

Mast Cell Activation Syndrome (MCAS)

What is MCAS?

Mast Cell Activation Syndrome (MCAS) is a chronic condition in which mast cells, a type of immune cell, release excessive amounts of chemical mediators like histamine, prostaglandins, and leukotrienes. This overreaction can cause widespread symptoms affecting multiple body systems.

Common Symptoms of MCAS

MCAS symptoms vary widely from person to person but commonly include:

- **Skin:** Flushing, itching, hives, rashes, angioedema (swelling under the skin)
- **Gastrointestinal:** Nausea, vomiting, diarrhea, abdominal pain, bloating, acid reflux
- **Cardiovascular:** Tachycardia (fast heart rate), palpitations, low or fluctuating blood pressure, dizziness
- **Respiratory:** Shortness of breath, wheezing, throat tightness, nasal congestion
- **Neurological:** Brain fog, headaches, migraines, anxiety, fatigue
- **Musculoskeletal:** Joint pain, muscle aches, swelling
- **Urinary/Reproductive:** Frequent urination, interstitial cystitis, menstrual irregularities

Potential Triggers for MCAS Flares

Triggers vary for each individual but may include:

- **Foods:** High-histamine foods (fermented foods, aged cheese, alcohol, leftovers, processed meats, etc.)
- **Environmental:** Pollen, mold, dust, strong odors (perfumes, cleaning products)
- **Medications:** NSAIDs (ibuprofen, aspirin), opioids, certain antibiotics, contrast dyes
- **Temperature Changes:** Heat, cold, humidity shifts
- **Stress & Emotions:** Physical, emotional, or mental stress
- **Exercise:** Overexertion, high-intensity workouts
- **Hormonal Changes:** Menstrual cycles, pregnancy, menopause
- **Infections & Illness:** Viruses, bacterial infections, post-viral inflammation

What Can a Flare Look and Feel Like?

An MCAS flare is a sudden worsening of symptoms due to mast cell overactivation. Symptoms during a flare may include:

- Sudden hives, flushing, or swelling
- Nausea, vomiting, diarrhea, severe stomach pain
- Dizziness, lightheadedness, fainting
- Difficulty breathing or throat swelling
- Heart palpitations or feeling like the heart is racing
- Severe fatigue and brain fog

Flares can last anywhere from a few hours to several days and may require intervention with medications or avoidance of triggers.

Managing MCAS

While there is no cure, management strategies focus on reducing symptoms and avoiding triggers. Some approaches include:

- **Dietary Modifications:** Following a low-histamine diet to reduce symptoms
- **Medications:** Commonly used medications include:
 - Antihistamines (H1 blockers: cetirizine, loratadine; H2 blockers: famotidine, ranitidine)
 - Mast cell stabilizers (cromolyn sodium, ketotifen)
 - Leukotriene inhibitors (montelukast, zileuton)
 - DAO supplements (to help break down histamine from food)
- **Lifestyle Adjustments:**
 - Avoiding known triggers (fragrances, stress, extreme temperatures, etc.)
 - Practicing stress-reducing activities (yoga, meditation, deep breathing)
 - Maintaining stable blood sugar levels (frequent small meals, balanced diet)
- **Emergency Preparedness:**
 - Having an EpiPen (if prescribed for anaphylaxis risk)
 - Carrying emergency medications (antihistamines, inhalers)
 - Wearing a medical alert bracelet for severe cases

When to Seek Medical Help

Seek immediate medical attention if experiencing:

- Difficulty breathing or throat swelling
- Severe allergic reactions or anaphylaxis
- Sudden drop in blood pressure leading to fainting
- Uncontrollable vomiting or diarrhea