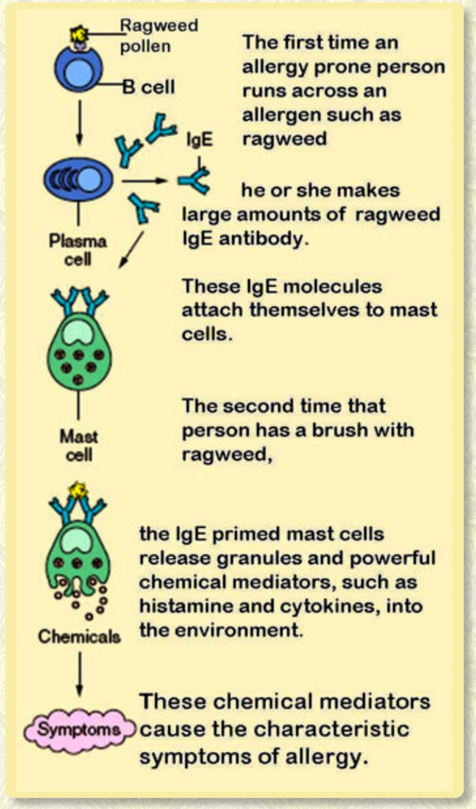
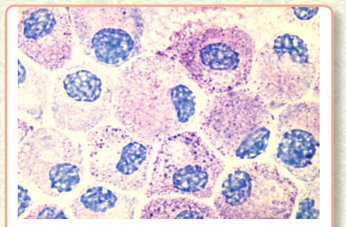


How are mast cells affected by EMF?

May degranulate
May increase in number
May migrate to surface during exposure

[Article about Belpomme Study]



Mast cells

Histamine degradation

Oxidation (extracellular)
Methylation (intracellular)

Mast and dendritic cell markers:

Histamine
Chymase
Tryptase

Intracellular histamine is higher when methylation is poor. Methylation is taxed by EMF stresses in the body. Any EMF will tend to raise histamine levels.

Pfeiffer site: Scroll down to histamine

See map: Methylation, Glutathione, EMF

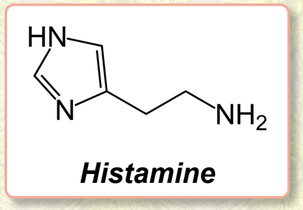
["Health Effects of EMF"]

Other Links

- EMF, mast cells
- Skin exposure to EMF
- Mast Cells and Autism
- Histamine release doubles
- Mast cells, Histamine, EHS
- See map: Histamine Allergies
- Story of woman with rash from tower
- BioInitiative Report: (Immune Chapter)
- Mast cells in normal humans, TVs, PCs
- Allergic Reactions Enhanced by Cell Phone Use

EMF and the The Mast Cell Response: learning from Dr. Olle Johansson and others...

What do mast cells do in our bodies?



Histamine

Studies

- Human skin increase
- Increase in rat skin, thyroid
- Calcium signals in mast cells
- Mast cell catecholamine changes
- Histaminergic nerves in the skin
- Signal transduction, DNA changes
- MW increases skin IgE production
- Sensitivity of lymph node labrocytes
- Disappearance of Langerhans cells
- Increased MCs one week after exposure
- Increase of MCs in rat brain parenchyma
- Increase degranulated MCs in rat thyroid
- Model of EMF, ELF effect on mast cells
- TV in humans causes increase, migration of MCs
- Enhancement of allergic skin wheal response, MW
- EMF plus endocrine-disrupting atrazine, mast cells
- Screen dermatitis and related MC effects in humans

Cellphone Allergies

- Bacteria on cellphones
- Cellphone contact dermatitis
- Allergic to your cellphone?
- Cellphones and skin rashes
- Rash, allergic to cellphone nickel

Related Maps

- Eczema, Dermatitis
- Histamine Allergies
- Belpomme EHS Panel

Mast cells are similar to basophils. Both cell types are created in the bone marrow, although it is believed they come from different precursor cells. The basophils enter the blood stream, whereas the mast cells migrate to the rest of the body -- particularly to connective tissue at areas where the body meets the environment such as skin, lungs, digestive tract, etc.

They contain granules of histamine and other substances which are involved in a number of physiologic responses when released into the tissues.

These include:
- ***histamine mediated allergies***
- ***inflammation***
- ***healing***
- ***defense against pathogens***

Studies, discussed in the BioInitiative Report Chapter on the Immune System, have found that non-ionizing electromagnetic fields have an impact on mast cell number, movement, degranulation, and symptoms produced.

["Mystery in the Skin"]

["Remarkable Changes in Skin"]

["Disturbance of Immune System"]

[Autism: Dr. Herbert and C. Sage mention mast cell research]

[EHS Workshop, WHO, 2006 Includes Dr. Johansson on Mast Cells]

Home: Oscillatorium
Newest version: this map
Date of this update: 08-31-18