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The Overactive Guard Dog: Understanding Mast Cell Activation Syndrome (MCAS)

If you have hEDS or HSD, you might feel like you are allergic to the world. You aren't just imagining it. Many people with connective tissue disorders also battle an immune system issue called **Mast Cell Activation Syndrome (MCAS)**.

What are Mast Cells?

Think of mast cells as your body's "guard dogs." They live in almost every tissue and protect you from invaders like bacteria and viruses. When they spot a threat, the **Sympathetic Nervous System** (the gas pedal) tells them to attack by releasing chemicals like histamine.

When the Guard Dog Goes Rogue

In a healthy body, the **Parasympathetic Nervous System** (the brake pedal) keeps these cells calm. But because hEDS/HSD causes these nerves to glitch, the "brake" fails.

The result? Your mast cells become confused. They start barking and biting at things that aren't dangerous—like foods, smells, or temperature changes. This overreaction is MCAS.

The Symptoms

Because mast cells are everywhere, the symptoms can happen anywhere. It's not just sneezing; it often looks like:

- **Skin:** Hives, flushing, itching.
- **Gut:** Nausea, vomiting, diarrhea (often misdiagnosed as IBS).
- **Heart:** Racing heart, low blood pressure, fainting.
- **Lungs:** Wheezing or throat tightness.
- **Brain:** Brain fog and headaches.

How is it Diagnosed?

Doctors look for the "Rule of Three":



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1. **Clinical Signs:** Symptoms in two or more body systems (e.g., skin and stomach).
2. **Lab Tests:** High levels of specific chemicals (like **Tryptase** or histamine) in blood or urine. *Note: You might also be tested for a genetic trait called **HaT** (Hereditary Alpha-Tryptasemia), which is common in EDS patients.*
3. **Response to Treatment:** You feel better when taking mast cell medications.

The "Two-Door" Treatment Strategy

Treating MCAS isn't just about taking an allergy pill. Histamine has different ways of entering your cells, like different doors. To stop the reaction, you often need to lock **both** doors:

- **Block Door 1 (H1 Blockers):** Common allergy meds like Zyrtec or Xyzal.
- **Block Door 2 (H2 Blockers):** Meds often used for acid reflux, like Pepcid.

If you only block one, the body just uses the other door, and you don't get relief.