

Dr. Ana Mihalcea & Clifford Carnicom: What Is Happening to Humanity's Blood? – On the Loss of Electrical Blood Conductivity in the Post C19 Era

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“In our good faith effort to quantify the loss of electrical blood conductivity in the post C19 era and reference this with the extensive previous investigations looking at iron oxidation in blood samples, we have found in our most conservative measures at least a 20% decrease in blood conductivity and in our modest range estimates a decrease of 47%. In our models this correlates with a 10% and 23.5% increase in iron oxidation.”

Evidence of Impaired Electrical Blood Conductivity, Iron Oxidation and Reduced Oxygen Transport Capacity in the Post C19 Injection Era: Ana Mihalcea, MD, PhD in Conjunction With Clifford Carnicom

by [Ana Maria Mihalcea](#), MD, PhD, [Dr. Ana's Newsletter](#)

April 16, 2023



Image: Unvaccinated blood sample, extremely symptomatic patient with fatigue, cognitive impairment, anxiety, pain, palpitations. Blood looks like sludge around Hydrogel/ Graphene/CDB Filament

Background:

In this report, we present preliminary data on further blood conductivity studies and correlations to iron oxidation of the hemoglobin molecule within the red blood cells. This effort is to answer the question quantitatively and qualitatively of what happened to humanities blood. As a physician, I have seen unprecedented accelerated aging in the unvaccinated over the last two years and the rate of illness is accelerating. In live blood analysis, I have seen Hydrogel/ Graphene Structures, that transform the blood into severe rouleaux formation, making the blood almost unrecognizable and correlating with severity of symptoms. In the last few weeks I have seen this in a more extreme form of toxicity, making the live blood look like sludge. These same structures have been identified by Clifford Carnicom to be filaments growing from

the synthetic hydrogel based Cross Domain Bacteria, aka Morgellons. We have shown our work on blood cultures, infrared spectroscopy, and electrical studies which I described in previous posts:

[Blood Cultures of Unvaccinated Blood Shows Extensive \(CDB\) Filament Development After 2 Weeks Incubation- Ana Mihalcea, MD, PhD In Conjunction With Clifford Carnicom](#)

I have also discussed the chemical analysis similarities between filaments sprayed upon humanity via geoengineering and the ingredients of hydrogel building blocks in the self spreading C19 injections.

[Chemical Analysis Comparison of Hydrogel Filaments from C19 Shots and Environmental Geoengineering Sources – Project What Happened to Humanities Blood?](#)

Our preliminary results showing low electrical blood conductivity has to be understood in the context of Clifford's work of three decades evaluating the findings of CDB aka as Morgellons. He began studies in 2011 and more intensively in 2015 to quantify changes in blood conductivity and correlating iron oxidation status in hemoglobin molecules of the blood. Historically, the medical profession has dismissed CDB or Morgellons as delusory parasitosis, marginalizing hundreds of thousands of individuals who had severe systemic symptoms of toxicity. However, CDB disease was not just a skin disease, but affected all human beings in a silent way as these fibers were found in blood and tissue samples of everyone investigated. It is known that the covert biological and geoengineering warfare is the source of these nanotechnological synthetic biology fibers.

All people affected had symptoms of chronic fatigue, which overlaps with current findings of what people call "Long Covid". This fatigue is a lack of energy, or life force which is obviously hijacked by these nanotechnological weapons,

causing all diseases of aging, including cancer by induction of lower tissue oxygenation and hence increased blood acidity.

Therefore, the question of iron oxidation came into the picture for Clifford. Blood requires iron to be in the primary state of Fe^{2+} to carry and deliver oxygen to tissues. The synthetic nanotechnology biological organism CDB oxidizes iron from its state of Fe^{2+} to Fe^{3+} , in which state it no longer is able to transport oxygen – and causes rouleaux formation.

He described the biochemistry of Heme, the studies of iron oxidation in this paper:

[Morgellons -A Thesis](#)

The loss and transfer of an electron is a transfer of energy. The body's function of oxygenation does not work when the Iron is in its Fe^{3+} state. The state of iron has to be in the Fe^{2+} state to carry oxygen and in that energy.

"Iron is one of the most common elements in the Earth's crust and forms a ready oxidation state. Bacteria use this as a source of energy and as a means of waste disposal.. Iron metabolism is also a significant part of bacterial virulence...It has been established experimentally by injecting iron soluble compounds into test animals with infections that adding more iron causes the bacteria to thrive....Bacteria put out compounds, called siderophores, which attract and bond free iron compounds by chemical processes; these are then oxidized and excreted as a byproduct⁶¹."

"Iron (Fe) has long been a recognized physiological requirement for life, yet for many organisms... its role extends well beyond that of a nutritional necessity. Fe(II) can function as an electron source for iron-oxidizing microorganisms under both oxic and anoxic conditions and Fe(III) can function as a terminal acceptor under anoxic conditions for iron-reducing organisms⁶²."

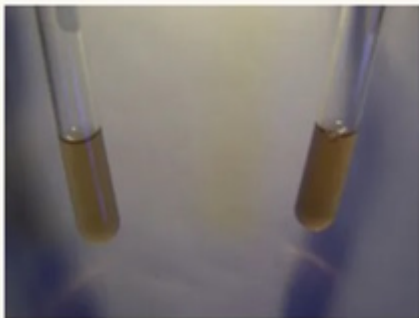
"Given the role of free iron in creating DNA damage, it is unsurprising that bacteria have evolved methods to scavenge it....Despite the sophisticated biochemical and genetic strategies that can be brought to bear upon bacteria, we still know remarkably little about the physical mechanisms of iron transport, storage, and regulation, and virtually nothing about iron trafficking and its insertion into metalloproteins. These areas are ripe for future work⁶³."

Source: [Free Iron in Bacteria](#), Jim Imlay PhD, Department of Microbiology, University of Illinois, Urbana-Champaign, Society for Radical Biology and Medicine.

In 2015 Clifford asked the question on what does this iron

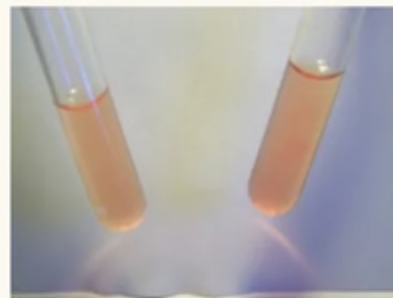
oxidation mean for the energy production of the body. The question was how much energy would we lose in the body in relation to how much oxidation of iron is observed?

In order to answer this, laboratory experiments were performed that show oxidation of iron. This was evaluated via 1. qualitative chemistry ferrous iron $2+$ shows green staining, 2. ferric iron $3+$ shows yellow staining. It was also evaluated via qualitative reagent based ion testing.



Testing for Fe^{2+} ions in the culture solution with 1,10 phenanthroline.

Results are negative. No characteristic deep red color forms in the test tube to the right where the reagent has been added.



Testing for Fe^{2+} ions in blood in distilled water solution with 1,10 phenanthroline. Results are negative. No characteristic deep red color forms in the test tube to the right where the reagent has been added.



An oral sample filamentous mass produced from extended exposure of the mouth gums to red wine. The sample has been repeatedly rinsed and decanted in distilled water. The purplish color and microscopic filaments are characteristic of the sample



The oral sample after it has been subjected to a process of alkalinizing, heating and filtration. The sample is treated with sodium hydroxide (lye) in solution and heated to the boiling point. The solution is then filtered and produces the colored solution above. Please recall that the color of the ferric ion ($3+$) is usually yellowish to brownish and that the color of the ferrous ($2+$) ion is generally more greenish in color. This result of this process indicates that the ferric ($3+$) iron form is a candidate for further investigation in this qualitative analysis.

Model calculations on how much energy is lost:

1. How much energy does it take to oxidize iron?
2. How much iron is in the body?
3. How much oxidation is taking place (it is variable)?

4. How much energy is in a human body in varying states of activity – sitting down, running, weight lifting etc.

The model estimates loss of energy as a function of iron oxidation. If iron oxidizes at a certain percentage, how much energy does the body loose? This energy loss is relative to basal metabolism as a function of oxidation of iron.

The first ionization energy for iron is 7.9 electron volts (eV) (~760 kilojoules (kJ) per mole), the second ionization energy is 16.2 eV (1560 kJ per mole) and the third ionization energy is 30.6 eV (2960 kJ per mole)⁵¹. What this shows us is that it takes almost twice as much energy to remove the electron to change the iron from the ferrous (Fe²⁺) state to the ferric (Fe³⁺) state as it did to remove two electrons to change it from the elemental form to the Fe(2+) state. From an energy standpoint, therefore, the oxidation of iron referred to in this paper requires a relatively strong energy investment.

To get some sense of what this energy level actually means, let us translate what is happening in the blood to something more tangible for us to visualize. If we assume a 5% reduction in oxygenated hemoglobin over a three month period (the approximate life cycle of red blood cells), this will translate to an energy requirement of approximately 3240 joules over this three month period.

[Humans have roughly 2.5×10^{13} red blood cells; 280×10^6 molecules of hemoglobin in each red blood cell; 7×10^{21} molecules of hemoglobin in each red blood cell; four heme molecules per red blood cell; approx. 2.8×10^{22} Fe²⁺ iron atoms in the human body; at 5% oxidation 1.4×10^{21} atoms in the Fe(3+) state ; .0023 moles of iron in the Fe(3+) state, $.0023(2960 \text{ kJ/M} - 1560 \text{ kJ/M}) = \text{approx. } 3260 \text{ joules over a three month period.}]$

Further calculations and documentation of experimental background can be found here:

[Morgellons A Thesis](#)

Extensive studies on iron oxidation were done in culture work and can be found in [Carnicom Laboratory Notes](#)

Iron - alkaline reaction	1	76
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The model formula determined was $\text{Energy Loss in \%} = 2.0 * \text{Iron Oxidation in \%}$ (approx.)

Full documentation of deduction and conclusions about formula can be found here:

[Full Iron Oxidation/ Energy Loss Model calculations](#)

We have a problem with low energy in the body in the post Covid era. What is different about the world three years later?

Blood conductivity studies 2023:

The preliminary data presented was performed with reasonable efforts of standardization of the results, including calibration of the meter and concentration of the sample dilution.

In N=13, all sample aged over 65 years old. Samples were both C19 vaccinated and unvaccinated.

Our samples had a 8 milli Siemens Average blood conductivity ranging from 5.8 to 10.6 milli Siemens. Prior references to normal blood conductivity show range from 10-20 milli Siemens. [Expert Blood Conductivity Values](#)

In our calculations if we take the average blood conductivity at 15 milli Siemens, then our sample average has a decrease of 47%. This is an astonishing number.

If we are highly conservative and choose our reference range for normal blood conductivity at the low end of 10 milli Siemens, our average is still at 20% below normal values.

Given our previous calculations and modeling regarding iron oxidation, we would have an increase of iron oxidation of 23.5% for the high end estimate and a 10 % increase in oxidation for our low end estimate.

There was no statistical difference between C19 vaccinated and unvaccinated blood.

Of note, the lowest values of blood conductivity were obtained from individuals who were not on an intensive nutritional regimen with high doses of Vitamin C and other nutrients to support their immune system. It is my concern, that those who do not use high dose electron donors to alleviate some of the iron oxidation levels, may have blood conductivity values even lower then our calculated average of 8 milli Siemens.

Summary:

In our good faith effort to quantify the loss of electrical blood conductivity in the post C19 era and reference this with the extensive previous investigations looking at iron oxidation in blood samples, we have found in our most conservative measures at least a 20% decrease in blood conductivity and in our modest range estimates a decrease of 47%. In our models this correlates with a 10% and 23.5% increase in iron oxidation.

One of the compounds able to reduce iron from a Fe^{3+} state to Fe^{2+} state is ascorbic acid or Vitamin C. Clifford has done studies showing effective improvement in iron oxidation via Vitamin C and other electron donors. I have been advocating for this therapy and been performing it intravenously in conjunction with the mainstay of therapy which is EDTA chelation. At the same time, I recommend most ardent measures to minimize exposure to EMF frequencies like 5G and use of cell phones, as the constant exposure clearly worsens the blood changes and makes the Hydrogel/ Graphene/ CDB filaments grow, sometimes a thousand times larger than a red blood cell.

EDTA is a potent electron donor what creates stable bonds with toxic transition metals. EDTA is ethylenediaminetetraacetic acid and its molecular formula is $\text{C}_{10}\text{H}_{16}\text{N}_2\text{O}_8$. It has pH value between -0.8 to 12. It is a hexadentate ligand, which means it has 6 lone pair of electrons that participate in coordination bonding. When a metal reacts with one molecule of EDTA, it can form 6 valent coordination complex. Metal ions have 4 bonds on oxygen atoms that are negatively charged and 2 bonds to a single electron pair on the nitrogen atom.

Therefore, EDTA has six donor atoms.

EDTA Donor Molecule

This has reliably reversed the severe blood changes as I have described in multiple other articles.

[Decontaminating The Blood From Synthetic Biology Hydrogel With EDTA Chelation – Live Blood Documentation](#)

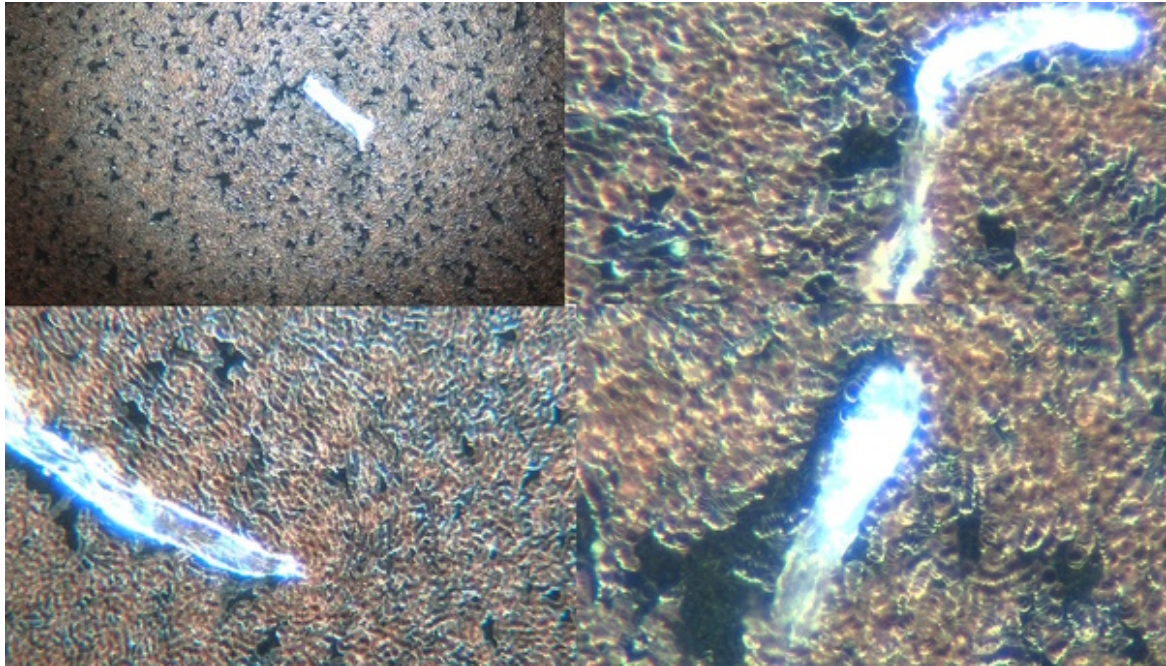


Image: Unvaccinated blood, age 30, highly symptomatic, brain fog, fatigue, palpitations, panic attacks, extreme restlessness, insomnia. Unable to function. Blood looks like sludge, the rouleaux formation is extreme.

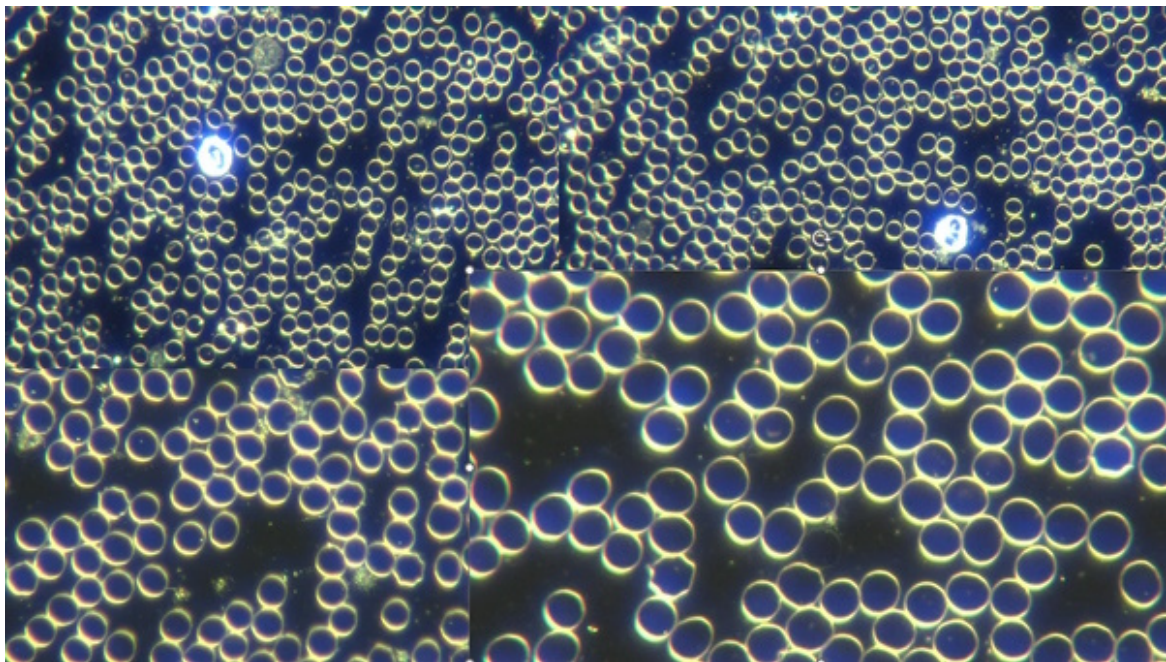


Image: 3 days later after EDTA Chelation 1500mg alternating with 20000mg IV Vitamin C and Epithalon. (total 2 EDTA and 1 Vitamin C IV). All symptoms resolved. Able to hike for 5 hours both days. Sleeping

through the night. Completely focused. No anxiety.

If you would like to support our research Project “ What happened to Humanities Blood? “, please donate to [Carnicom Institute](#). We are a team of scientists dedicated to saving the human species and our planet. Thank you.

Note to scientists and doctors from Ana Mihalcea, MD, PhD: I believe that the current stance of freedom movement doctors to ignore the findings of nanotechnology and synthetic biology causes great harm to humanity, by omitting appropriate treatments. I encourage all scientists and doctors to do their own scientific research and overcome the barrier of hesitancy to address what is so blatantly obvious.

“Silence in the face of evil is itself evil: God will not hold us guiltless.

Not to speak is to speak.

Not to act is to act.”

–Dietrich Bonhoeffer

[Connect with Ana Maria Mihalcea, MD, PhD](#)

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