

Mast Cell Activation Syndrome Part 2—Symptoms

By Mare Ferreri

As previously discussed, Mast cells are part of your immune system. They're found throughout your body, particularly in your bone marrow and around blood vessels.

When people are exposed to allergens, including medications, foods, and insect venom to which they are allergic, mast cells typically react by releasing chemical mediators. These mediators cause symptoms of an allergic reaction, including itching, mucus, and inflammation.

If you have MCAS, your mast cells release these same mediators too frequently and too often on their own — without exposure to an allergen. (MCAS can occur without a known cause.)

Researchers aren't sure what causes some people to experience MCAS. Some evidence: [Trusted Source](#) suggests there may be a genetic component to MCAS, but more research is needed to fully understand what puts a person at greater risk of developing this condition.

[Trusted Source](#) There are three variants of MCAS. They include:

Primary MCAS: Primary MCAS occurs when a certain mutation, known as the KIT D816V mutation, is found and the mast cells display CD25, often with a confirmed case of mastocytosis. Mastocytosis occurs when the body produces too many mast cells.

Secondary MCAS: Secondary MCAS occurs as an indirect result of another immunologic condition, IgE-mediated allergen (food or environmental allergy), or hypersensitivity to another trigger.

Idiopathic MCAS: Idiopathic means the cause of MCAS can't be determined. Unlike primary MCAS, it's not the result of a cloned cell. And unlike secondary MCAS, a doctor or healthcare professional can't determine an underlying trigger for the MCAS.

If you have secondary MCAS, you may find exposure to certain things trigger your symptoms. If you have primary or idiopathic MCAS, symptoms will occur without exposure to any particular trigger.

So, what are the symptoms? The release of too many mast cell mediators can impact almost every part of your body.

The primary affected areas can include your skin, nervous system, cardiac system, lungs, and gastrointestinal tract. Depending on the number of mediators released can bring on symptoms ranging from mild to life threatening.

Mast Cell Activation Symptoms

Symptoms may include:

- **skin:** itching, flushing, hives, sweating, swelling, rash
- **eyes:** irritation, itching, watering
- **nose:** itching, running
- **mouth and throat:** itching, swelling_of lips, tongue or throat
- **lungs:** trouble breathing, wheezing
- **heart and blood vessels:** low blood pressure, rapid heart rate
- **stomach and intestines:** cramping, nausea, diarrhea, abdominal pain
- **nervous system:** headache, confusion, fatigue, brain fog

In severe cases, anaphylactic shock may occur. This condition requires emergency treatment. Symptoms can include:

- a rapid drop in blood pressure
- lightheadedness
- weak pulse
- trouble breathing or quick and shallow breathing
- confusion
- loss of consciousness

If you or someone else experiences symptoms of anaphylactic shock, call 911 or your local emergency services. Many of these symptoms are also associated with other conditions which can make a MCAS diagnosis more difficult.

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