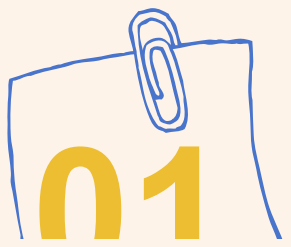


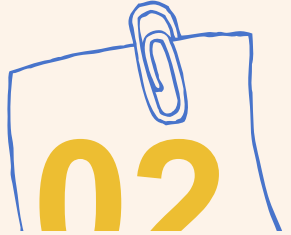
High IgE: From Symptoms to Solutions

2025/08/05

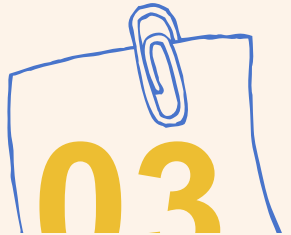




Overview



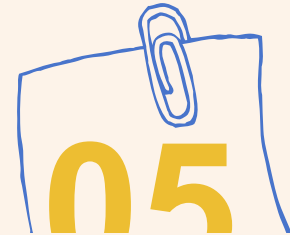
Symptoms



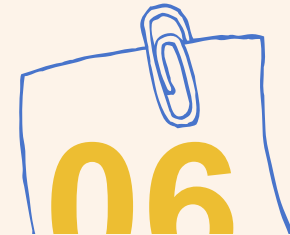
Causes



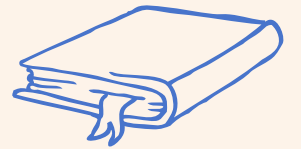
Diagnosis



Treatment



Take-Home Points





What Elevated IgE Tells Us


IgE Level > 150 kU/L

Signals an over-reactive immune system

IgE is the antibody that triggers allergic reactions. Persistent elevation can herald common atopic disorders, occult parasitic infestation, rare primary immunodeficiencies, or even IgE myeloma. The finding always deserves **contextual interpretation** rather than dismissal.

 Atopic Disorders

 Parasitic Infestation

 Immunodeficiencies

 IgE Myeloma



Clinical Clues of High IgE

Common Manifestations

- 🖐️ Chronic eczema, hives, and itching
- 👃 Sneezing, wheeze, and nasal congestion
- 🫁 Severe asthma symptoms

Hyper-IgE Syndromes Red Flags

- ⚙️ Recurrent staphylococcal skin abscesses
- 🦠 Pneumonia with lung cysts (pneumatocoles)
- 🦷 Mucocutaneous candidiasis, retained baby teeth
- 🦴 Scoliosis, minimal-trauma fractures
- 💡 Surprisingly low fever despite aggressive infection



Root Drivers of IgE Rise

A funnel of causation from common to rare.

Dominant Causes: Atopic Disorders

Allergic rhinitis, asthma, atopic dermatitis

Infectious Triggers

Parasites (Ascaris, Strongyloides, Schistosoma), ABPA

Underlying Conditions

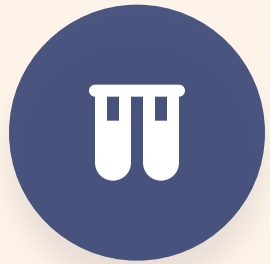
Cystic fibrosis, Drug reactions, Kawasaki disease

Rare & Genetic Causes

Wiskott-Aldrich, DOCK8/STAT3 deficiencies, IgE Myeloma



Work-Up for Elevated IgE: A Systematic Approach



1. Confirm & Correlate

Total IgE level & Eosinophil count



2. Allergy Testing

Skin/RAST for inhalant & food allergens



3. Parasitic Workup

Stool O&P, specific helminth serologies



4. Advanced Studies

Chest imaging, Genetic panels
(STAT3/DOCK8)

This systematic evaluation ensures **no treatable cause is missed**, guiding diagnosis from common allergies to rare genetic conditions.



Evidence-Based Therapy Choices



Treat the Cause

Antihistamines, steroids for allergy.
Antiparasitics for helminths. Antifungals
for ABPA. Prophylactic antibiotics for
Hyper-IgE syndrome.



Target IgE Directly

Anti-IgE biologic **Omalizumab** lowers
free IgE, reducing asthma exacerbations
and chronic urticaria effectively.



Curative Option

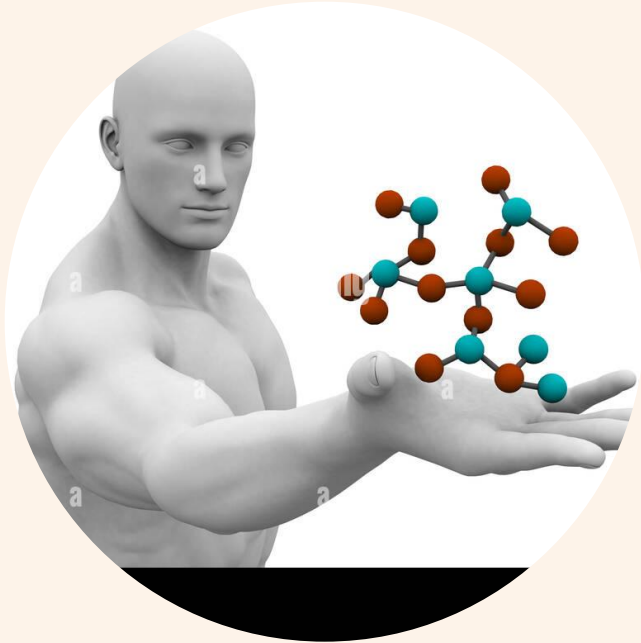
Hematopoietic stem cell transplant is the
curative approach for specific genetic
deficiencies like DOCK8 deficiency.



06

**Take-Home
Points**





Clinical Priorities on High IgE



Systematic Evaluation

Persistent elevation demands a thorough allergy, infectious, and immunologic workup to uncover the root cause.



Recognize Red Flags

While most cases are atopy or parasites, signs like recurrent abscesses or pneumatoceles mandate **genetic testing**.



Targeted Therapy is Key

From allergen avoidance to biologics, targeted intervention improves quality of life and prevents irreversible organ damage. **Early recognition is crucial.**

A stylized illustration of a child with dark hair, wearing a yellow long-sleeved shirt, dark blue shorts, and red leggings, jumping rope. The child is in a dynamic pose, with one leg bent and the other extended. A long, dark blue shadow of the child is cast on the ground to the left. A pink oval frame surrounds the central text. In the bottom right corner, the date '2025/08/05' is written in a simple black font. There are some small, colorful abstract shapes on the left side of the image.

THANK YOU

Thanks for Watching

2025/08/05