

Mast Cell Activation Syndrome (MCAS)

A Brief Guide

What Are Mast Cells?

Mast Cells are a type of blood cell found in all parts of the body. They are a key part of the immune system. Mast cells react to potential threats, like 'police officers' – spotting signs of trouble and calling for back-up by releasing chemicals called mediators. In a healthy person, mast cell mediators help to fight infection and promote healing. Histamine is the most well-known mediator, but there are over 200 different types.

What is MCAS?

MCAS is a condition which can develop in children or adults. In people affected by MCAS, their mast cells are over-active, and produce too many mediator chemicals unnecessarily. These mediators cause widespread inflammation and symptoms in all areas of the body.

The mediators are released in response to triggers that shouldn't normally be harmful, like foods, toiletries or cleaning products.

Symptoms

Symptoms of MCAS often come and go, and people can experience 'flares' when they are more unwell. Symptoms are often unpredictable, unpleasant, debilitating and wide-ranging. They may get worse after infections, surgeries, or significant stress. They can affect different parts of the body all at once or at different times, and can vary depending on which trigger has been encountered. The table below shows the symptoms of MCAS.

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Nasal-ocular

- Nose congestion
- Eye watering and itching

Respiratory

- Sore throat
- Hoarseness
- Wheezing
- Shortness of breath
- Throat swelling

Cardiovascular

- Chest pain
- Low blood pressure
- Fast heart rate
- Fainting or light-headedness

Genital and urinary

- Genital pain or swelling
- Pain when urinating
- Vaginal pain, discharge or itching
- Bladder urgency or loss of control

Dermographic

- Flushing/redness
- Hives or wheals
- Itching with or without a rash
- Swelling

Neurologic

- Headache
- Brain fog (memory and concentration difficulties)
- Numbness, pain or tingling skin
- Anxiety
- Behavioural issues, rages

Musculoskeletal

- Joint & muscle pain
- Osteoporosis (brittle bones)
- Loss of bone mass

Gastrointestinal

- Bloating
- Stomach cramps or pain
- Reflux
- Feeling or being sick
- Diarrhoea
- Constipation
- Dumping syndrome
- Food allergies or intolerance

General

- Extreme tiredness
- Anaphylaxis, which can be life threatening



What are Mast Cell Triggers?

Normal mast cell triggers include bacteria, parasites, viruses, stings and wounds.

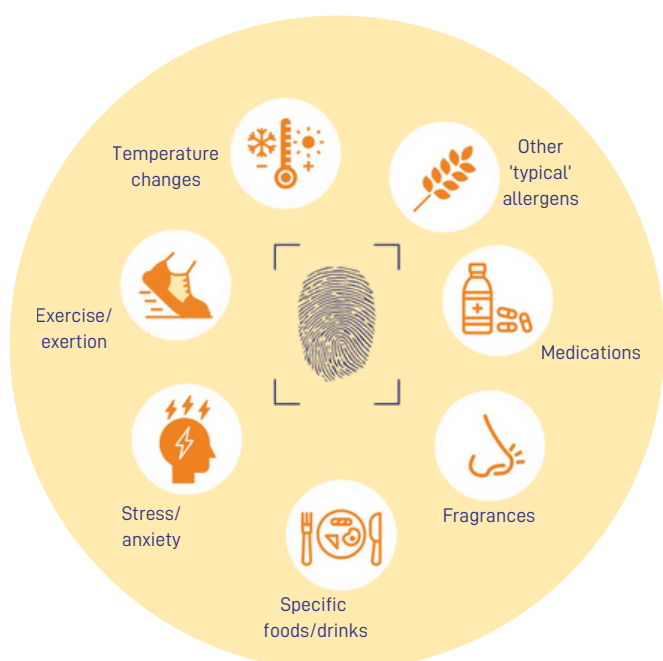
People with MCAS may react to lots of additional triggers, such as

- Foods, particularly foods high in histamine
- Medications and supplements
- Chemicals and fragrances in toiletries and cleaning products
- Temperature changes, exercise, and stress
- Hormonal fluctuations
- Infections, and allergens like pollen, dust, and mould

Triggers vary from person to person, and are very individual.



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Management and Treatment

There is currently no cure for MCAS, but there are a range of treatments and strategies that can help manage symptoms. The condition can change over time and can stabilise or improve with the right combination of medication, diet, and lifestyle changes but can also progress.

Prescription drugs such as antihistamines and mast cell stabilisers can help with symptom management. Some people experience anaphylaxis and need epi-pens. There are also natural supplements and dietary changes which people often explore with a Nutritional Therapist or Dietician experienced in MCAS. It is important to identify and eliminate any underlying infections which may be driving mast cell activity.

People with MCAS often have other conditions such as Dysautonomia including PoTS, EDS and hypermobility, Marfan Syndrome, or Mastocytosis, and these may need treatment and management too.

Self-Management

Self care is essential for those living with MCAS. A key part of managing symptoms is reducing exposure to dietary and environmental triggers, and reducing stress. Each person will need different management strategies, depending what works best for them. It is a case of trial and error to explore what helps each person most.

Impact of MCAS

MCAS can impact many areas of life. Avoiding triggers, and managing fatigue can make it tricky to join in socially, or take part in hobbies and events. This can make people feel isolated and frustrated, and can affect mental health. It is important to find ways to enjoy social activities and hobbies safely by being flexible, adapting hobbies, and finding creative ways to avoid triggers while having fun.

MCAS mediators can affect mood, and emotional changes can be part of a reaction, causing low mood or anxiety. This may come and go as part of an MCAS

reaction, and it is important to seek support from those around you at these times.

The Histamine Bucket.
Mediators like histamine build up over time, like in a bucket. Many things fill the bucket until the person gets symptoms.



Scan this QR code to find out more about The Bucket Theory



Additional Information

For further guidance and resources visit

www.mastcellaction.org