

## 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