

Autoimmune Hemolytic Anemia

A general article about anemia can be found [here](#) and article about autoimmune disease can be found [here](#).

Autoimmune Hemolytic Anemia or abbreviated AIHA belongs, as the name suggests, among [autoimmune diseases](#). It is a condition by which antibodies of our immune system begin to attack and destroy our own red blood cells (erythrocytes).

Causes

As the other autoimmune diseases, even by AIHA we do not know its cause. The disease affects only certain people who seem to have a genetic condition (a predisposition). It is assumed that by these people a viral infection starts the process of focusing our immune cells against our own organs, tissues or other cells. In this case red blood cells are the target. Immune cells begin to produce autoantibodies and break-up of red blood cells starts (hemolysis).

Symptoms

Anemia no matter its cause has several basic symptoms. Most of them are related to the reduced capacity of the blood to transport breathing gases. The classic symptoms are weakness and fatigue. Muscles of our body do not get enough oxygen and that leads to fatigue. Brain also can suffer from a lack of oxygen and patient [faints](#) or feels dizzy. Less red blood cells and hemoglobin in the blood vessels causes [pallor of skin and mucous membranes](#), which is well visible in conjunctiva. [Spleen enlarges](#) in which the break-up and further disintegration of erythrocytes happens. Anemic person suffers [shortness of breath](#) like by a cardiac or lung diseases. Lungs and heart are however healthy but can not handle the deficiency of erythrocytes and hemoglobin.

Because of hemolysis [jaundice](#) could appear. It is caused by a colored substance emerging from hemoglobin metabolism which is called bilirubin. Bilirubin is excreted by liver but such an overproduction like in AIHA; bilirubin accumulates in tissues and causes yellow discoloration of the skin and mucous membranes.

The disease sometimes tends to occur in acute attacks with acute [jaundice](#), nausea, [vomiting](#) and [abdominal pain](#).

Diagnosis

In blood samples we find a decrease in hemoglobin concentration and a reduction in the number of red blood cells. This gives us a picture of anemia. By eventual bone marrow examination, however, we find that cells form normally and even in increasing numbers. In addition we can find higher blood

concentration of bilirubin. After that there is enough evidence to think about abnormal disintegration of red blood cells. Precise diagnosis can be made serologically by proving presence of autoantibodies in patient's blood.

Prevention

We are not able to prevent this disease which is typical for almost all [autoimmune illnesses](#).

Treatment

We use medication to [suppress the immune system](#); [corticosteroids](#) are classic means of therapy. In serious conditions it is possible to remove autoantibodies from the blood (of course it is only a temporary effect).