Paradigm “invisible transfusion”.

Chapter. The mucous membranes, antigens and antibodies.

Deceptive words is a fascinating topic.

The word means a bread bakery. But as we go to the bakery it turns out that we have to choose approx. 30 subspecies; wheat, corn, rye, wheat and rye bread, with herbs, with sunflower seeds, natural sourdough etc. Seller ask us how?

We go to the grocery store and we feel like apples. Again, the seller has a problem, what? Jonathan, russet, Malinówka, goldens, Wikia, Ligol. List of varieties is here.

https://pl.wikipedia.org/wiki/Lista_odmian_jablon

In medicine pathogen is a pathogen. Term referring mostly to biological agents. Of course, changes in the body can also trigger an external factor such as; radiation, magnetic field, temperature and more.

Known common pathogens include bacteria, viruses, microorganisms, fungi, dust mites, pollen. Some of the names used interchangeably.

But as we dive into the topic of resistance to all these pathogens pathogenic to discover other words. Such as antigens and antibodies.

I asked myself a lot of trouble to detect factors-pathogens that cause many diseases. However, in many cases, the disease found an answer very general.

Common asthma is by immunologists medical condition for which correspond to multiple factors. Not only that we have a genetic predisposition to asthma. Among the pathogens they are exchanged feces of mites, molds, animal dander, pollen. A key element of this treatment is to find the causative factor, which leads to an asthma attack.

Pathogen irritated mucous membranes and in defense organism leads defensive action .... Just what, it really makes your body?

Will release large amounts of histamine. Of course, the inflammatory process is more complex, but well-described in the art.

Antigen exchange allergen is the main character of these descriptions. And here we come to the crux of the matter. Antigen but how?

The definition of an antigen is very deceptive. This may be any material through which the body produces antibodies. And here the lecture should end. No arguments, evidence that the cause of asthma is' invisible transfusion. "

Recently I watched the movie "The Man who knew infinity". History of Hindu mathematics that no academic education has changed the face of mathematics.

Well, it turns out that in mathematics we have something like this.
a = the Unknown
a+3=5,
5-3=a,
a number, no longer unknown,  a=2. what should prove.

In most studies in the field of diagnosing diseases we have any idea antibody titer. This is a great test. It determines how much and what your body produces.

We primary antigen-antibody reaction.
The antigen (temporarily unknown) produces IgM, = inflammation of the Rheumatoid arthritis (RA).
a-unknown antigen
a + IgM = RA
pause 5 min.

A few words of explanation.

• What is rheumatoid factor?
• RA diagnosed on the basis of RF.
• IgM.
• Search the antigen.

“Rheumatoid arthritis (RA, arthritis, chronic rheumatoid progressive) is a chronic, progressive disease of the connective tissue, and immune-mediated unknown etiology. RA is characterized by non-specific inflammation associated with arthritis symmetrical changes pozastawowymi and systemic symptoms, which leads to the destruction of cartilage and joints, thereby reducing their mobility, periarticular muscle atrophy, osteoporosis and disability and premature death. Distinguished serologically positive form of the disease - when there autoantibodies (rheumatoid factor RF IgM antibody and / or anti-citrullinated - anti-CCP) or negative - no presence of these autoantibodies.”


Additional explanation.

There is no diagnostic test that confirms us in 100% of RA. Patients are divided into two groups:

1. seronegative RA - a group of smaller, lighter form of the disease, no RF
2. seropositive RA - about 70% of the patients, an aggressive form of the disease, the current RF.
"IgM RF has a low specificity for RA (about 87%). High titers of autoantibodies found in the course of other connective tissue diseases, including Sjögren’s syndrome (30-96%), systemic lupus erythematosus (25-40%), scleroderma (10-30%), mixed connective tissue disease (up to 90%), and inflammation polymyositis or intramuscular sarcoid. Positive IgM RF may occur in the course of hepatitis C, chronic liver disease, cryoglobulinemia, chronic pulmonary inflammatory diseases, tumors, viral infections and bacterial or parasitic infections and also in healthy people (2-13%)."


IgM antibodies. What we know about them?

From the time of the discovery by Landsteiner group antigens ABO little has changed. Antigens anti-A and anti-B are determinants of the ABO blood group. How does it look.

<table>
<thead>
<tr>
<th></th>
<th>Group A</th>
<th>Group B</th>
<th>Group AB</th>
<th>Group O</th>
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<tbody>
<tr>
<td>Red blood cell type</td>
<td><img src="#" alt="Blood cell A" /></td>
<td><img src="#" alt="Blood cell B" /></td>
<td><img src="#" alt="Blood cell AB" /></td>
<td><img src="#" alt="Blood cell O" /></td>
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<tr>
<td>Antibodies in Plasma</td>
<td><img src="#" alt="Anti-B" /></td>
<td><img src="#" alt="Anti-A" /></td>
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<td><img src="#" alt="Anti-A and Anti-B" /></td>
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<tr>
<td>Antigens in Red Blood Cell</td>
<td><img src="#" alt="A antigen" /></td>
<td><img src="#" alt="B antigen" /></td>
<td><img src="#" alt="A and B antigens" /></td>
<td>None</td>
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What are the ABO blood group antigens?

Are chemicals based on the proteins. There are proteins According to some authors and books. Blood group antigens are known. An epitope, also known as antigenic determinant. N-acetylgalactosamine type A, and type B for galactose

https://en.wikipedia.org/wiki/Epitope

https://en.wikipedia.org/wiki/ABO_blood_group_system
We met antigens. It's time to explore the antibodies.

What exactly is meant an anti-A, anti-B?

The first thing we will meet this word (eng) -isoantibodies, Isohaemagglutinins.

**Significantly, they belong to the IgM.**


as we learn this kind of aglutinins red blood cells stick together


**In addition to antigens of the ABO blood vessels can be found in the body.**

Figure 2: Organ distribution of blood group antigens. A schematic representation for the antigen distribution of some clinically relevant blood group systems is shown. ABO antigens are formed by carbohydrates expressed on the surfaces of many cells in the human body. When an individual carries active ABO genes, the ABO antigens are expressed on RBCs and even more strongly on some tissues other than RBCs, such as kidney, lung, liver, and intestine. The ABO antigens are also soluble in the plasma of persons and then attach passively to cells that do not express the ABO antigens by themselves.[43] Modified from Nydegger et al.[44] and reprinted with permission.
It is known that, we antigens on red blood cells and antibodies in the plasma. Both of these components are in the blood. Blood is a tissue comprising a plurality of components. However, the ABO antigens, as shown in Figure appear in many organs, and the mucous membranes of the body. The quantities much higher than the occurrence of the erythrocytes.

So the question I ask. Is there are also antibodies?

Mucous membranes and mucus

Secretion great mystery.

- saliva
- mucus
- tears
- sweat
- sperm

Did you know that blood type can be determined by examining a sample of just secretions?

Secretions -in every person with the status of Secretor, and there are approx. 80% of the population include ABO blood group antigens. These are the same materials as those contained in red blood cells. So you can treat them the same chemical reagents used in the laboratory for determination of blood groups from blood samples.

Any person with the status of Secretor daily spreads huge amounts of their antigens in the environment in which he resides. What is this environment? Office, classroom, living room, bedroom, bathroom, fitness room, gym, swimming pool, sauna. It is significant that the smaller the room the antigen concentration after long having stayed in the room increases exponentially.

Do you realize that at work or at home, there are areas where you are with the person incompatible antigen after 8 hours or more? Not to mention the dorms, dormitories and boarding.

Have you ever read, work, scientific research on the exchange of secretion between family members?
Have you ever read, work, scientific research on the impact of the secretor status of persons non-secretor?

Have you ever - read, work, scientific research on the amount of concentration-group antigens ABO indoors?

Do not be surprised that people get sick for some reason.

Yet you can not see.

Whether the body has reason to produce antibodies?

Success in research.