

A New Insight Into SIRS, SEPSIS, COVID-19 and CBRN - Prevention and Therapy

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REVOLUTIONARY DISCOVERY OF MECHANISM OF SIRS, SEPSIS, COVID-19 and CBRN - FACTS AT A GLANCE: - Pathology process of illness -

BACKGROUND of mechanical ventilation and surgery

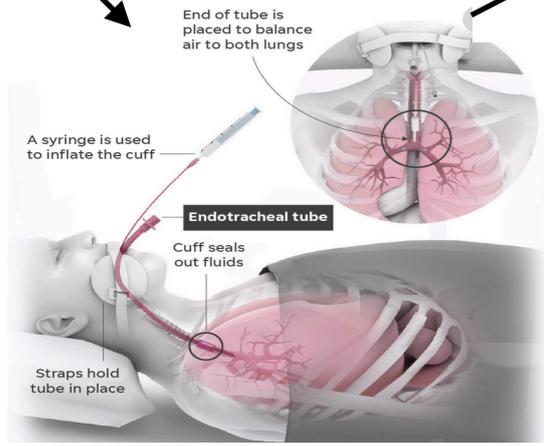
Important physical properties of the breathing gas

Humidity **Temperature**

With the respirator without a warming and humidifying device, the temp of the air supplied directly to the lungs may be below 20°C and dry, **it should be 37°C and 100% humidity!!** In addition, a very cold table during surgery, cold iv, drugs, sedatives - all this activates mast cells to release histamine and cytokines.

Normally air heating and moisturizing takes place in the nasal cavity, but not in the case of ventilator ventilation, where the upper respiratory tract is bypassed by tube directly to lungs.

Pressure
The volume of calculated gas introduced into the lungs, however, in the form of cold and dry gas, entering the warm body (with fever) will additionally expand in the lungs according to Charles' law - causing internal damage to the lung follicles! Increased pressure - activates mast cells to release cytokines and histamine.

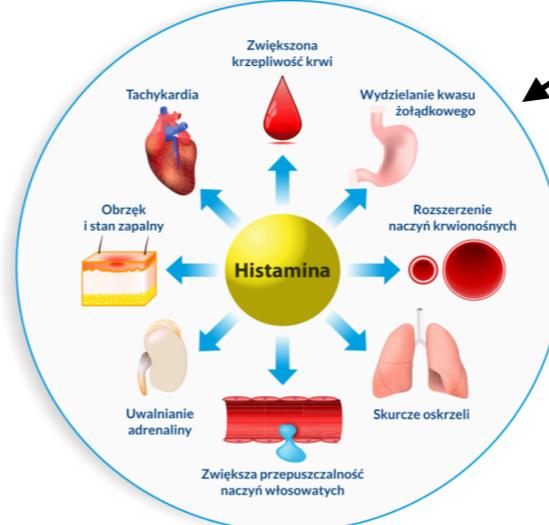


Mast Cell Triggers:

- **Temperature: Cold, Hot** cold air in lungs, on skin
- **Pressure** - to much pressure in lungs, on skin
- **toxic substances, drugs,**
- **viruses, bacteria, molds,**
- **vibrations, radiations,**
- **Ph difference,**
- **Ion difference,**
- **stress, poisons, mushrooms,**
- **mechanical triggers**

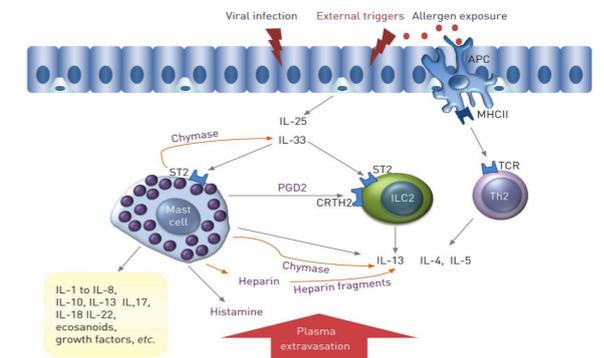
Covid -19
(probably bradykinin/ heparin blockade)

Septic shock and sepsis is triggered by a histamine storm and activation of its H1, H2, H3, H4 receptors



RESULTS: SYMPTOMS OF SEPTIC SHOCK, SEPSIS, ANAPHYLACTIC SHOCK ARE SYMPTOMS OF HIGH HIT and HISTAMIN STORM, released from strongly activated mast cells by external and internal factors, including CBRN, Covid-19 and mechanical triggers e.g. cold from: operating table, ventilator, drip, catheters, etc.

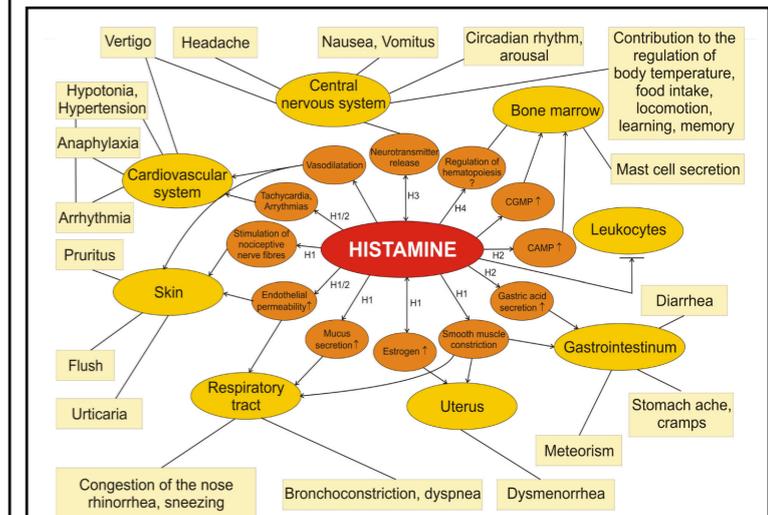
ACTIVATION OF MAST CELLS FACTORS: BIOLOGICAL. CHEMICAL PHYSICAL: RADIOLOGICAL, NUCLEAR (CBRN)



source: <https://err.ersjournals.com/content/23/133/299.full>

When mast cells are activated, histamine is released and developing responses are leading to blood clots and inflammation of the lungs and other organs.

The actions of histamine is also based on the stimulation of H1, H2, H3, H4 receptors and the release of cytokines in different organs:



source: https://immunotech.cz/Media/Default/Page/Histamine_analyte_info.pdf

source: <https://eu.usatoday.com/in-depth/news/2020/04/10/coronavirus-ventilator-how-works-why-covid-19-patients-need/2942996001/>

CONCLUSION: suggestions: supplying the lungs with air temperature of about 36-37°C and appropriate humidity of 100%, it will maintain proper pressure, warming the operating table and infusions, reducing other triggers - it all will allow to lower the activation of mast cell and level of histamine, using the DAO enzyme and bigger dose of antihistamines before, during and after operation can prevent septic shock and sepsis, the injection of heparin, adrenalin, Immunoglobulins IgG, steroids can be helpful also, because it is INTOLERANCE of too much HISTAMINE with symptoms of pseudoallergy / anaphylactic shock - not allergy.



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