

The unsuspected source of oxygen in Crohn's Disease.

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Abstract

Crohn disease is a chronic idiopathic inflammatory bowel disease condition characterized by skip lesions and transmural inflammation that can affect the entire gastrointestinal tract from the mouth to the anus. Presenting symptoms are often variable and may include diarrhea, abdominal pain, weight loss, nausea, vomiting, and in certain cases fevers or chills. In some cases, extraintestinal manifestations may develop. The diagnosis is typically made with endoscopic and/or radiologic findings. Disease management is usually with pharmacologic therapy; however, most patients will eventually require surgery for their disease.

Crohn disease can affect any part of the gastrointestinal tract. About one-third of patients have small bowel involvement, especially the terminal ileum, another 20% have only colon involvement and about 50% be involved of both the colon and small bowel. So far, there is no cure, and most patients experience bouts of remissions and relapse at unpredictable times. This disease leads to very poor quality of life.

Our observation that our body does not take oxygen from the air, but from intracellular water, like plants, implies rethinking the etiopathogenesis of the disease. Crohn's disease, because until now, the interpretation of clinical findings is because we take oxygen from the air, when the purpose of breathing is only to expel the CO₂ that is continually formed inside our body.

Keywords: Bowell, Crohn's, Hydrogen, Ileum, mucosa, serosa, oxygen, water.

Introduction

Crohn disease (CD) is most seen in the western developed world in North America, northern Europe, and New Zealand. Its incidence has a bimodal distribution with the onset occurring most frequently between ages 15 to 30 years and 40 to 60 years old. It is more prominent in urban than rural areas. There is a high incidence in Northern Europeans and Jewish descent (incidence 3.2/1000) contrasting to a significant infrequent prevalence in Asians, Africans, and South Americans [1]. However, recent studies have shown a significant increase in incidence in rapidly industrializing areas of Asia, Africa, and Australasia [2].

The initial lesion starts out as an infiltrate around an intestinal crypt. This goes on to develop ulceration first in the superficial mucosa and involves deeper layers. As the inflammation progresses, non-caseating granulomas form involving all layers of the intestinal wall. It can develop into the classic cobblestone mucosal appearances and skip lesions along the length of the intestine sparing areas with normal mucosa. As the flare of Crohn settles, scarring replaces the inflamed areas of the intestines. [3]

Granuloma formation is very common in Crohn disease. The ongoing inflammation and scarring lead to bowel obstruction and stricture formation. Crohn disease is also associated with enterovesical, entero-enteral, enterocutaneous, and entero-vaginal fistulas.

Crohn disease is associated with extraintestinal manifestations including episcleritis, uveitis (figure 1), stomatitis, aphthous ulcers, liver steatosis, gallstones, cholangitis, primary sclerosing cholangitis, nephrolithiasis, hydronephrosis, urinary tract infections, arthritis (spine - sacral,

knee, ankles, hips, wrist, elbows), ankylosing spondylitis, erythema nodosum, and pyoderma gangrenosum [4].

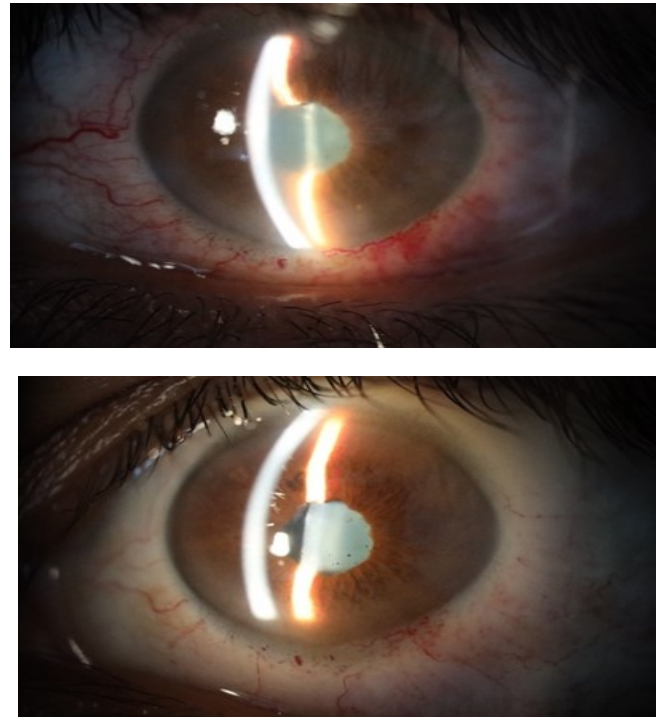


Figure 1) Photograph of the anterior segment of the left eye, in a patient with Crohn's syndrome. A) Before treatment. We can appreciate the usual findings of chronic uveitis, such as opacity of the cornea due to edema, turbidity of the aqueous humor, edema of the iris, and posterior synechiae between the iris and the lens. B) Photograph after treatment. The opacity of the cornea and the turbidity of the aqueous humor have already disappeared. The iris edema decreased almost completely. No topical or systemic steroids were used, only sublingual QIAPi 1™ every hour.

Although the exact etiology of inflammatory bowel disease (IBD) and CD is not known, there is substantial evidence to suggest that the disease is resulting from a supposedly inappropriate immune response in the bowel to situations from environmental factors such as drugs, toxins, infections, or intestinal microbes in a genetically susceptible

host.

However, the immune-mediated response in Crohn disease involves both innate and acquired mechanisms by macrophages, neutrophils, and T-cells in the intestine which promote pro-inflammatory mediators like tumor necrosis factor-alpha. But the cells mentioned have millions of years of evolution, we can think that they "know" their job perfectly. It is difficult to accept that they react inappropriately for reasons that we do not know or at least do not understand.

For instance, in colonic Crohn lesions were found to have high levels of cytokines like interferon-gamma, IL-2, IL-12, and IL-18. Furthermore, Crohn disease is primarily regulated by helper T 1 and 17 mediated processes [5]. Given the astonishing accuracy of the biochemical processes that make up what we call life, perhaps it would be better to think that the body or tissue is not reacting properly because something is disturbing it. The immune response, as well as the other systems that make up the human organism, are strictly regulated by millions of years of evolution. Our biochemical mechanisms are quite complex but at the same time, they border on perfection.

Thereby, the cell lines, hormones, and cytokines that show abnormal behavior in Crohn's syndrome are too many, which indicates a generalized failure. And in any system, when the failure is widespread, we must think about energy.

Our observation that the eukaryotic cell does not take oxygen from the air around it, but from the water it contains inside the cells, as in plants, leads to a disruptive discovery: the human body has molecules capable of dissociating the molecule from

the water, such as hemoglobin, myoglobin, bile pigments, cytochrome P 450, the most efficient of all being melanin.

And by dissociating the water molecule, our body obtains the precious molecular oxygen as well as hydrogen, also in molecular form. The oxygen content in the body is very high, as it is almost five times more than atmospheric oxygen, the vast majority being combined with almost all the compounds normally present in the human body. Oxygen, when combined with other atoms or molecules, becomes stable, which is in accordance with the chemical logic of life.

On the other hand, molecular hydrogen is the other element that the cell obtains by dissociating water. And this element is the carrier of energy par excellence in the entire universe, therefore, the eukaryotic cell cannot be different. Then, part of the energy that is released when the water molecule splits is trapped and ultimately transported by the hydrogen molecule.

So, given the current technical limitations to determine the levels of molecular hydrogen inside the cell, we can use oxygen as a kind of indicator, or even more so as a surrogate marker, since both hydrogen and oxygen are generated at the same time, and in the same way.

Our article should have been called the unsuspected role of hydrogen in Crohn's disease, but until recently hydrogen was considered a relatively inert molecule, to which biochemical or metabolic functions were hardly attributed. But in reality, hydrogen has been the energy source of the cell since the beginning of time, and not glucose, since it was attributed a double role: 1) as the universal precur-

...sor of any organic molecule in all living beings, and 2) as a source of energy, but we can rule this out now that we know that our cells have molecules capable of dissociating the water molecule, like plants.

The thought that glucose contributes so much to biomass and that at the same time it can supply the energy that its own metabolism requires, is a collective error that dates to the mid-18th century, and that we must banish as soon as possible.

Returning to Crohn's disease, the involvement of tissues, organs and systems is extensive, so we can infer, as in any system, that the problem begins with an imbalance in the dissociation of water that occurs at the intracellular level, since it is an exact chemical reaction, amazingly exact and that has not changed since the beginning of time.

In general, Ulcerative colitis (UC) affects the colon only and spreads continuously from rectum to more proximal colonic segments. The inflammation is mostly superficial and complicated by erosions, ulcers, and bloody diarrhea with mucinous stool [6]. CD can in contrast affect any part of the GI tract and is characterized by discontinued inflammation (skip lesions) with transmural inflammation that leads to fibrosis, fistula, and strictures, causing symptoms such as chronic abdominal pain, diarrhea, obstruction, or perianal lesions [7].



Figure 2) Macroscopic aspects of small intestine in Crohn disease. Edema and hemorrhage are a characteristic finding in this disease and in other hypoxic conditions.

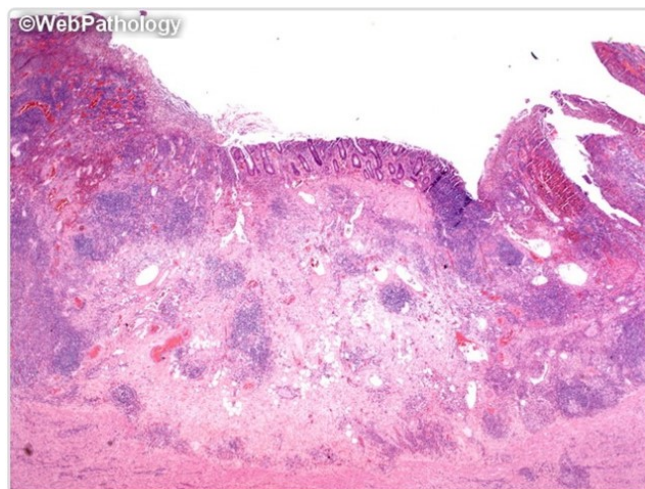


Figure 3) There is considerable overlap in histologic features between Crohn disease and ulcerative colitis. **Deep ulcers and fissures, transmural inflammation, and epithelioid granulomas** are diagnostic hallmarks of Crohn disease. In our experience, when the oxygen levels inside the cells are depleted, the tissues become disorganized in an inversely proportional manner, the lower the intracellular oxygen, the greater the disorganization and vice versa. Microphotography courtesy of Dharam Ramnani, MD.

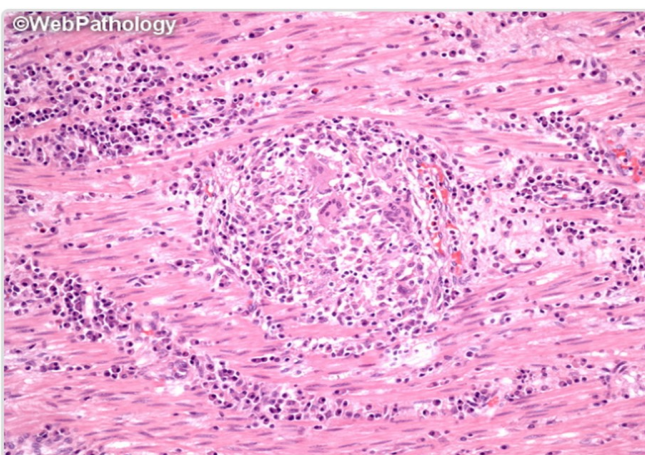


Figure 4) non-caseating epithelioid granulomas are one of the diagnostic hallmarks of Crohn disease. They are found in 40-60% of cases; therefore, absence of granulomas does not exclude Crohn disease. They may be present in any lay-

er of the intestine, inflamed or non-inflamed regions, and even in mesenteric lymph nodes. This image shows a large epithelioid granuloma within muscularis propria in a colectomy specimen. Microphotography courtesy of Dharam Ramnani, MD.

The disorganization of the tissues is diffuse, generalized, and can be explained because the oxygen levels inside the cells coming from the dissociation of water are very low.

When the dissociation of water inside the cell decreases abruptly, there will be edema and hemorrhage. In experimental studies, the ischemia-reperfused flap group showed histologically significantly much edema congestion and bleeding than the control groups ($P < .0001$). The control group showed less edema in fat tissue than the ischemia-alone group ($P < .001$) [8].

When intracellular hypoxia becomes chronic, fibrosis and disordered mitosis appear.

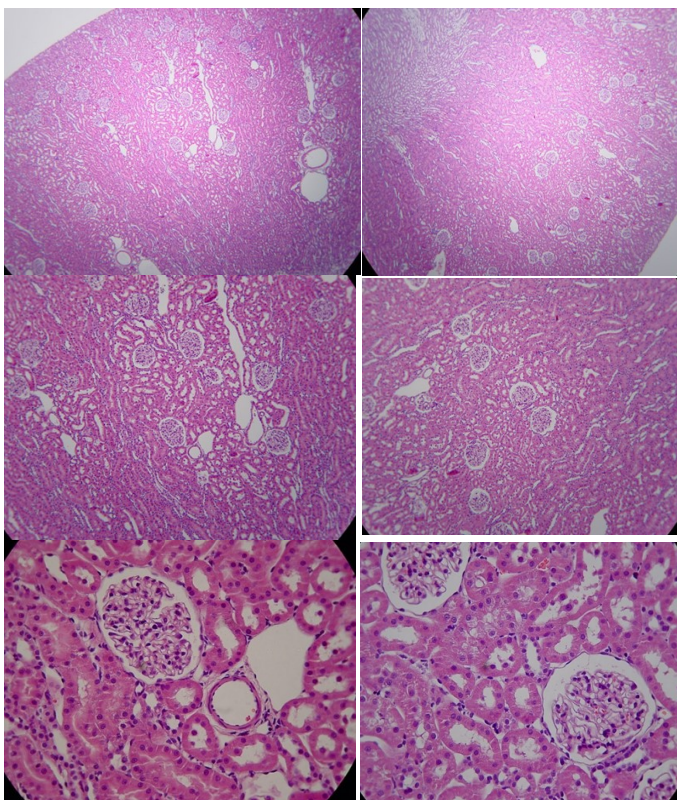


Figure 5) Microphotographs of histological stains of Wistar rat kidney, after having been exposed to pentavalent arsenic in water, one of the most frequent forms in nature. In the left column, the sections correspond to the control group, and in the right column, the group exposed to pentavalent arsenic in water. The samples are stained with H&E, and the magnifications from top to bottom are: 5X, 10X, and 40X. [9].

Regardless of the underlying causes of the condition, this disease is universally characterized by disruption to the protective epithelial barrier separating the intestinal lumen above from the mucosal immune system below. Once this barrier becomes compromised a sequence of events ensues, that can occur in repetitive cycles to ensure long-term and serious damage to the gut [10].

The importance of dissolved oxygen levels in drinking water

Inflammatory bowel disease (IBD) -Crohn's disease (CD) and ulcerative colitis (UC) [11]- is becoming increasingly prevalent with the improvement of people's living standards in recent years, especially in urban areas [12]. The emerging environmental contaminant is a newly proposed concept in the progress of industrialization and modernization, referring to synthetic chemicals that were not noticed or researched before, which may lead to many chronic diseases, including IBD. The global emerging contaminants mainly include microplastics, endocrine-disrupting chemicals, chemical herbicides, heavy metals, and persisting organic pollutants [13].

The emerging environmental contaminants including but are not limited to microplastics (MPs), endocrine-disrupting chemicals (EDCs), chemical

herbicides, heavy metals, and persisting organic pollutants (POPs) [14]. These environmental contaminants or exposomes are not commonly monitored in nature but have the potential to enter the environment and human body and cause short-term and long-term adverse health effects. In the immediate dietary intake, the contaminants may cause acute abdominal pain or diarrhea, activating immediate intestinal inflammation. As in long-term exposure, these contaminants will cause chronic diseases like IBD and chronic renal failure, activate a series of chronic inflammation. (Figure 5).

Microplastics (MPs) are tiny plastic particles under 5 millimeters in size [15]. The primary sources of MPs in human life are plastic bottles, abrasives, and opacifiers [16], and they may be degraded into MPs by various factors like ultraviolet over time [17]. The main types of MPs include polyethylene (PE), polypropylene (PP), polystyrene (PS), polyethylene terephthalate (PET), polyvinyl chloride (PVC), Polyurethane (PU), etc. [18]

Endocrine disruptors (EDCs) are chemicals that interfere with the hormones in the human body through the endocrine system [19]. EDCs, including phthalates, flame retardants, pharmaceutical agents, and phenols like bisphenol-A (BPA), ethylparaben, and methylparaben [20], are massively produced and used for food containers, personal care products, and other plastic objects. EDCs enter the human body mainly through dietary ingestion, inhalation, and dermal uptake, and are mostly bioaccumulated in the adipose tissue [21].

Chemical herbicides are herbicides that inhibit the growth of unwanted plants like residential weeds and invasive species [22]. Commercially used chemical herbicides can cause substantial mortality

of non-target plants and insects. They contaminate soil and reside in water and may accumulate in the environment over time. Glyphosate is the most popular herbicide in America. Its concentration continued to soar in the world, with the level rising from 2 to 430 $\mu\text{g/L}$ in natural water [23]. The rising level in water causes severe pollution and threatens food safety.

Heavy metals are naturally occurring elements with high atomic weight and density [24]. They are also called trace elements, usually detected in trace concentrations (ppb range to < 10 ppm) [25]. The heavy metals we discuss are those accumulated in the food chain and are highly toxic to living organisms. Most of them come from natural resources and industry [26], including lead (Pb), manganese (Mn), arsenic (As), cadmium (Cd), mercury (Hg), and others. They are commonly used in people's daily life with widespread pollution [27].

Persistent organic pollutants (POPs) are chemicals of global concern with the potential to persist in the environment. They can bio-accumulate and bio-magnify in ecosystems and threaten human health [28]. POPs mainly include new pesticides, chemicals, and by-products of industrial production, which may lead to multiple effects on immune response and alter gut function.

New pesticide is widely used to wipe out indoor and outdoor pests, such as imidacloprid, pyrethroids, and β -ketonitrile derivatives [29]. It harms humans by taking the contaminated food and water [30] and causing intoxication through its accumulation in the food chain [31]. Its exposure mainly includes the intake of vegetables, fruits, and grains. Among these, pesticide can residue more easily in grains.

Another type of POPs is chemicals and by-products derivate from industrial production [32]. These pollutants include Polychlorinated biphenyls (PCBs), Polybrominated dibenzo-p-dioxins and furans (PBDD/Fs), 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD), etc. [33]. They can accumulate in the environment and exert a long-term adverse effect on human health [34].

Currently, it is thought that these contaminants mainly exert long-term adverse effects by accumulating in the body and inducing chronic inflammation through various poorly understood mechanisms of action, however the aforementioned pollutants have one characteristic in common and that is that they all decrease the levels of oxygen dissolved in the water, and since our body takes oxygen from the water that the cells have inside, then the role of water in biology is more important than we believed, and the levels of dissolved oxygen in the drinking water supplied to cities and towns must have a minimum of 6 mg/L.

Our body takes the oxygen from the intracellular water, and not from the surrounding air.

During an observational, descriptive study about the vessels of the optic nerve and the possible correlation of its morphological characteristics with the three main causes of blindness in the world (macular degeneration, diabetic retinopathy, and glaucoma), we detected the unsuspected capacity of the tissues of the human body to take oxygen from the water contained in the cells inside, such as plants. And they do it in the same way: by dissociating it, and through several molecules derived from protoporphyrin IX (PPIX), a compound present in all living beings [35].

These compounds dissociate the water molecule

irreversibly. The only known molecule that can reversibly dissociate water is melanin [36]. So, we must rethink biology and physiology, given that the lung function is only to expel CO₂, [37], but the lung has nothing to do with oxygen, hence the high mortality in patients who are intubated to force oxygen. through the lungs, since its toxicity ends up destroying them [38].

Therefore, studies about the role of hypoxia in tissue damage must focus on the fact that the origin of oxygen is the interior of the cell and not the atmosphere. Therefore, the analysis of vascular changes must be done without thinking that blood transports oxygen, since the only gas it transports from the tissues to the lung is CO₂.

Let's analyze the following paragraph:

The intestine receives oxygenated blood from the celiac, superior and inferior mesenteric arteries which amount to 20–25% of cardiac output in the unfed state but increases dramatically in response to a meal. Nutrients such as glucose, peptides and lipids can increase total intestinal blood flow by >200%. However, the perivascular PO₂ at the villus tip can decrease by approximately half under the same conditions [39].

Here we would have to modify the first lines, since the oxygen inside the cells comes from the dissociation of water, and not from the atmosphere. Then it would look like this:

The intestine receives blood supply from the celiac, superior and inferior mesenteric arteries which amount to 20–25% of cardiac output in the unfed state but increases dramatically in response to a meal. Nutrients such as glucose, peptides and lipids can increase total intestinal blood flow by

>200%. However, the perivascular PO₂ at the villus tip can decrease by approximately half under the same conditions..... The dramatic increase in blood flow is due, at least in part, to the fact that during digestion, the dissociation of water increases, and this process generates a vacuum that attracts blood flow and not so much that the force of contraction of the left ventricle can boost the bloodstream to such a degree, since there are 95,000 km of capillaries that the average human body contains, and there are only 120 mm Hg that the left ventricle can exert.

Another reason why oxygen decreases during digestion is that this element tends to combine with the molecules that the intestinal tissues absorb, as part of the normal process of assimilation of the different nutrients that the body requires to preserve itself, since we ingest relatively inert substances. and, in a matter of minutes, our body imbues them with life.

The role of hypoxia and hypoxia-dependent signaling pathways are increasingly appreciated to play a role in the physiology and pathophysiology of the intestine. recent pre-clinical animal studies have clearly supported the rationale for pharmacologically manipulating the oxygen-sensitive hypoxia-inducible factor (HIF) pathway in models of Inflammatory Bowel Disease IBD [40].

So, hypoxia plays a decisive role among the various mechanisms that come together in Crohn's disease, but it had not been possible to advance in the knowledge about this disease, as well as its treatment, because the oxygen present in the cells and tissues of the intestine (and the body in general), does not come from the atmosphere that surrounds

us, but from the water that is present inside each cell.

The molecules found inside eukaryotic cells, capable of dissociating the water molecule, as in plants, are sensitive to current contaminants present in water, air, and food. Well, the process by which the cell separates liquid water into its gaseous components is very exact, amazingly exact. And it usually happens in the order of nano and picoseconds. And as long as this process happens with the appropriate intensity to meet the strict requirements of the cells, our body will function well, because it is very well made. But when the oxygen (and hydrogen) that our body obtains by dissociating the water molecule is not enough to meet the demanding needs of the cells, the cells, tissues, organs, and systems tend to become disorganized, and usually the alterations are primarily functional, but in chronic or severe acute cases, even the form also tends to alter.

The circulatory system is extremely long.

If you were to lay out all the arteries, capillaries, and veins in one adult, end-to-end, they would stretch about 60,000 miles (100,000 kilometers). What's more, the capillaries, which are the smallest of the blood vessels, would make up about 80 percent of this length [41]. Thereby, the source of oxygen is not thorough blood vessels coming from distant lungs, simply is too much distance between lungs and cells. It is more practical (and real) that the oxygen (and hydrogen) coming from inside the cell itself. Besides that, in the atmosphere there is so little oxygen, and inside our body there is about 5 times more oxygen.

Oxygen and Crohn's Disease

It is already described that tissue hypoxia is a common feature of active inflammatory disease, and it is true. However, it is not because the lack of atmospheric oxygen that cannot reach cells and tissues through the blood vessels, instead is the compromise of the natural intracellular mechanisms of water dissociation that cannot provide the oxygen (and hydrogen) at adequate levels, so the pressing cell metabolism requirements are fulfilled.

Despite the rate of water dissociation is in the range of pico and nanoseconds, this whooping turnover rate can be impoverished due to polluted water, because an astonishing accurate reaction, as water dissociation at room temperature, it is highly sensitive to relatively minor fluctuations in the ever-changing molecular structure of the liquid water, which are induced mainly by man-made pollutants in the water, meals, or even air.

It is worst when the toxicity of those pollutants can reach the cell's molecules that normally make the water dissociation, impregnating it, as the case of melanin granules, normally placed in the perinuclear space, which is limited internally by the nuclear cell membrane, and in the outer side by the rough endoplasmic reticle.

Examples of patient of Crohn's Disease treated with enhancement of dissociation of water of intracellular location.

The response of patients suffering from Crohn's disease to the administration of drugs that restore or improve the adequate physiological turnover rate of the dissociation of intracellular water, such as QIAPI 1 (TM), sublingual drops, is surprising. In the following photographs you can see the dif-

ference between the initial photograph, before the treatment, and the evolution after a few weeks.

Case 1



Figure 6) In this case, a male patient in the seventh decade of life, with several years of evolution with numerous daily bowel movements, significant weight loss, fever, general malaise, etc., as well as multiple treatments that failed to stabilize him. The photograph was taken at the first consultation.

Once the bases of our treatment were explained to the patient and family, and once the informed consent was signed, QIAPI 1(TM), sublingual drops, was started at a dose of three drops every hour, all the time. that the patient was awake.

The following photographs (7, 8) were taken 5 weeks after the start of treatment.

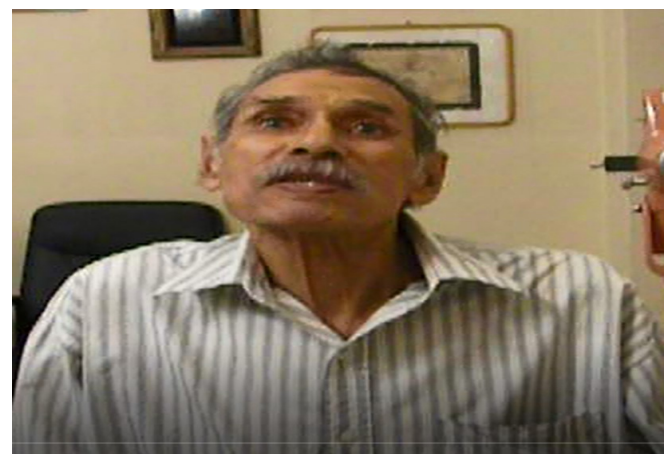


Figure 7) 5 weeks after the start of treatment, the clinical improvement is surprising. From an initial weight of 40 kg, the patient regained twelve kg at week 5.



Figure 8) After twelve weeks of treatment, the patient only reached 60 kg in weight. Symptoms improved by 90%.

Case 2) Male patient in the sixth decade of life, resident in a city in northern Mexico, with important mining activity, which began about a decade ago, with symptoms compatible with Crohn's Disease. He has received several treatments by different physicians throughout this time, but with no major results. The following photograph (9) was taken at the first consultation.

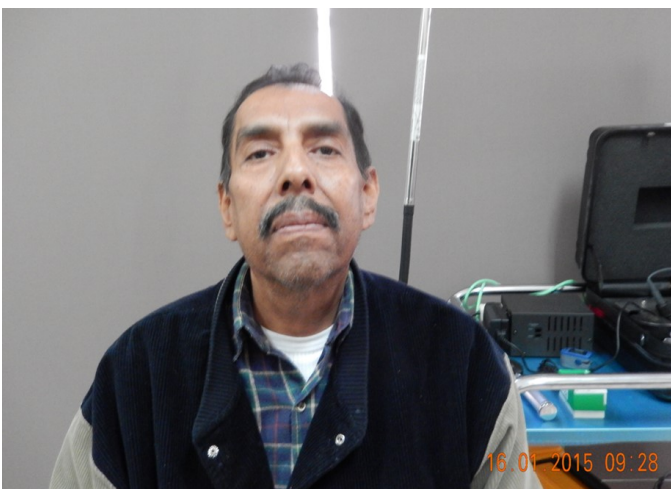


Figure 9) The signs and debilitating symptoms of Crohn's disease were more or less controlled with the usual treatments, but the patient tried to get on with his normal life.

Once the bases of our therapeutic approach were explained to the patient and family, and once the informed consent was signed, he was prescribed QIAAPI 1(TM), sublingual drops, every hour, the entire time he was awake. The next photograph (10) was taken three months later, and the photograph (11), 5 years later.



Figure 10) The response to the enhancement of water dissociation is good, very good. The signs and symptoms have improved substantially.



Figure 11) After 5 years of continuous treatment, the patient has a good quality of life only using QI-API 1. Since the contamination of the environment where the patient lives continues, it is not advisa-

ble to suspend it.

Case 3) Male patient in the sixth decade of life, who was treated via email, given that he resides in another country and pandemic lockdown. The patient has been diagnosed with Crohn's disease for almost a decade. He has been treated by various doctors, who have prescribed similar treatments and strict diets, but he has not been able to gain weight and the symptoms continue, although with ups and downs.

Photographs 12 and 13 show the patient before our treatment, photograph 14, 4 months after starting the treatment.



Figure 12) The weight loss is visible in the neck region, as well as the adherence to the vegetarian diet.

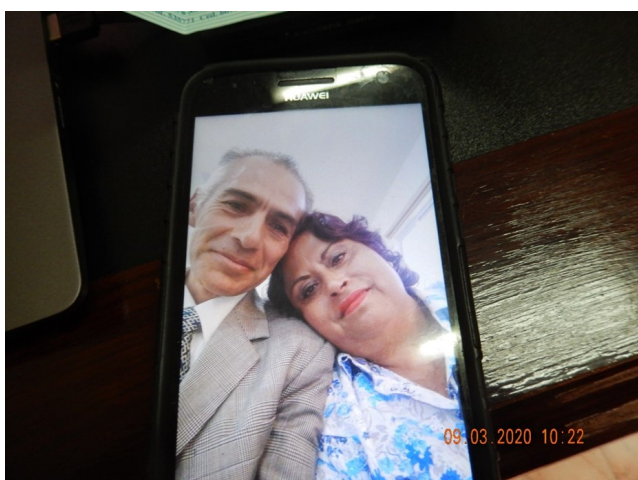


Figure 13) This photograph was also taken before treatment, where you can see the weight loss characteristic of this disease. As well as depression in both the patient and the wife.

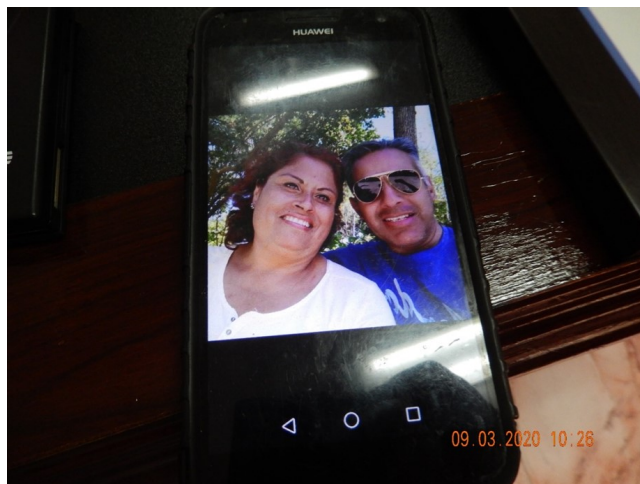


Figure 14) After almost 4 months of treatment, the weight gain can be seen in the photograph, as well as the improvement of depression in both the patient and his partner.

The importance of intracellular oxygen levels is relevant, but the oxygen must come from inside the cell, which is obtained by dissociating water like plants, and not through the lungs as was believed for almost 300 years. The restoration of intracellular oxygen levels plays an important role in this, and other diseases associated or not with Crohn's disease.

Association Between Inflammatory Bowel Disease and Both Psoriasis and Psoriatic Arthritis

The prevalence of psoriasis in patients with Crohn's disease (CD) is higher than chance would allow if they were mutually exclusive diseases. A close examination reveals genetic and pathologic connections between these diseases [42].

Psoriasis, psoriatic arthritis, and inflammatory bowel disease, i.e., Crohn disease and ulcerative colitis, are chronic systemic immune-mediated dis-

orders affecting an increasing proportion of adults and children worldwide. Observational studies have suggested an association between inflammatory bowel disease and psoriasis and vice versa [43].

The increased levels of tumor necrosis factor-alpha are seen in lesions of CD and Psoriasis. It is because the elevation of said tumor necrosis factor alpha is conditioned by hypoxia at the intracellular level and is not a specific response but reflects the disorder that follows when the dissociation of water, which is an amazingly accurate process, becomes unbalanced. due to environmental factors such as water contaminated with pesticides, herbicides, fertilizers, metals, plastics, solvents, industrial waste, etc.

The dissociation of water is a very strict process, which provides the cell with molecular oxygen and hydrogen, and in the case of melanin, also with high-energy electrons, since for every two water molecules that are reformed, 4 electrons are generated. high energy. And in the case of the dissociation of water that takes place in the compounds derived from protoporphyrin IX, the dissociation is irreversible, as in chlorophyll and hemoglobin, both derived from PP IX, and therefore only provide hydrogen and oxygen, both of molecular.

Since the dissociation of water is the very first spark of life, it is not surprising that it is present in the eukaryotic cells that make us up. And the factors that affect this reaction impact the entire organism, at first in the function and if the imbalance is intense or long-term, the shape of the cell will also be altered.

Crohn's disease and psoriasis have the same principle: lack of oxygen (and hydrogen)

It is a mystery about what is the role of gut microbiome perturbation in driving immune pathogenesis in both psoriasis and Crohn's disease. Furthermore, it is well known that microbiota has a leading role in the pathogenesis of many diseases [44]. Different studies show evidence of a connection between gut and skin health state that is implied in the pathophysiology of many chronic inflammatory diseases [45]. The hypothesis is that the gut microbiome is responsible for the skin homeostasis and allostasis [46]. Even if the complete mechanism by which communication occurs between the gut and the skin is not fully understood, it has been reported that gut microbiota affects skin health by inducing an immune system imbalance [47].

It is complex to think that both psoriasis and Crohn's disease are linked to a sustained immune dysfunction generated by a gut microbiota dysbiosis that can negatively influence immunological homeostasis, even when genetic, epigenetic, and environmental risk factors are considered.

Given now that we know that our body does not take oxygen from the air but from the water that cells contain, like plants, through the dissociation of the water molecule and that it is a fundamental mechanism present in all our cells, it would seem more consistent that this process, when affected by contaminated water, contaminated air, and contaminated food, is affected diffusely, which leads to generalized cells dysfunction.

Thereby, intracellular oxygen levels are the main regulator of the Gut-Skin Axis, and not so much the intestinal microbiome.

Case report

Male patient in the seventh decade of life, who began with skin alterations for just over three decades, starting with peeling in isolated areas, but which increased as time went by, despite multiple treatments prescribed by different doctors. The following photographs were taken during the first consultation.



Figure 15) appearance of skin lesions before treatment.



Figure 16) Pretreatment. In addition to the skin lesions, signs of arthropathy can be seen.



Figure 17) Pretreatment. We can consider it as a severe case of Psoriasis.



Figure 18) Pretreatment. Skin lesions include more than 80% of the body surface.



Figure 19) Pretreatment. The patient could no longer work, and did not leave his house, so he had severe depression.



Figure 20) Pretreatment. The injuries were extensive and severe.



Figure 21) Pretreatment. The hands and abdomen were also affected.



Figure 21) Pretreatment. The extent of the lesions is linked to decades of evolution.



Figure 22) Pretreatment. Even the palms of the hands were affected.



Figure 23) Pretreatment. The posterior area of the neck and pinna were visibly affected.



Figure 24) Pretreatment. Affected neck and shoulders.

After evaluating the patient, it was explained that the basis of the treatment was the oxygen levels inside the cells, and that the body did not take oxygen from the air that surrounds it, but from the water that our body contains. The function of the lung is only to expel CO₂, but the lung and oxygen have nothing to do with each other, and the proof is that when patients with acute respiratory failure go to a hospital, and the health personnel, according to the dogma prevalent, tries to force the introduction of oxygen through the lungs, mortality is unacceptably high, reaching 90% in some regions, not counting accidents such as explosions and fires due to high levels of oxygen in emergency rooms.

Once the patient and family members signed the informed consent, QI-API 1 (TM), sublingual drops, was prescribed at a dose of three drops every hour, as long as the patient was awake. The following photographs were taken a month later.



Figure 25) After one month of treatment with QI-API 1™ sublingual, every hour, during daytime.



Figure 26) After a month of treatment, the skin changes are significant.



Figure 27) The administration of QI-API 1 was noticed throughout the affected surface.



Figure 28) The skin reaction is surprising when intracellular oxygen levels are restored.



Figure 29) The front of the hand showed notable changes after just one month of treatment.



Figure 30) The back of both hands will improve significantly.



Figure 31) The auricle Improved substantially.



Figure 32) The great involvement of the neck decreased significantly.



Figure 33) Both legs also showed improvement.



Figure 34) Video of Crohn's Disease patient (in Spanish).

Conclusion

Both psoriasis and Crohn's disease respond very well to the restoration of oxygen levels inside the cells, which shows that both diseases have a common origin: hypoxia. But oxygen must come from the inside out, and not from the outside.

The lung has no mechanisms to take oxygen from the atmosphere and introduce it into the bloodstream. The lung is only responsible for expelling the CO₂ that continually forms inside our body, day, and night. But we continually take oxygen from the water that the cells contain inside.

Our discovery finally explains, after more than 100 years, the enormous difference between the oxygen content of the atmosphere it is almost 5 times higher inside our body. Therefore, we do not breathe oxygen but rather extract it from intracellular water, dissociating it, like plants.

As population grows the pollution of drinking water increases, which is reflected with the consequent rises in the number of affected people by this devastating disease. The unsuspected capacity of human eukaryotic cells to dissociate the water molecule and provide itself with oxygen (and hydrogen) means a new way to understand and therefore the development of better treatment.

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Conflict of interest disclosure: Both the finding of the unsuspected capacity of human body to dissociate the water molecule throughout several molecules and the development of QIAPI 1™, were achieved in our study center.

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