

Macular degeneration in the light of the pulse spectral analysis (part 1)

Vladivostok, Russia

January 23, 2022

Macular degeneration disease is characterized by a progressive decrease in vision in the area of the macula of the eye. The macula is the part of the retina responsible for central vision, which allows us to see colors and small details.

It is believed that for young people, the cause of degeneration and loss of vision is a genetic factor.

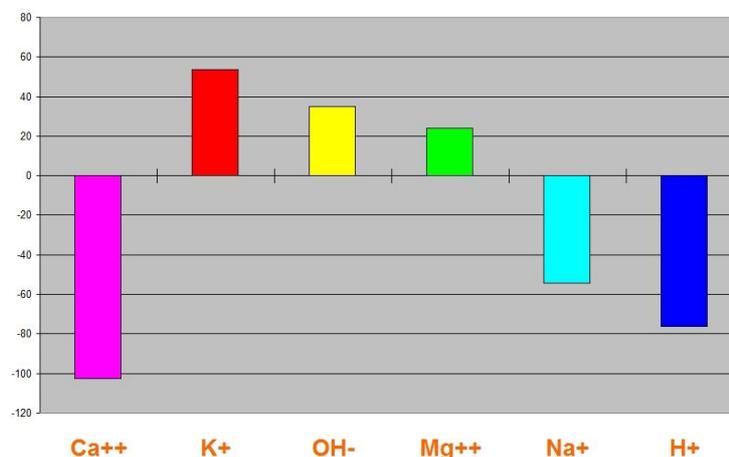
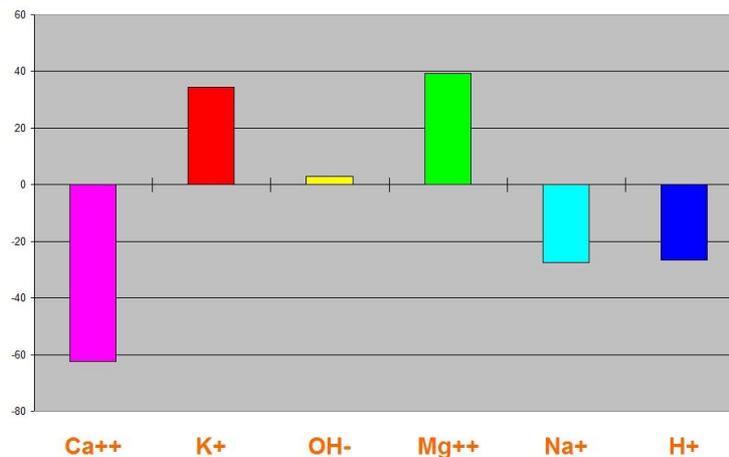
In biology, the phenomenon of genetic translocation is known, when, under the influence of any factor, an error in DNA repair occurs.

If we take into account the work of Dr. Alexander Samohotsky, who cured almost any disease with the help of 4 minerals - calcium, magnesium, potassium and sodium, we can assume that even in the case of genetic damage, an imbalance of minerals which will be manifested in some form.

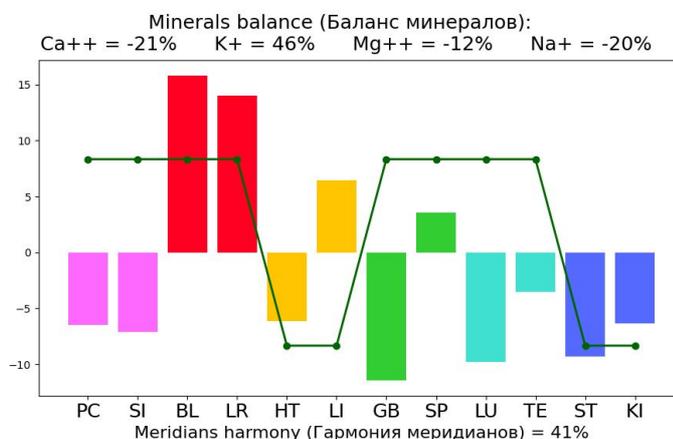
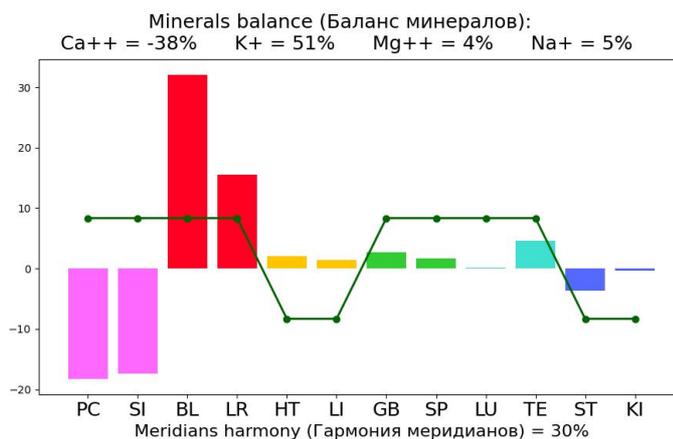
Below there is a diagram of the balance of 4 major macronutrients in the pulse metabolic analysis system in a patient, a 26-year-old male, suffering from macular degeneration, confirmed by a genetic test:

“The targeted variant c.3523-3C>G in ABCA4 gene was detected in heterozygous state in the clinical sample analyzed.”

A series of measurements by the pulse analysis system has a fairly constant deviation profile.



At the same time, another method of spectral analysis shows pretty similar results:



Please note that constantly repeating data in a changing environment is the main sign of the pathology of metabolic processes in the body (Heraclitus' principle applies here - "It is not possible to step twice into the same river"). This is an indicator of the lack of synchronization with natural rhythms.

In the given case, the metabolic imbalance is obvious.

- firstly, there is a predominance in the active daytime the anabolic phase (anabolism is defined as an excess of functions associated with potassium, magnesium and hydroxyl ions),
- secondly, there is a deep calcium deficiency on the background of potassium excess.

Such imbalances have very clear coordination with known medical facts:

- Antagonism of calcium and potassium. Potassium inhibits the contractile functions of calcium, resulting in stagnation of capillary circulation.
- Antagonism of sodium and potassium. Potassium enhances diuresis, resulting in a decrease in the total volume of blood in the body, which reduces the blood supply to the capillaries and, again, stimulates stagnation of blood circulation. And in itself, an excess of potassium leads to an excessive decrease in vascular tone.

A skew towards potassium likely is aggravated by cultural differences. The patient is an Indian citizen and follows a vegetarian diet. And, as you know, plant foods are extremely rich in potassium. Because of this natural feature, the human body is adapted to quickly remove excess

potassium from the body. But it removes from it only in the presence of calcium and sodium. It is likely that most cases of kidney failure are associated with such deficiencies. Not excreted potassium leads to inflammation of the renal parenchyma and impaired functions of excretion of potassium by the kidneys. Chronic hyperkalemia has a destructive effect on all body systems, and in this case, the visual apparatus turned out to be vulnerable due to hereditary causes.

Excess potassium, as well as its deficiency, increases the risk of death from ANY CAUSE (dependence diagrams are attached from the paper <https://pubmed.ncbi.nlm.nih.gov/29554312/>)

Relationship between blood potassium levels and mortality rates

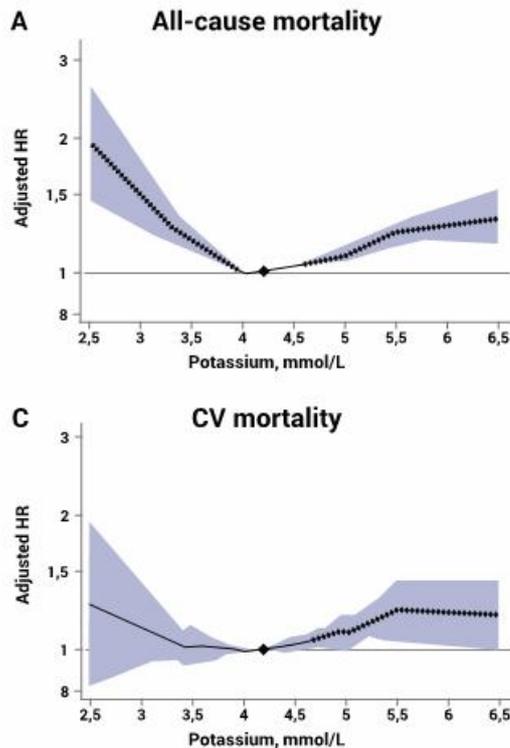
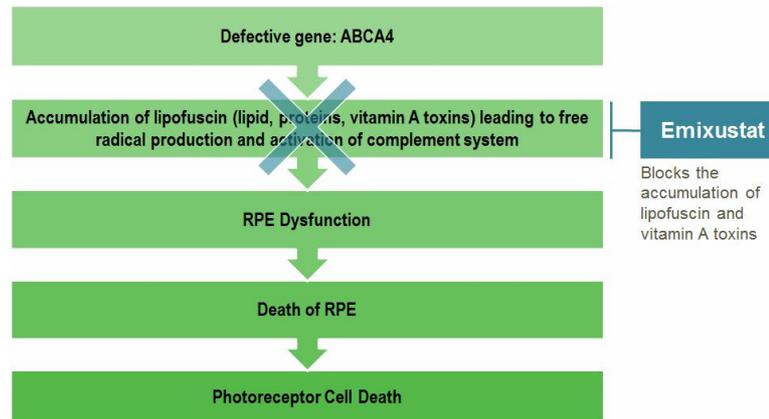


Рис. 1

(Kovesdy С.Р. и др., 2018)

Interestingly, in such diseases, there are known contraindications to take vitamin A, which is easily explained by the antagonism of vitamin A to vitamin D and calcium.

In the light of the foregoing, the property of the new drug Emiksustat, which blocks lipofuscin deposits and the effect of toxic vitamin A metabolites on the retinal pigment epithelium, looks completely logical. Blocking vitamin A metabolites automatically improves calcium metabolism, improves the contractility of the fundus capillaries and increases blood circulation.



An additional study will be presented on the properties of lipofuscin and its role in this case.

Pulse Spectral Analysis Manual:

<https://app.box.com/s/mbnp2qaagyf82sqt6ingt2hs9tltgme>

Macular degeneration in the light of the pulse spectral analysis (part 2)

Vladivostok, Russia

January 26, 2022

In the first part of the article on macular degeneration, a patient was found to have a large imbalance between potassium and calcium.

I'm not sure that the mind of an ordinary therapist has such a figurative idea of these minerals as I have.

Let me show you my vision:

Potassium is a vital mineral, but strictly in a certain concentration. In the blood. Its ideal concentration is approximately 4.2 millimoles per liter. Deviations, both up and down, increase the risk of death from ANY CAUSE - i.e. it is a fundamental metabolic factor. Remember- potassium is one of the four magic minerals of Dr. Alexander Samohotsky (together with calcium, magnesium and sodium).

The properties of potassium, apparently, are determined by its position in the series of standard electrochemical potentials:

Li→Rb→K→Ba→Sr→Ca→Na→Mg→Al→Mn→Zn→Cr→Fe→Cd→Co→Ni→Sn→Pb→H
→Sb→Bi→Cu→Hg→Ag→Pd→Pt→Au

Electrochemical Series

Electrode Reaction (Half-Reaction)	Standard Electrode Potential E0(in Volt)
$\text{Li}^+ + e \rightleftharpoons \text{Li}$	-3.04
$\text{K}^+ + e \rightleftharpoons \text{K}$	-2.92
$\text{Ba}^{2+} + 2e \rightleftharpoons \text{Ba}$	-2.89
$\text{Ca}^{2+} + 2e \rightleftharpoons \text{Ca}$	-2.87
$\text{Na}^+ + e \rightleftharpoons \text{Na}$	-2.71
$\text{Mg}^{2+} + 2e \rightleftharpoons \text{Mg}$	-2.37
$\text{Al}^{3+} + 3e \rightleftharpoons \text{Al}$	-1.66
$\text{Mn}^{2+} + 2e \rightleftharpoons \text{Mn}$	-1.18
$\text{Zn}^{2+} + 2e \rightleftharpoons \text{Zn}$	-0.76
$\text{Cr}^{3+} + 3e \rightleftharpoons \text{Cr}$	-0.74
$\text{Fe}^{2+} + 2e \rightleftharpoons \text{Fe}$	-0.44
$\text{Cd}^{2+} + 2e \rightleftharpoons \text{Cd}$	-0.40
$\text{Ni}^{2+} + 2e \rightleftharpoons \text{Ni}$	-0.23
$\text{Sn}^{2+} + 2e \rightleftharpoons \text{Sn}$	-0.14
$\text{Pb}^{2+} + 2e \rightleftharpoons \text{Pb}$	-0.13
$\text{Fe}^{3+} + 3e \rightleftharpoons \text{Fe}$	-0.036
$2\text{H}^+ + 2e \rightleftharpoons \text{H}_2$	0
$\text{Sn}^{4+} + 2e \rightleftharpoons \text{Sn}^{2+}$	+0.14
$\text{Cu}^{2+} + 2e \rightleftharpoons \text{Cu}$	+0.34
$\text{O}_2 + 2\text{H}_2\text{O} + 4e \rightleftharpoons 4\text{OH}^-$	+0.401
$\text{Fe}^{3+} + e \rightleftharpoons \text{Fe}^{2+}$	+0.77
$\text{Hg}^{2+} + 2e \rightleftharpoons \text{Hg}$	+0.796
$\text{Ag}^+ + e \rightleftharpoons \text{Ag}$	+0.80
$2\text{Hg}_2^{2+} + 2e \rightleftharpoons \text{Hg}_2^{2+}$	+0.905
$\text{O}_2 + 4\text{H}^+ + 4e \rightleftharpoons 2\text{H}_2\text{O}$	+1.20
$\text{Pt}^{2+} + 2e \rightleftharpoons \text{Pt}$	+1.20
$\text{Cl}_2 + 2e \rightleftharpoons 2\text{Cl}^-$	+1.36
$\text{Au}^{3+} + 3e \rightleftharpoons \text{Au}$	+1.50
$\text{F}_2 + 2e \rightleftharpoons 2\text{F}^-$	+2.87

Increasing order of reduction potential (upward arrow) and increasing order of oxidation potential (downward arrow).

Being in the third position from the left of the series of electrochemical potentials, potassium has a strong influence on hydrogen-containing substrates. The reaction of potassium with substrates causes a rapid release of atomic hydrogen. Atomic hydrogen in the body is the main fuel that mitochondria use in the process of ATP production - a universal energy source for all biochemical processes occurring in living systems, and in particular for the formation of enzymes.

Obviously, it is this main property of potassium that determines its role in living organisms.

The properties of potassium allow it to freely diffuse to any place in the body. It penetrates all membranes without any special obstacles if the concentration of its antagonists is insufficient. A result of the ability of antagonists, potassium is normally retained inside the cell (where it belongs in the process of splitting food substrates). These antagonists are two other minerals of Dr. Samohotsky - calcium and sodium. If potassium is not hidden in the cell, its carnivorous properties extend to the intercellular space, causing damage to capillaries in all parts of the body, in all organs saturated with capillaries.

Potassium outside the cell stimulates acidosis. And prolonged acidosis is a guarantee of the formation of tumors. In this sense, tumors can be considered as a way to combat the damaging effect of potassium against the background of acids excess in body fluids (hydrogen, in combination with the anions of chlorine, sulfur, phosphorus and other elements, creates hard concentrations of inorganic acids that increase tissue inflammation - it is a note to cancer fighters).

How do potassium antagonists work?

Calcium is an element without which it is impossible to create normal connective tissue. Calcium is an element that thickens cell membranes, making them less permeable. Those - calcium reduces the ability of potassium to freely spread throughout the body.

Sodium is the balancer of potassium in the work of the cellular pump, which in exchange for 3 sodium ions pushed out of the cell, drives 2 potassium ions into the cell. In this way, the negative intracellular potential of a normal living cell is formed. Without sodium, the creation of such potential would be fundamentally impossible. And the absence of potassium in the cell is the absence of the normal process of cellular digestion.

But potassium should be exactly as much as needed, and excess potassium is excreted from the body by normally functioning kidneys (but again - in the presence of calcium and sodium).

Macular degeneration in the light of the pulse spectral analysis (part 3)

Vladivostok, Russia

January 31, 2022



In the first two parts, we studied the role of potassium in the development of the disease.

In the case of Emixustat for treating macular degeneration, the target of exposure is also lipofuscin.

Lipofuscin is the name given to fine yellow-brown pigment granules. It is considered to be a sign of aging or "wear-and-tear" pigments, found in the liver, kidney, heart muscle, retina, adrenals, nerve cells, and ganglion cells. Lipofuscin is contained mainly in the form of granules surrounded by a lysosomal membrane, concentrated around the nucleus. By its concentration, they even determine the age of arthropods and other living creatures that do not have a skeleton.

Its appearance in cells is associated with the functional inability of the body to neutralize "cellular debris". And so that this garbage does not interfere with the normal activity of the cell, it is packaged in an insoluble lipid capsule. The only trouble is that the intracellular garbage landfill can take a limited amount of the substance and with large volumes, the cell simply cannot work normally, as it happens in an aging organism.

The composition of lipofuscin includes fats (20-50%), proteins (30-60%), a significant amount of carbon, nitrogen, phosphorus, sulfur, magnesium and aluminum. Fats are mostly represented by phospholipids (cephalin, lecithin, sphingomyelin), as well as cholesterol, triglycerides and products of peroxidation and polymerization of fatty acids. The composition of lipofuscin granules can include all known amino acids, the quantitative ratio of which depends on the organ where lipofuscin is placed. But the most abundant amino acids in lipofuscin granules are glycine, valine, alanine, and proline.

Now let's dwell on the 4 main amino acids of lipofuscin and consider them through the prism of the vibrational model of the Chinese Book of Changes, the theory of which is set out in the work "DNA codes of the I-Ching"

https://www.researchgate.net/publication/356604171_Hacking_DNA_structure_of_I-Ching_codes

It was demonstrated in the above-mentioned paper that the bases in the triplets of genetic code correspond to the twelve main meridians of Chinese traditional medicine. On the other hand on the basis of the similarity of their vibration spectra, each of the meridians has a connection with certain macroelements - potassium, magnesium, calcium, sodium, hydrogen, or hydroxyl ions. The relationship table is shown below.

	Bases of the standard genetic code			
	Adenine	Guanine	Uracil	Cytosine
First Base	Pericardium = calcium =	Kidneys = Hydrogen =	Gall Bladder = magnesium =	Large Intestine = hydroxyl =
Second Base	Lungs = sodium =	Pancreas = magnesium =	Urinary Bladder = potassium =	Small Intestine = calcium =
Third Base	Heart = hydroxyl =	Liver = potassium =	Stomach = Hydrogen =	Triple energizer = sodium =

In the context of the presented table, let's look at the structure of the 4 main amino acids of lipofuscin from the point of view of the proportions of the main minerals.

Considering that the 3rd base of DNA structure has a correspondence with one of four ions - calcium, hydrogen, magnesium and hydroxyl - we also assume the quantity of each ion is equal to one for the whole group of the four amino acids (with a probability of 0.25 for each ion per each amino acid). Thus, the overall balance of minerals will look like this:

- At the first base - 3 potassium, 1 sodium,
- At the second base - 1 potassium, 2 calcium, 1 magnesium,
- At the third base, 1 calcium, 1 magnesium, 1 hydrogen, 1 hydroxyl. 1.

	First Base	Second Base
Glycine	Guanine Liver = potassium =	Guanine Pancreas = magnesium =
Alanine	Guanine Liver = potassium =	Cytosine Small Intestine = calcium =
Valine	Guanine Liver = potassium =	Uracil Urinary Bladder = potassium =
Proline	Cytosine Triple Energizer = sodium =	Cytosine Small Intestine = calcium =

Here is the total mineral balance in descending order :

- potassium - 4,
- calcium - 3,
- magnesium - 2,
- sodium - 1,
- hydroxyl - 1 and hydrogen -1, it is a formula of neutral water - the medium where the main ions act.

Overall, such a balance profile confirms the picture of imbalances that are revealed by pulse spectral diagnostics of a case of macular degeneration. On the other hand, we see that the calcium deficiency shown by pulse diagnostics is purely functional in nature, which is obviously determined by the predominance of calcium antagonists - potassium and magnesium.

Sodium and hydrogen ions were in short supply. And, as you know, the action potential of the cell (the phase of catabolism) cannot be launched without these ions. This is because the onset of the action potential is associated with the rapid entry of sodium ions into the cell, which opens ion channels for the penetration of hydrogen, which in turn is the fuel for mitochondria that produce ATP, the body's universal energy substrate.

Based on the above, we can conclude that the bias towards potassium and magnesium in metabolic processes not only leads to diseases like macular degeneration (in fact, any other weaker body system can be under attack), but also accelerates aging. .

Therefore, one should be skeptical of any antioxidant interventions widely promoted as a way to slow down aging.

For example, it is clear from the research results, that the increased lifespan of C.elegans is a result of moderate oxidative stress occurring in the body of nematodes (nematodes are used in biological experiments due to their simplicity - they have about one thousand cells only).

What can be done with the findings?

As any entity has its antipode, as a manifestation of the law of unity and of the struggle of opposites, as the law of Yin and Yang, we can assume the presence of amino acids that can neutralize and balance the effects of lipofuscin amino acids.

In the work mentioned above, in relation to the laws of organization of DNA codes, it is postulated and proved that the main influence on the quality of an amino acid is exerted by the middle base in the triplet. Taking into account that we have found the concentration of potassium as the main factor contributing to the formation of lipofuscin and the cause of macular degeneration, we can consider the sodium ion as a potassium compensator, which, in fact, is the very antipode and antagonist, creating together with potassium the molecular machine of the potassium-sodium pump of any living cell.

Referring to the table of correspondences between the bases of the DNA triplets and the main minerals, we have found sodium corresponding to adenine in the second base (the Lungs meridian), which encode the amino acids tyrosine, histidine, glutamine, asparagine, lysine, aspartic acid, and glutamic acid.

Among these amino acids, tyrosine, which has the combination of the first two bases as Uracil - Adenosine (Hydrogen - Sodium), is the most active in compensating for imbalances in lipofuscin amino acids. And these are just the elements that are required for the flow of the catabolic phase and the activation of calcium.

The properties of tyrosine, in fact, are known as an enhancer of catabolic reactions, since it is involved in the synthesis of thyroid hormones.

But another confirming factor for the correctness of the hypothesis that describes the physics of the Book of Changes is a study conducted at Johns Hopkins University. Scientists have found that the development of light-sensitive cells in the eye, called cones, depends on the concentration of the thyroid hormones thyroxine (T4) and triiodothyronine (T3) in the organelles themselves. (Publication in English <https://www.researchgate.net/publication/328244184>)

And the essence of such a discovery lies in the fact that the body must fundamentally maintain a balance between anabolism and catabolism. And there are no magic medicines and potions of health and longevity, except for the need to properly maintain such a balance.

Strictly speaking, it is the spectral analysis that is absolutely indispensable in this matter.