOXA2, two transcription factors postulated to play a role in maintaining epithelial homeostasis in bronchioles. In cultured bronchiolar cells, IL13, a T2 stimulus, suppressed FOXA2 and distal airway secretory cell (DASC) gene signatures and upregulated MUC5AC expression, shifting cell fate toward MUC5AC-high goblet cells.

Spatial transcriptomics analyses showed that MUC5AC-high regions in bronchioles from the severe and fatal asthma cohorts had distinct gene expression profiles, with reduced FOXA2 expression and elevated T2 gene signatures. These bronchiolar "niches" with elevated MUC5AC expression had disrupted cell biology that the authors describe as a "T2-driven proximalization associated with mucus plugging."

COMMENT: Bronchial mucus plugging is a known driver of asthma morbidity and mortality; however, less is known about small airway mucus plugs, which are not captured well with current CT imaging. In this study, mucus plugs in patients with asthma had a heterogeneous distribution that localized around goblet cells with high *MUC5AC* expression, which was unsurprising. Interestingly, these islands of goblet cells seem to be driven by T2-mediated basal cell dysfunction and not by co-localization with T2 effector cells. Further advances in imaging will help us better understand the broader clinical impact of bronchiolar mucus plugs.

T.G.C.

Schworer SA, Murano H, Dang H, et al. Airway epithelial heterogeneity and mucus plugging in asthmatic bronchioles.
Am J Respir Crit Care Med. 2026;212(2):209-226.

Keywords: asthma, bronchioles, mucin 5AC

Effect of Dupilumab on Mucus Plugging in Moderate-to-Severe Asthma

This post hoc analysis of data from the VESTIGE trial (NCT04400318) examined the effect of dupilumab treatment on mucus plug scores and mucus volume in patients with uncontrolled moderate-to-severe T2 asthma. Patients with severe asthma have high mucus plug scores that correlate with fractional exhaled nitric oxide (FeNO) levels, indicating an upregulation of the IL-4/IL-13 pathway. Dupilumab blocks the IL-4/IL-13 receptor.

In the trial, the treatment group received 300 mg dupilumab every 2 weeks for 24 weeks. In the analyses, patients were stratified according to high or low mucus plug score at baseline as measured by high-resolution computed tomography. With dupilumab treatment, the percentage of patients with a high mucus plug score decreased from 67.2% at baseline to 50.8% at 4 weeks and to

32.8% at 24 weeks. In the placebo group, percentages remained around 73% to 77%. More patients in both the high and low mucus plug score subgroups treated with dupilumab than with placebo achieved the end point of FeNO <25 ppb by 24 weeks. Patients with a high mucus plug score at baseline experienced significant improvements in pre- and post-bronchodilator FEV_1, percent predicted FEV_1, and pre-bronchodilator forced vital capacity with dupilumab vs placebo.

More than half the patients in the VESTIGE trial had a high mucus plug score at baseline, and dupilumab reduced mucus plugging and mucus volume in these patients over 24 weeks. The findings provide more evidence for a role of T2 inflammation in mucus plugging in asthma.

COMMENT: Keeping with the mucus plug theme, in this study, investigators looked at the impact of dupilumab on baseline mucus plug scores in the double-blind, placebo-controlled phase 4 VESTIGE trial. Patients treated with dupilumab were more likely than patients treated with placebo to achieve a low mucus plug score; patients with high mucus plug scores at baseline demonstrated greater improvements in pulmonary function than did those with low mucus plug scores. This highlights a potential additional clinical marker that clinicians may consider when considering biologic choice to treat severe asthma. The study was funded by Sanofi and Regeneron.

T.G.C.

Porsbjerg C, Dunican EM, Lugogo NL, et al. Effect of dupilumab on mucus burden in patients with moderate-to-severe asthma: the VESTIGE trial. Am J Respir Crit Care Med. 2026;212(2):241-252.

Keywords: asthma, dupilumab, mucus

Delays in Diagnosis of Chronic Urticaria

Using data from the multicenter Chronic Urticaria Registry (CURE), these authors report that nearly 1 in 4 patients with chronic urticaria experience 1-year delays in diagnosis and 1 in 10 may wait 3 years or more to be diagnosed.

Among 4332 patients analyzed, about 61% had chronic spontaneous urticaria, 18% had 1 or 2 forms of chronic inducible urticaria, and 21% had a combination of both. About 24% of patients had experienced a diagnostic delay of 1 year or longer. About 12% had experienced delays longer than 3 years. Patients with 1 or 2 inducible subtypes of chronic urticaria experienced longer diagnostic delays than did patients with chronic spontaneous urticaria or those with a combination of both. Among patients with 1 or 2 inducible subtypes, 1 in 3 experienced delays of 1 year or longer and 1 in 5 experienced delays longer than 3 years. Patients with chronic inducible urticaria with longer diagnostic delays (≥6 months vs <6 months) were younger at the time of disease onset, had a longer median duration of disease (4 vs 1 years), had higher rates of thyroid disease, had higher frequencies of an elevated erythrocyte sedimentation rate, and had lower Urticaria Control Test (UCT) scores. Patients with chronic spontaneous urticaria with longer diagnostic delays had a longer duration of disease (3 vs 0 years); lower frequencies of thyroid disease, atopic dermatitis, asthma, and autoimmune diseases; lower frequencies of an elevated erythrocyte sedimentation rate, and lower UCT scores. The authors suggest that future studies should examine whether differences in UCT scores are clinically meaningful.

Patient education and physician training for non-urticaria experts could relieve the burden caused by delays in diagnosis.

COMMENT: Chronic urticaria has a significant impact on quality of life, including sleep and impairment of daily activities, and is associated with psychiatric disorders and higher risk of suicide. In this cohort, diagnostic delay was more pronounced in chronic inducible urticaria, in which 1 in 3 patients experienced delays longer than 1 year. The findings reinforce how underrecognized chronic inducible urticaria remains, even among physicians. Diagnostic delay can lead to prolonged years of avoidable quality-of-life impairment and should be recognized as an important contributor to the disease burden associated with chronic urticaria.

S.Y.J.

Muñoz M, Salameh P, Zajac M, et al. Diagnostic delay in patients with chronic urticaria: results from the Chronic Urticaria Registry (CURE). Clin Exp Allergy. 2026;56(4):411-420.

Keywords: chronic urticaria, registries

A Cardioprotective Effect of Omalizumab in Patients With CSU

In this research letter, Shen and Huang report that patients with chronic spontaneous urticaria (CSU) are at greater risk for some classes of cardiovascular disease and that omalizumab has a cardioprotective effect. The authors analyzed data for more than 17,000 patients in the TriNetX database. The study group had an average age of 39 years; 26% were male and 66% were White.

In this cohort, patients with CSU had a higher risk for major adverse cardiovascular events (hazard ratio [HR]: 1.171; 95% CI, 1.059-1.295); diseases of the arteries, arterioles, and capillaries (HR: 1.165; 95% CI, 1.075-1.264), and ischemic heart disease (HR: 1.162; 95% CI, 1.036-1.304). Patients with CSU who used systemic steroids had higher risk for diseases of the arteries, arterioles, and capillaries, and those who used cyclosporine had higher risk for heart conduction disorders. By contrast, patients with CSU treated with omalizumab had lower risks for cardiomyopathies (HR: 0.718, 95% CI: 0.532-0.97), heart failure (HR: 0.802, 95% CI: 0.661-0.974), major adverse cardiovascular events (HR: 0.83, 95% CI: 0.724-0.951, and diseases of the arteries, arterioles, and capillaries (HR: 0.922, 95% CI: 0.863-0.985).

The authors suggest that the cardioprotective

effects of omalizumab may be the result of suppressing mast cell–driven inflammation. Further study in larger, real-world cohorts is needed.

COMMENT: CSU has long been recognized as more than a skin condition, with well-documented autoimmune and atopic comorbidities. This large retrospective cohort adds cardiovascular disease to that list, demonstrating significantly increased risk of major adverse cardiovascular events and ischemic heart disease in patients with CSU compared with control patients. More striking is the signal for omalizumab: after adjustment for covariates, omalizumab use was associated with reduced risks of cardiomyopathy, heart failure, and arterial disease. The mechanism is plausible given mast cell involvement in both CSU pathogenesis and cardiovascular inflammation. The data are retrospective and require prospective validation, but allergists prescribing omalizumab for refractory CSU may be conferring benefits beyond itch control.

K.A.

Shen YH, Huang YC. Increased cardiovascular risk in chronic urticaria and cardioprotective potential of omalizumab: a retrospective cohort study. Ann Allergy Asthma Immunol. 2026;136(3):354-356.

Keywords: cardiovascular disease, chronic spontaneous urticaria, omalizumab

Novel Outpatient Immunotherapy Buildup Protocol for Hymenoptera Allergy

Venom immunotherapy (VIT) is the primary treatment for Hymenoptera venom allergy, but conventional outpatient protocols may require up to 4 months for patients to build up to a maintenance dose. In this retrospective, single-center study, Göcebe et al report their findings on a novel, 4-day, outpatient VIT buildup protocol.

In the 4-day protocol, VIT doses were increased from 0.1 μg to 50 μg over 8 injections, 2 per day, to build up to a standard 100-μg maintenance dose. Results from 363 treatments with the 4-day protocol were compared with 118 treatments with a 3-day inpatient rush protocol and 85 treatments with a 2-day inpatient ultrarush protocol. About 8% of the patients experienced systemic allergic reactions during buildup; most reactions were mild to moderate. One patient experienced grade III anaphylaxis. Fewer patients treated with the novel outpatient protocol (4.4%) than with the rush (9.3%) or ultrarush (12.9%) protocols required emergency intervention for an allergic reaction during the buildup phase. Results of a univariable regression analysis showed that use of the novel outpatient protocol was associated with a reduced risk for systemic allergic reactions requiring emergency intervention (odds ratio [OR], 0.38; 95% CI, 0.19-0.74). Risk was increased with the ultrarush protocol.

COMMENT: Patients with allergy to Hymenoptera are at particularly high risk for exposure. Interest in rapid protection as compared to conventional VIT is frequent. The authors describe lower rates of systemic reactions with the outpatient 4-day protocol than with rush or ultrarush protocols in the hospital setting. This new protocol provides an interesting and practical option and may be a consideration for our clinical practice.

V.H.T.

Göcebe D, Ries L, Schäkel K. Novel 4-day outpatient Hymenoptera venom immunotherapy buildup protocol with low reaction rates. Ann Allergy Asthma Immunol. 2026;136(5):550-557.

Keywords: anaphylaxis, bee venoms, Hymenoptera, wasp venoms

Predictors of Tolerance to Aspirin Therapy After Desensitization

Aspirin-exacerbated respiratory disease (AERD) is treated by aspirin desensitization followed by aspirin therapy after desensitization (ATAD) with high-dose daily aspirin. However, not all patients tolerate this therapy. To better predict which patients might tolerate ATAD, these authors studied patient demographics in a cohort from the Penn AERD Center.

In this retrospective study, the authors reviewed the electronic medical records of 360 adults with AERD. The final sample of 278 patients analyzed was 53% female and mostly White (77%); mean age was 50 years. Half the patients had started ATAD with an initial dose of 1300 mg. The other half started on an updated protocol with doses ranging from 975 to 650 mg. Forty-six patients (16.5%) discontinued ATAD because of aspirin-related complications. Ten patients (3.6%) experienced complications requiring emergency department visits or hospitalizations. The rate of intolerance to therapy tended to differ by race. For example, 57% of Hispanic/Latino patients did not tolerate therapy compared with 13% of White patients. Reasons for intolerance included gastrointestinal symptoms like gastritis (5%) and gastrointestinal bleeding (1.4%), anaphylaxis (1.8%), and exacerbation of lower airway symptoms (1.8%). In a joint model combining linear mixed and Cox proportional hazards models, perimenopausal and postmenopausal women had a lower risk for intolerance than men (hazard ratio [HR], 0.4). Hispanic/Latino (HR, 8.2) and African American (HR, 4.03) patients had a higher risk for intolerance than White patients. Each additional year of age also incurred an increase in risk. In an analysis focused specifically on patients with gastrointestinal symptoms, Hispanic/Latino and African American race/ethnicity categories and age were associated with increased risk.

"Treatment selection requires careful consideration of various factors and shared decision-making between physician and patient," the authors write.

COMMENT: This large retrospective cohort identified race and menopausal status as meaningful predictors of ATAD intolerance. Hispanic/Latino and African American • • •

patients were more likely to discontinue therapy, whereas perimenopausal and postmenopausal women fared better than men. Notably, aspirin dose was not independently associated with intolerance after adjustment, suggesting current tapering protocols are reasonably optimized. As we increasingly frame ATAD versus biologics as a shared clinical decision, these demographic predictors belong in that conversation and should prompt us to counsel patients accordingly rather than discovering intolerance after the fact.

K.A.

Herpin LP, Finuoli AM, Workman AD, et al. Factors influencing aspirin therapy after desensitization (ATAD) tolerance in aspirin-exacerbated respiratory disease (AERD) patients.
Ann Allergy Asthma Immunol. 2026;136(3):288-294.

Keywords: aspirin, asthma

Penicillin Allergy Delabeling Should Be Performed in Pregnant Patients

This work group report from the American Academy of Allergy, Asthma & Immunology (AAAAI) committees on Women's Health in Allergy/Immunology and Adverse Reactions to Drugs, Biologics, and Vaccines concludes that penicillin allergy delabeling can and should be performed in pregnant patients. The work group conducted a scoping review and surveyed practicing allergists and immunologists.

Table 1 summarizes findings from 9 studies in more than 1000 pregnant patients, reporting that 95% to 99% of patients had negative results on skin testing, and nearly all passed oral challenges. None of the studies reported serious adverse outcomes.

Survey responses were analyzed from a small group of 39 allergists. Respondents worked in private practice (51%), academic medical centers (28%), and integrated care organizations (21%). More than half of respondents answered that they did not see any barriers to a pregnant patient being delabeled in allergy clinics. However, 16% said they did not feel comfortable performing allergy testing during pregnancy or felt it was too risky.

The article highlights successful programs with optimized triage processes, such as "best-practice" alerts in the electronic medical record. At one institution, 75% of patients for whom a best-practice alert was triggered were referred for allergy testing. At another institution, obstetricians document the patient history of penicillin allergy, and an electronic consult request is sent to the allergy/immunology division. An allergist then determines the appropriateness for evaluation.

COMMENT: There has been a traditional reluctance to perform penicillin allergy delabeling and testing in pregnant women, even as pregnant women are uniquely at higher risk for outcomes in which penicillins and other beta-lactams would be first-line therapy to protect them. In this work-group report by the AAAAI, the authors summarize available safety data in addition to data showing the apparent benefits of testing and our own level of comfort as practicing allergists. They conclude that routine, proactive evaluation and delabeling of unnecessary penicillin allergies in pregnant women is a workflow that practicing allergists can do safely and should consider adding to their practices.

C.A.S.

Kraft MT, Nguyen VT, Arora N, et al. Penicillin allergy delabeling can and should be performed in pregnant patients: a work group report of the AAAAI Women's Health in Allergy and Immunology and Adverse Reaction to Drugs, Biologics, and Vaccines Committees.
J Allergy Clin Immunol Pract. 2026;14(4):805-815.

Keywords: drug hypersensitivity, penicillins, pregnancy

Recommended Vaccines for Immunocompetent Older Adults

This work group report of the American Academy of Allergy, Asthma & Immunology (AAAAI) Asthma, Allergic & Immunologic Diseases in Older Adults Committee summarizes guidelines on vaccination of older adults.

COVID-19: Four vaccines are available that target the spike glycoprotein of SARS-CoV-2. October 2024 recommendations from the Advisory Committee on Immunization Practices (ACIP) were that immunocompetent adults 65 years and older receive 2 doses of any 2024-2025 COVID-19 vaccine with a 6-month interval, regardless of previous vaccination status. November 2025 interim guidance from the Centers for Disease Control and Prevention (CDC) recommended shared decision-making. The change to shared decision-making is controversial.

Pneumococcal disease: Two types of vaccines are approved, an isolated polysaccharide vaccination (PPSV23) and conjugate vaccinations (PCV15, PCV20, PCV13, and PCV21). Conjugate vaccines are believed to produce a longer immune response. Most immunocompetent adults should receive a single dose of PCV20 or PCV21 at 50 years of age.

RSV disease: Both recombinant protein–based vaccines and an mRNA-based vaccine are available. For adults ages 75 years and older, one vaccine dose is recommended for all. For adults aged 50 to 74 years, one dose is recommended for patients with risk factors like diabetes, congestive heart failure, chronic obstructive pulmonary disease, and kidney or liver disorders.

Influenza: High-dose, recombinant, and adjuvanted vaccines are available. A single annual high-dose vaccine is recommended for all adults ages 65 and older.

Shingles: The previous live-attenuated vaccine is no longer recommended. The recombinant protein vaccine (Shingrix) is recommended for adults aged 50 and older in 2 doses administered 2 to 6 months apart.

COMMENT: Older adults become more susceptible to infectious illnesses in the natural course of aging. At • • •

the same time, positive changes in recent years have led to updates in available vaccines and the creation of vaccines that can prevent complications from diseases that previously ran through the population unimpeded. In this setting, the practicing allergist-immunologist is likely to benefit from a concise, one-stop update in what's available and recommended for older adults and the value of vaccinations to protect patients against COVID, pneumococcal pneumonia, RSV, influenza, shingles, and tetanus. This workgroup report does an excellent job of bringing us all up to speed.

C.A.S.

Slimovitch J, Lockey RF, Arroyo AC, et al. Recommended vaccines for immunocompetent older adults: a work group report of the AAAAI Asthma, Allergic & Immunologic Diseases in Older Adults Committee. J Allergy Clin Immunol Pract. 2026;14(4):791-801.

Keywords: COVID-19 vaccines, influenza vaccines

Intranasal Saline Spray Improves Obstructive Sleep Apnea Symptoms in Children

Medical treatments for obstructive sleep apnea in children could reduce the need for surgery. The MIST+ randomized clinical trial (RCT) from Australia (NCT05382494) reported that 6 weeks of treatment with intranasal saline spray resolved obstructive sleep-disordered breathing (OSDB) in up to one-third of children. Following up on a previous RCT showing that intranasal saline and intranasal steroid resolved OSDB symptoms similarly, this trial studied the efficacy of both treatments in children who did not respond to a 6-week run-in with intranasal saline.

Eligible children were 3 to 12 years old and had no history of tonsillectomy, adenoidectomy, or nasal surgery. During the 6-week run-in period, all children were treated with 1 spray of 0.9% normal saline per nostril. A total of 93 children whose symptoms persisted were randomly assigned to 6 weeks of treatment with intranasal mometasone furoate 50 μg/dose spray (n = 47) or continued treatment with normal saline (n = 46). The primary outcome was the proportion of children whose OSDB symptoms resolved.

Of the children randomly assigned to treatment and who completed a 12-week visit, OSDB symptoms resolved in 36% of children in the steroid group and 36% in the saline group. The 2 groups did not differ significantly in effects on sleep, behavior, emotions, or quality of life. Parents rated their satisfaction with treatment at the end of the run-in phase and at the end of the treatment phase. Parent satisfaction did not differ according to whether the children were treated with steroids or saline. Adverse events potentially related to the study medication included nasal itch or irritation (6.8% of steroid-treated children and 2.4% of saline-treated children) and epistaxis (2.2% of steroid-treated children and 2.4% of saline-treated children).

"We confirmed that saline alone is effective as a first-line treatment," the study authors write. They propose treating with saline for 3 months before considering a specialist referral.

COMMENT: The participants in this cleverly designed study had a 6-week wait for an appointment for a specialist. The most intriguing finding is that nearly 30% of the children improved using nasal saline in the 6 weeks waiting for their specialist visit. Of those who continued the nasal saline, 50% improved. We should consider using more nasal saline in children with nasal blockage.

S.M.F.

Nixon GM, Anderson D, Baker A, et al. Intranasal treatments for children with sleep-disordered breathing: the MIST+ randomized clinical trial. JAMA Pediatr. 2026;180(3):240-249.

Keywords: mometasone furoate, saline solution, sleep apnea syndromes

REVIEWS OF NOTE

COMMENT: This up-to-date review on chronic granulomatous disease provides helpful advice on functional and genetic testing as well as the management of infectious and inflammatory complications.

G.B.L.

Leiding JW, Pettiford LH, Chang CC, et al. How I treat: chronic granulomatous disease. J Hum Immun. 2026;2(3):e20250162.

COMMENT: This review provides a helpful algorithm on choosing the ideal biologic for severe asthma in children and adults and lists the pipeline of upcoming therapeutics.

G.B.L.

Gaberino CL, Moraczewski J, Jackson DJ, et al. Biologics in the treatment of severe asthma in children and adults-updates 2024-2025. J Allergy Clin Immunol. 2026;157(3):575-587.

COMMENT: This review discusses the recent advances in the classification and management of both hereditary angioedema and chronic spontaneous urticaria, including current and upcoming therapeutics.

G.B.L.

Gandhi RS, Bruun TUJ, Bernstein JA. Updates in hereditary angioedema and chronic spontaneous urticaria.
J Allergy Clin Immunol. 2026;157(4):804-817.