

# The Type 2 Inflammation Connection

## Spectrum of Conditions

Type 2 inflammation is an overactive immune response that often plays a crucial role in the pathogenesis of various allergic or atopic conditions, including allergic rhinitis, asthma, atopic dermatitis (AD), chronic rhinosinusitis with nasal polyps (CRSwNP), eosinophilic esophagitis (EoE) and food allergies.

In fact, some of your patients may suffer from symptoms associated with several of these conditions. That's because they commonly occur together due to something called the allergic or atopic march – a progression of allergic diseases that may begin in early childhood as eczema and progress to other allergic conditions over time, including food allergies, hay fever, asthma and EoE. And sometimes, patients with asthma develop CRSwNP. When these occur, patients tend to suffer from more severe disease.

The common denominator? Type 2 inflammation due to an overactive immune response. This graphic highlights the spectrum of conditions connected by type 2 inflammation and the symptoms for each to help alert you to patients who might be affected. These patients should be referred to a board-certified allergist/immunologist who can partner with you to diagnose them – including determining whether type 2 inflammation is the underlying mechanism – and help develop the most effective treatment options.

### Allergic rhinitis

- Nasal symptoms, including congestion, rhinorrhea or postnasal drip, repetitive sneezing
- Nasal, throat, eye itching
- Red, puffy watery eyes

### CRSwNP

- Nasal symptoms, including congestion, rhinorrhea or postnasal drip, repetitive sneezing
- Decreased or loss of sense of smell
- Snoring

### EoE

Symptoms vary by age:

Infants and children:

- Feeding difficulties
- Failure to thrive
- Irritability
- Regurgitation/emesis

Adolescents and adults:

- Dysphagia
- Esophageal food bolus impaction
- Chest pain

### Asthma

- Frequent coughing and/or wheezing, especially nocturnal or exercise-induced
- Dyspnea
- Chest tightness

### Food allergies

Common

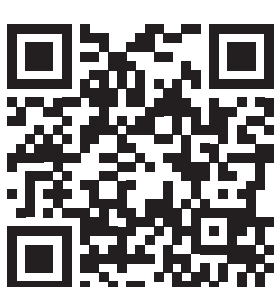
- Urticaria
- Angioedema
- Nausea, emesis, diarrhea
- Rhinorrhea
- Dyspnea
- Bronchospasm
- Dizziness

Severe (Anaphylaxis)

- Tachycardia
- Hypotension
- Shock
- Loss of consciousness

### Atopic dermatitis

- Erythema or erythematous maculopapular rash
- Severe pruritis
- Dry skin, which can crack and bleed



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