Carnicom Institute Research

2010

Acknowledgements

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MORGELLONS : pH, CONDUCTIVITY, IONS & LIVE ANALYSIS

MORGELLONS :
pH, CONDUCTIVITY, IONS & LIVE ANALYSIS
Clifford E Carnicom
Jan 10 2010
This page has embedded video segments.
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Adobe Flash Player is required.
[NOTE: Video clips have disappeared, will be replaced if possible]

I am not offering any medical advice or diagnosis with the presentation of this information. I am acting solely as an independent researcher providing the results of extended observation and analysis of unusual biological conditions that are evident.

All work thus far indicates that the culture forms under examination encompass primary pathogenic forms that are in association with the so-called "Morgellons" condition. These are the the encasing filament, the chlamydia-like organism, the mycoplasma-like (pleomorphic) organism and under certain conditions, the erythrocytic (red blood cell) form. This list does not exclude current or future discoveries by any party that are sufficiently documented, but this list is inclusive as of this date.

An exact match in chemistry, size and growth has been established between the human biological based cultures and the cultures developed from a specific airborne filament sample that the U.S. Environmental Protection Agency (EPA) has refused to identify. The same degree of similarity has been achieved with a culture developed from a human DNA extraction. Please see previous reports for further information on these topics.

The chemistry of the various cultures has been under study in more detail of late, and the following assessments can be provided at this time:

1. The culture flourishes in an acidic environment. Most biochemical processes take place within relatively narrow and defined pH ranges. As such, the acidic nature of the growth medium has increased in importance in the evaluation of the growth. Conversely, it is proposed at this stage that an increase in alkalinity in the growth

medium is likely to be less favorable to the growth process. This hypothesis is eventually to be tested in detail, but several months will likely be required to detail that problem.

2. Conductivity testing indicates that the conductivity of the growth medium increases substantially in correlation with the age of the culture. This indicates that an increase in the ion concentration of the growth medium has occurred as the culture matures. The growth of the filament stage of the culture usually passes through three color phases during maturation : white, green and eventually black. The full growth cycle can commonly take two to three months to complete.

3. The pH of the culture medium itself (red wine) does not appear to significantly change during the growth process. When this information is coupled with that of the conductivity report above, it can be established that the H+ ion or the OH- ion concentration does not appear to change substantially during the growth process. It does remain clear, however, that the growth propagates strongly *within* an acidic (increased H+ concentration, specifically red wine) environment.

4. The increase in conductivity beckons for the determination of what ion species change as a function of growth, i.e., if not the hydrogen or hydroxide ion. A series of qualitative chemical tests of the affected culture medium vs. a control of original red wine have been conducted. Although the work is of a preliminary nature, it does appear as though certain ions of importance have been identified. The initial assessments at this stage are that:

a. There are indications of an increase in the chloride ion concentration (Cl-) with the age of the culture.

b. There are indications of a decrease in the iron ion concentration (Fe2+) with the age of the culture.

5. It appears that the chlamydia-like organism (a focal point of the biological research underway) can use the ferrous ion as a source of nourishment. This assessment is reached both through qualitative chemical ion analysis and by direct observation of the culture development.

There are likely to be significant biological ramifications that would accompany such chemical changes, should these analyses be borne out in time; these are to be discussed at a later point if they are further confirmed. It is reasonable to expect significant biochemical changes in conductivity or ion exchange within the human organism. It is also germane to state that iron is essential in the production of hemoglobin, and that degradation of red blood cell integrity has been a primary subject of research for some time now. It can also be stated that a decrease in iron levels can lead to increased fatigue and immune suppression.

No medical advice or diagnosis of ANY kind is made with the presentation of this information, and all readers are advised and required to work with their chosen health professional for any medical or health concerns or issues. All reports of a biological nature are to be regarded as informational only and they derive from independent research.

This page has four embedded video segments.
A high speed connection will be required along with sufficient loading time.
Adobe Flash Player is required.

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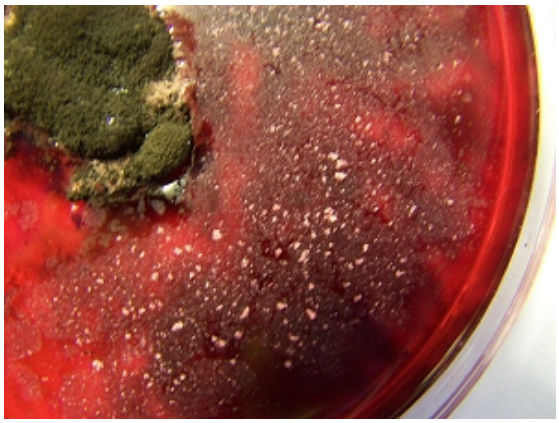
CULTURE ION ANALYSIS :



A testing of the hypothesis that iron may act as a nutrient source to the pathogenic culture within the red wine medium. In this case, a mature and relatively inactive portion of the culture is at the top left corner of the photograph (dark green conglomerate). A small amount of ferrous sulfate in powdered form has been added to the surface of the wine medium. The question to be answered is whether or not there is a noticeable resurgence in growth in conjunction with the presence of the iron compound. The result of the test is positive, i.e., there is an increase in growth that relates directly to the added presence of the iron.

Another photograph showing the relatively rapid development of cultural growth (white specks , chlamydia-like component, one of four components) on the newly introduced iron salt on the top of the wine. The hypothesis of utilization of the iron iron (Fe2+) appears to have been confirmed with this test. This growth was perceptible within approximately two days time. Ferrous sulfate is soluble in both water and alcohol and will produce ferrous ions (+2) in this wine medium. The hypothesis of consumption of the ion has been tested through a series of qualitative iron tests, and the initial results of those tests is also positive.

A live examination at HIGH magnification of the developing culture growth (the same growth referred to above) that is a result of the introduction of the soluble iron compound into the red wine medium. The growth in all respects is perfectly identical to the chlamydia-like organism that is the subject of intensive study in these reports. This particular organism appears to be a crucial link in the understanding of the biological disruptions that are characteristic of the "Morgellons" condition. This video shows the capture of the organism in a live mode for the first time. It is apparent that the organism is motile. Magnification approx. 10,000x. Please allow sufficient time for all videos to load as well as for sufficient bandwidth.

Another view in a live mode at HIGH magnification of the newly developing cultural growth in direct response to providing a source of ferrous ions within the red wine culture medium. Magnification approx. 10,000x.

LIVE BLOOD CELL ANALYSIS :

A live view of a blood sample that demonstrates the frequent, if not ubiquitous occurrence of the chlamydia-like organism. This finding has been extensively reported on, and additional information can be found in the paper entitled A Mechanism of Blood Damage from Dec 2009. In this specific case, the two organisms that appear to be within the central cell may actually be underneath or on the top of the cell as opposed to within it. These blood cells appear to be of reasonable integrity and at this time do not demonstrate the breach of the cell wall that commonly occurs in more severe cases. One of the important findings (please see referenced paper above) is that large numbers of the organism can often be found within the serum of the blood even if the red blood cells themselves remain intact. It has also been determined that red blood cell integrity can change quickly, i.e., both deteriorate or improve, within a three week period. It is surmised that the state of the immune system is a critical factor in the changes or progressions that can take place. Careful observation of this video will reveal the existence of additional live organisms in the blood external to the cells. Magnification approx. 10,000x.

Another live view of the blood sample. Careful observation of this video will reveal numerous instances of the chlamydia-like organism external to the cell walls. Motility is apparent. Magnification approx. 10,000x.

ANIMAL BLOOD

ANIMAL BLOOD
Clifford E Carnicom
Jan 27 2010

I am not offering any medical advice or diagnosis with the presentation of this information. I am acting solely as an independent researcher providing the results of extended observation and analysis of unusual biological conditions that are evident.

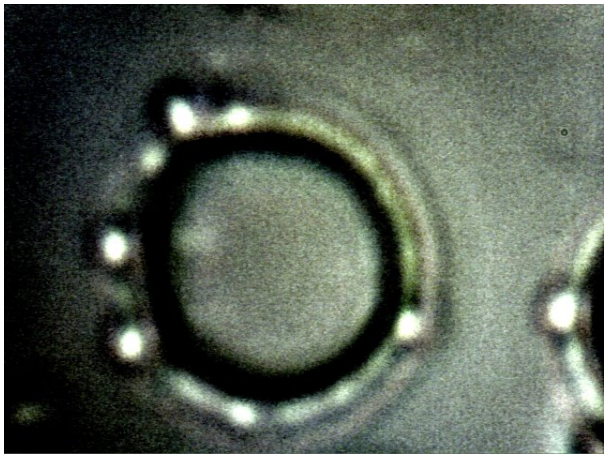
Samples of blood from two canines have been made available to me for examination. The age of one of the dogs is 11 years and the age of the other dog is unknown.

Both animals show the existence of the chlamydia-like organism within the blood and the serum in a fashion identical to that which has been repeatedly found in human blood samples. This particular organism is under extensive study and it is a dominant component of the biological research that is underway. This organism, along with three other forms (pleomorphic, encasing filament, erythrocytic) repeatedly described are central aspects of the so-called "Morgellons" condition.

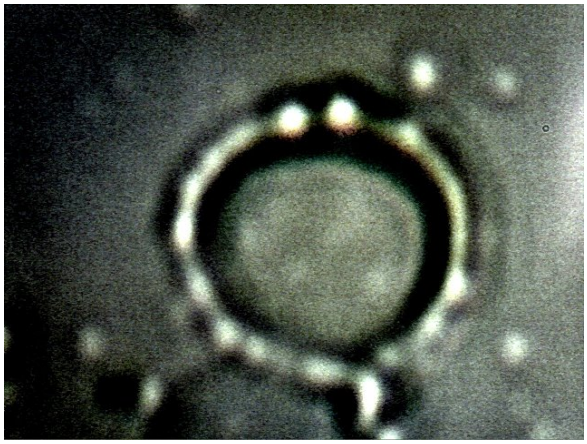
This research reveals that the consideration of biological symptoms, structures and characteristics of the *Morgellons* condition must now be extended to include other life forms beyond that of the human.

At a minimum, this consideration now extends to the mammalian segment of the animal kingdom. There is additional research (external DNA examination and culture analyses) underway which suggests that this discovery may extend further to include the plant kingdom or the food supply; further examinations are required to clarify the initial findings.

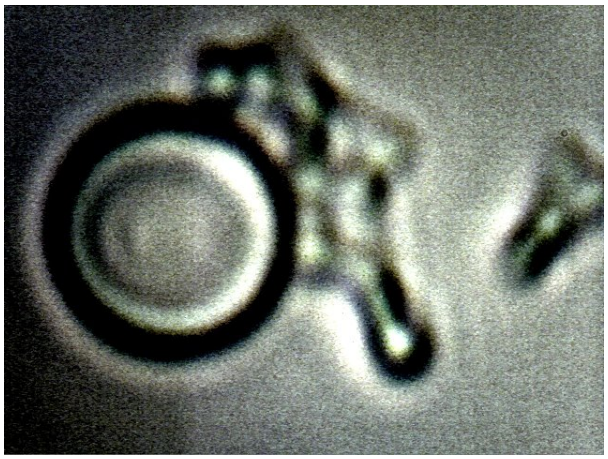
PHOTOGRAPHS:



An example of canine blood subjected to examination at high power under the microscope. The existence of the chlamydia-like organism that has been reported on extensively over several years on this site is evident. Several instances of the organism attached to the exterior of the erythrocyte wall are visible. Approx. magnification is 10,000x.



Additional instances of the chlamydia-like organism external to and attached to the exterior of the canine erythrocyte wall are visible. Please see A Mechanism of Blood Damage and Live Analysis for further information on human studies. This particular organism is a central focus by this researcher on the *Morgellons* conditions Approx. magnification is 10,000x..



Additional instances of the chlamyida-like organism external to the canine erythrocyte wall are visible. Approx. magnification is 10,000x..

A sample of the blood of the 11 year old canine subjected to high magnification. Additional damage to the integrity of the erythrocytes of the 11 year old dog exists in comparison to the other sample. Approx. magnification is 10,000x.

MORGELLONS : A NEW CLASSIFICATION

MORGELLONS : A NEW CLASSIFICATION
Clifford E Carnicom
Feb 03 2010
Edit Feb 11 2010
Edit Nov 27 2015

I am not offering any medical advice or diagnosis with the presentation of this information. I am acting solely as an independent researcher providing the results of extended observation and analysis of unusual biological conditions that are evident.

The so-called "Morgellons" condition has thus far defied proper identification as to its root causes or nature. Although there appear to be many varieties of manifestation, this researcher has from the beginning attempted to identify and focus on those aspects that exist as common denominators. Available resources and technology by necessity limit the scope of this examination, and it is expected that additional discovery will come to light. At the present time, however, a set of four primary components has been established at the microscopic level as having , at the very least, some degree of association with the condition. These are (at a minimum):

1. An encasing filament structure, generally on the order of 12 to 20 microns in thickness, and it is this form which is visible to the human eye. This encasing filament may contain an internal network of sub-micron filaments, or some combination of the following items on this list.

2. A chlamydia-like organism (Chlamydia pneumonia is the strongest candidate thus far) measuring on the order of 0.5 to 0.8 microns.

3. A pleomorphic form (Mycoplasma-like is the strongest candidate thus far).

4. An erythrocytic (red blood cell – likely artificial or modified) form.

It is proposed that one reason that this set of organisms has defied definition is because IT NEVER HAS existed before, i.e., it is indeed a "new" organism. The question that arises is how do we go about classifying the overlying form given the underlying complexity and variation of the INTERNAL constituents? This paper will attempt to provide a rationale that is consistent with the available information and evidence.

The term "Morgellons" arose out of necessity and convenience; it did not arise from a basic understanding of the dynamics and metabolism of the organism(s) involved. This is understandable for many reasons, not the least of which is that no such foundation of knowledge even existed at the time. This foundation remains far removed, undoubtedly in part because of the pattern of denial, refusal and misdiagnosis that has plaqued the "formal" involvements or investigations from the onset. Whether or not the failure to confront the reality of the condition has been deliberate or not, history shall judge for us regardless of our belated participation.

The name "Morgellons" will probably stick with us now whether we like it or not, and whether is is accurate or not. The term will almost always be shrouded in controversy and denial to a certain degree. This is the way of language and of human beings. Again, how much of this mire is deliberate or a result of confusion and ignorance is also uncertain, but at some point the truth speaks to us whether we are ready to listen or not.

The point of this paper is to strive for a foundation that is, to the best of my knowledge on the subject, consistent and accurate with regard to that which is known. My research is not complete or representative of the whole, it is only that which I can offer under the circumstances. These circumstances are hampered by the lack of open, fair and honest discourse amongst the public, professional and governmental communities and by the lack of coordinated and properly funded research. It is nevertheless, the best overall picture that I can offer at this time.

Now, to the details:

One of the more vexing challenges that faces the characterization of this condition is the diversity of form and structure within the set of components identified. Also, under certain circumstances, all four components have been identified as existing within a single integral unit, i.e, all bounded by the encasing filament structure. In addition, the filament form appears to represent the culmination of the developmental stages, at least within the culture trials examined thus far.

If we take each of these components separately, the confusion of varying form becomes apparent:

1. First, with regard to the encasing filament, the more obvious interpretation might be that we could be dealing with a fungal form. Unfortunately we run into numerous difficulties right away, such as no known match to any fungal form has been established thus far. A breakdown of the filament has been accomplished by subjecting it to extremes in chemistry and heat, and this is highly indicative of a protective casing to the internal components. One of the reasons that we cannot have a match to known fungal forms is because of what is happening INTERNAL to the encasing filament, which brings us to the second item on the list.

2. The chlamydia-like structure would appear on the surface to be a bacterial form. Chlamydia (esp. Chlamyida pneumonia) has been suggested as one target candidate because of numerous parallels in morphology, biological characteristics and symptomology that are in accordance with my study of that particular organism. But we must also notice that from the beginning, I have specifically used the term "chlamydia-like" , and not Chlamydia, for two good reasons:

a) No absolute and proper means of identification at the required level has come forth from any source.

b) Certain characteristics of the organism DO NOT fit the Chlamydia genus, especially with regard to chemical and thermal stresses that have been placed on the organism during various testing procedures.

3. The pleomorphic (many forms) form is difficult by its vary nature, as indicated by the name itself. The mycoplasma candidate, at its origin, is too small to be seen with conventional microscopy. It is one of the smallest, if not the smallest bacterial form known and has the distinguishing feature of having no cell wall. It is this very lack of the cell wall that allows for the pleomorphic form to occur. Therefore it appears that we are dealing with only a subsequent morphology that develops and is visible, and it is at this level that this candidate identification has been made. Unfortunately, we also have the same chemical and heat stress issues with this structure as we do with the the chlamydia-like structure. Thus far, both of these "bacterial-like" forms have resisted all chemical and heat extremes that they have been subjected to. The fact that the bacterial-like forms exist WITHIN the encasing filament confronts us with an additional serious contradiction in conventional taxonomy.

4. And lastly, at least for now, we consider the erythrocytic (red blood cell) form. This identification truly stretches the limit of common understanding and conventional knowledge. Erythrocytes are from blood, and blood comes from animals. The appearance of this entity is completely incongruent with any fungal or bacterial

interpretation that we might attempt to make. Even the appearance of an erythrocyte (artificial or not) outside of the host biology is a leap outside of conventional knowlege and public discourse. And so, we are forced to ask, how could this be?

We must now talk about phylogeny, or the structural aspects of life as we know them to be (i.e., the Tree of Life).

Science often evolves arduously and gradually, and many times this is for good cause and reason and to our benefit. At other times, the processes of review and acceptance are stubborn to the point that they deliberately hamper the progress and renaissance of understanding that is eventually to usher in. Certainly at times, and *usually* for that matter, there are power, economic and institutional frameworks in place that have a vested interest in maintaining the status quo. The emotional state of society must be prepared and "ready" to accept the knowledge base that has painstakenly developed over the decades that precede those special moments of insight that have been gifted to mankind.

One of these transformational states appears to have occurred in 1978. In that year, Carl R. Woese provided a somewhat radical interpretation to our understanding of phylogeny[1], There were obviously difficulties that existed with the earlier template that had been established, which was composed of six "kingdoms", for example, the plant kingdom, the animal kingdom, the fungal kingdom, etc.[2]. What Woese did was to seek the lowest common denominator within phylogenetic relationships, and it was the RNA (ribonucleic acid), or the underlying genetics, of the organism that became the key of understanding. As such, Woese essentially re-wrote the blueprint of the structure for life as we know it, and elevated (and reduced at the same time) the structural branches to three DOMAINS instead of six "kingdoms". It would appear (after this period of roughly 30 years) that the insight of Woese has been generally accepted and rightfully transformational in our understanding of the "structure" of life. This demonstrates to us that science is sometimes in need of radical change, and that we should not become too comfortable as to what we think is true or false.

These Domains are :

1. The Bacteria

2. The Archaea

3. The Eukarya

It is in our interest to understand the basic members and characteristics of each of these groups, as they represent a simpler, more comprehensive and a more accurate model for the understanding of life's "structural" features. I encourage each of us to make this effort, at least at the fundamental level. The three Domains vary in the cell

type, cell wall, membrane lipid(fat) structure, protein synthesis, the transfer RNA molecules *and in their sensitivity to antibiotics*[3]. Even the terms prokaryote and eukaroyte(non-nuclei or nuclei) are no longer adequate and they fail to define the salient features identified by Woese.

What has prompted this paper is the realization that the "Morgellons" condition crosses the lines between these three Domains.

Here is, at least in part, the reasoning for the rather bold statement that has been made:

The difficulties with the "bacterial like" forms (chlamyida-like and mycoplasma-like) have already been enumerated. The testing processes thus far have subjected these two components to boiling, extremely strong alkalis (sodium hydroxide, bleaches) and extremely strong acids (e.g., hydrochloric acid). There is also good reason to think that the structures have been subjected, at a minimum, to extremes of cold (e.g., -50 to -60 deg. C). At this point none of these stresses imparted to the "structures" have damaged their viability for future growth or reproduction. Under the harshest of circumstances, it appears as though these structures are still held in biological stasis or dormancy until more favorable environmental conditions return. One of the dominant characteristics of the Archaea is their ability to withstand extreme environmental conditions and stress. It is representative to encounter these forms of life in volcanic vents and deep under the ice shelf; they are prime candidates in the explorations for extraterrestrial life. Many of the organisms from the Archaea group do not require oxygen and can thrive under anaerobic conditions that metabolize carbon dioxide rather than oxygen. Archaea are considered to likely be one of the oldest forms of life on earth. It is relevant to mention that the Archaea are not sensitive to antibiotics[4], and it is of interest to note that the existence of Archean pathogenic forms has apparently not yet been established.

By the same token there are some aspects of these two structures that are quite in accord with bacterial expectations, i.e., metabolism within a cell, size, pathogenic impact, symptomology, etc.. It is this variation that forces us to consider a crossover between two of the Domains even at this early level of discussion, i.e., the Bacteria and the Archaea.

In addition, we must now consider the encasing filament structure. On the surface, this would appear to bring the Eukarya to the forefront, as the fungi are one element of this group. The Eukarya includes such examples as fungi, protozoa, slime molds, plants and animals. The difficulties, as mentioned before, are that no such fungal identification exists to date and that structures more representative of the OTHER Domains occur INTERNAL to the encasing filament.

And lastly, the existence of an "erthyrocytic" form violates all boundaries from any of the considerations above. Blood cells emerge in the more complex phyla of life, such as humans, for example. Blood cells, by any conventional biology, do not grow in test tubes. Admittedly, the desire to create an artificial blood has been a holy grail of biological research for some time now[5]. The commercial world teeters on the edge of artificial blood production and we should not be surprised if clandestine operations have made significant advances in this field. But at this stage, regardless of the marvels involved, one does not expect Eukarya characteristics to share the same house with the Bacteria and Archaea Domains.

The Eukarya are *also*[6] stated to be insensitive to antibiotics. The fact that two of the three domains have this insensitivity points out the difficulties that might be expected in treating the condition with conventional antibiotics.

As such, it appears that we are dealing with an "organism" that transcends the structural existence that has been defined for life itself. The Morgellons condition appears, by the best information and analysis to date, to be an orchestrated synthesis that crosses the lines of the three established Domains of life on this planet. It is very difficult to envision, at this state of knowledge, that this "organism" (for the sake of discussion) is the result of any "natural" or "evolutionary" process. This hypothesis, if accepted, forces us to consider the very real prospect of deliberate and willful indulgence in the arena of genetic engineering. This could certainly explain, at least in part, the deliberate and willful lack of disclosure and honesty on the issue to the public. We may also ask what was the motivation for the "ordained" misdiagnosis of 'delusional parasitosis' that was promoted so negligently and that has now failed so prominently? What is at the heart of the strong coincidence between biological and certain environmental samples? Disclosure and full honesty will reclaim their rightful positions in the end, regardless of the machinations of our own species.

The more appropriate "term" for this condition may evolve in like order to that which has been described for science in general; I will not confuse the issue with additional nomenclature at this time. What has happened here is that the term "Morgellons" now encompasses a broader context than that which has been previously understood. I shall always correct my ways if a straightforward address of the issues reveals that everything after all is amazingly simple, and that we can get on with our ordinary business of taking yet another pill to alleviate the symptoms. The evidence and history thus far does not project such an innocent and gleeful outcome, and in the meantime we must prepare ourselves for the heinousness that has been unleashed, by whatever means, upon us.

Clifford E Carnicom
(p.s., sorry, no pictures this time…)

Additional Note Feb 11 2010:

For those that consider the extent of this article to be implausible, please refer to the public disclosure on February 05, 2010 of the project by the Defense Advanced Research Projects Agency (DARPA) to develop immortal "synthetic organisms", as outlined in the unclassified version of the 2011 budget. [7] From a recent article[8] on the budget that has been published, it declares that,

> **"As part of its budget for the next year, Darpa is investing $6 million into a project called BioDesign, with the goal of eliminating "the randomness of natural evolutionary advancement."**

It may be of interest to compare this phrase with that which has been declared within this report:

"It is very difficult to envision, at this state of knowledge, that this "organism" (for the sake of discussion) is the result of any "natural" or "evolutionary" process."

There are many that believe that the accomplishments from classified projects and budgets precede the disclosure of similar goal-oriented unclassified projects by a factor of many years to decades. My appreciation is extended to the individual that brought this disclosure to my attention.

Clifford E Carnicom
Feb 11, 2010.

References:

1. Tortora, Gerard; Microbiology, An Introduction, 2001, Benjamin Cummings-Addison Wesley, 277-287.
2. Towle, Albert; Modern Biology, 1999 by Holt, Rinehart & Winston, 350.
3. Tortora, 277.
4. Tortora, 279
5. Towle, 39.
6. Tortora 279.
7. Pentagon Looks to Breed Immortal 'Synthetic Organisms,' Molecular Kill-Switch Included, Wired, Feb 05, 2010.
8. Department of Defense Fiscal Year (FY) 2011 President's Budget, Defense Advanced Projects Research Agency

[It is observed that the last link results in an "Access Denied" error message as of 11/27/15]

MORGELLONS : A DISCOVERY AND A PROPOSAL

MORGELLONS :
A DISCOVERY AND A PROPOSAL
Clifford E Carnicom
Feb 22 2010
Edited Jun 02 2011
Edited Jun 12 2011

Note: I am not offering any medical advice or diagnosis with the presentation of this information. I am acting solely as an independent researcher providing the results of extended observation and analysis of unusual biological conditions that are evident. Each individual must work with their own health professional to establish any appropriate course of action and any health related comments in this paper are solely for informational purposes and they are from my own perspective.

A set of conditions that leads to the enhanced growth of the "bacterial-like" components of the cultures under study has been identified. This will be referred to as the *discovery* aspect of this paper.

A set of conditions that apparently leads to the inhibition of the growth of the "bacterial-like" components has also been identified. This will be referred to as the *proposal* aspect of this paper.

These bacterial-like forms comprise two of the four primary components that have been repeatedly identified as being distinctly characteristic of the so-called "Morgellons's condition. The additional two forms are that of the filament and erythrocytic forms, respectively, as enumerated within numerous earlier papers (e.g., Morgellons : A New Classification). The bacterial-like forms are at the crux of the research on this condition, as they appear to be the precursors and prerequisites to the matured development that encompasses all four forms. The existence of the bacterial-like (chlamydia-like and mycoplasma-like) forms can only be established with certainty at sufficient microscopic examination (approximately 10,000x).

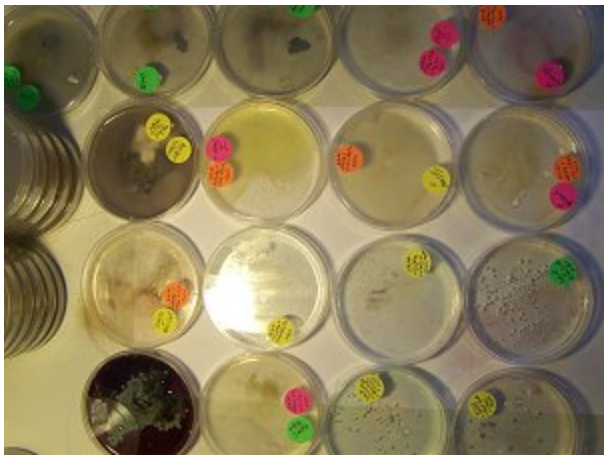
DISCOVERY

Now for additional details on the discovery aspect of this paper. A general statement will be made, and then I will expand upon this statement with additional information:

"Given that a hydroxyl free radical exists within an acidic environment with sufficient nutrients, the growth of the *Morgellons bacterial-like organisms* in that same medium will increase rapidly in the presence of oxidizers."

Let us now discuss how this statement has evolved and what it means.

Hundreds of various culture trials have been analyzed over the past several months since it was learned that the four components (as a minimum) can be cultivated in a controlled environment external to the body. These culture studies continue. It is these cultures that have allowed many conclusions and inferences to be drawn on various aspects that affect the growth of the pathogens under study. Some of the aspects that have been considered include variation in the culture medium (agar, wines, simulated wines, broths, etc.), acid or alkalinity (pH), conductivity variation, ion analyses, nutrients and potential inhibitors to growth, for example. Some of the approaches and assessments have been reached through a combination of trial and error, experimentation and intuition; the majority of them have been reached through the prolonged and progressive accumulation of various rationales and study. The general statement above has been reached through a combination of all of the above.



Culture Trials Under Examination

Rather than detail all of the various combinations that have been evaluated over the many preceding months, let us focus now on more recent developments that seem to be especially important with respect to the growth and the inhibition of the pathogens.

One of the changes that has occurred during the last several weeks is to shift the majority of the cultures to the use of white wines instead of red wines. Solution based chemistry by itself has many advantages, but one of the needs that has arisen is to develop a colorless or clear solution based culture so that analysis and observation become more straightforward. This idea was successful and numerous advantages have resulted from this switch. In addition, we learn that growth, at least at the preliminary stages, is not affected by whether a red wine or a white wine is involved (i.e., tannin consideration, etc.). Indeed, a "simulated wine" culture has also been developed with some success, and this has the extended advantage of being both transparent and of known chemical composition. This level of control may become even more important in the future, but for the time being, white wines are simple to use and accomplish the immediate purpose. Red wines have the known advantage of being able to produce the culminating filament form; not enough time has elapsed yet to determine if this remains the case for white wines. Agar cultures were the first to be developed some time ago, but they offer no distinct advantages at this time.

The next item to consider is the role of iron. It may be recalled from earlier reports that an interest in potential iron consumption and the metabolism of iron has been expressed. This remains the case. The cultures will grow in white wine alone, but the growth appears without doubt to be enhanced with the addition of a small amount of

iron sulfate to the solution. During some of the trials that use a combination of white wine and iron sulfate, an additional component of hydrogen peroxide was introduced into the culture. It is at this point that a dramatic increase in the growth rate and extent of the culture was noted. Under these circumstances, it is not unusual to be able to record and observe the *bacterial-like* stage of growth occurring within a matter of hours. This is in major contrast to the use of wine alone, where a minimum of several days will usually be necessary. The filament growth stage generally takes anywhere from weeks to months to develop and it does seem in part to depend upon temperature.

This particular reaction of sudden growth is of much interest and it has deserved further and detailed consideration. As we delve into this question, a particular chemical reaction of note emerges, known as Fenton's Reaction[1,2] (discovered in 1894). The essence of Fenton's reaction is as follows : the iron ion (+2) when added to hydrogen peroxide, forms the iron ion in the +3 state, the OH- ion (i.e., the hydroxide ion) and the OH (neutral) radical, also called the hydroxyl radical.

The hydroxyl radical (OH neutral) is of tremendous interest in our case. What is the '*hydroxyl radical*" and why is it important? The hydroxyl radical is what is known as a "free radical" and it has major implications in biology, health and disease. I am not a chemist by profession and those that are may choose to engage themselves; I continue to hope that they shall. I am, however, sufficiently motivated in a broad array of disciplines to seek answers to important questions and problems of need and we have more than enough of them for us all.

A free radical is a compound that in general seeks to react, because of an electron imbalance, with something else. In more technical terms, a free radical is a substance with one or more unpaired electrons.[3] As one of many examples of the consequences of the this particular free radical, we note the following:

> **"In cells and tissues, such particles can attack a host of surrounding biomolecules to produce new free radicals, which, in turn, attack yet other compounds. Thus, the formation of a single free radical can initiate a large number of chemical reactions that are ultimately able to disrupt the normal operations of cells".[4]**

Furthermore, this particular "Reactive Oxygen Species" (ROS) is just about at the top of the list in nature as essentially one of the most reactive oxidants known, only after Fluorine as shown in the following table:[5]

Oxidant	Oxidation potential, V
Fluorine	3.0
Hydroxyl radical	2.8
Ozone	2.1
Hydrogen peroxide	1.8
Potassium permanganate	1.7
Chlorine dioxide	1.5
Chlorine	1.4

Oxidation is the process in which atoms, molecules or ions lose electrons. An oxidizing agent is a chemical reagent that oxidizes, or takes electrons away from other atoms, molecules or ions.[6]

Now that we know that the hydroxyl radical is extremely reactive (and damaging to biology), let us continue to make sense of that which has been observed. Fenton's reaction is self-standing, and it does not need the culture to exist. Fenton's reaction is a reaction that says *if* we have the iron ion present (+2) and if we have hydrogen peroxide available, we will end up with the hydroxyl radical formed. It does not say anything about the culture and what has been observed, i.e, an explosion of growth in the presence of Fenton's reaction. What can be said about the culture is that *if* Fenton's reaction takes place in the culture, *then* we have an explosion of growth that takes place. It is reasonable to surmise, then, that *if* the hydroxyl radical is

present in the culture, that growth then takes off explosively. Now the question that comes up is whether or not we are likely to have the hydroxyl radical in our bodies. The answer is yes, as it is an expected product of metabolism.[7,8]

The next question that we must ask is whether or not the bacterial-like organisms occur commonly within the human species. There are numerous reports that address the reality of that situation, and it will simply be stated here that the evidence presents itself in the affirmative. It is reasonable, therefore, to suggest that the conditions for expanded growth of this organism set are likely to exist on a larger scale, and that we should realize the serious health issues that are likely to ensue.

There is, therefore, legitimate concern for certain health conditions that are likely to be prevalent. In addition, the specific chemical and biological conditions that underlie this concern may have in part been identified and established. The analysis of the conditions and the basis for the concern result from direct biological observation and study over an extended period of time. The basis for the analysis is an extensive set of culture studies that are a direct result of the research on the Morgellons condition.

An additional set of observations concerns the use of and presence of oxidizers, in general, within the culture environment (beyond that of hydrogen peroxide). It is found, in general, beyond that of Fenton's reaction and the use of hydrogen peroxide, that oxidizers in general enhance the growth rate and extent of the cultures. These studies include additional items from the list above, such as chlorine and chlorine dioxide. Specifically, sodium hypochlorite (conventional bleach), sodium chlorite (may be sold as "MMS") and calcium hypochlorite (may be sold as MMSII) all enhance the growth of the culture in the presence of an added iron solution. This observation raises serious questions, in the eyes of this researcher, as to whether increased growth of the "organisms" under study may in fact result from the use of chemicals of an oxidative nature (at least when used internally). Oxidation and the *creation* of free radicals with the use of chemical reagents in this family is an additional complication that is not appealing or attractive to me at this time. As one example of the concern held by a manufacturer (in this case, related to air filtration), it is stated that :

"*Some new air cleaning devices are using free radicals or Reactive Oxygen Species (ROS) to "oxidize" indoor air. Free radicals have been shown to be damaging to human health. Testing is lacking on the by-products of the reactions between free radicals and the components of indoor air.*
[and from the same source:]

Here is a quote from a brochure on another "cure-all for indoor air" product. It is a cause for concern. "When the HVAC system is in operation the cell creates an Advanced Oxidation Process consisting of Hydroxyl Radicals, Super Oxides, Hydroperoxides (Hydrogen Peroxide), UV light and ozonides (ozone)." It goes on to say: "All are friendly oxidizers. By friendly oxidizers we mean oxidizers that revert back to oxygen and hydrogen after the oxidation of the pollutant." However, these are not "friendly oxidizers." They are well known as Reactive Oxygen Species (ROS) or free radicals and are involved in a whole host of health problems from cancer to heart disease.**"** [9]

As a further clarification of the relationship between oxidation and free radicals, consider the following statement:[10]

*"*Oxidation is a chemical reaction that transfers electrons from a substance to an oxidizing agent. Oxidation reactions can produce free radicals, which start chain reactions that damage cells. Antioxidants terminate these chain reactions by removing free radical intermediates, and inhibit other oxidation reactions by being oxidized themselves."

There is more that can be said here, particularly in respect to the health related issues of free radicals and in particular the hydroxyl radical. I, too, am in a continual state of learning. There are some individuals that state or claim, at an anecdotal level, that progress has resulted from the use of such oxidizing products. One immediate question that arises is whether we are referring to external or internal application. I will defer any assessment on this position until the research is at a more advanced state. I must, nevertheless, in the interest of time progress to the next issue, and that is the proposal that results from the current study.

PROPOSAL

Please recall the dogmatic qualification at the beginning of this report; no medical advice, diagnosis or assessment of any kind is being made here. I am making information available that you may or may not wish to consider in consultation with the health professional of your choosing.

The question that naturally arises when the growth of a culture is enhanced is whether or not this growth can be hindered, impeded or stopped. The ultimate desire is, of course, to kill the organism(s) without damaging the host. It is a formidable problem in this case. I understand the question and that millions across the globe may be or will be asking it. It is the natural and easy question to ask but, unfortunately, the answers may not be any more forthcoming than the tribulations that have brought us to the current state of knowledge. These inherent difficulties do not even begin to address the lack of proper resources to tackle the problem. It has always been my viewpoint that the proper means of addressing the current situation begins with the simple and factual identification of the particular "organisms" and environmental pollutants under study. Such an identification has not taken place and there is no real prospect of this occurring in a comprehensive and honest fashion in the immediate future. My thoughts on this subject are expressed rather thoroughly in the recent paper that I have referenced.[11] It is hopeful that the central tenets of that paper can someday be proven wrong, but in the meantime, effort must be directed toward the more impending and obvious need for suppression of growth, at least within the culture environment that has been established. What I shall present here is a summary of the progress of the work in that direction. The general strategy to be employed is that the understanding of the conditions that support growth may well lead us to the eventual repression of that same growth.

We can begin the work on the problem by recalling a couple of the more salient observations that have been made.

In the culture environment, it has been established that the organism(s) flourish within an acidic environment. In addition, it has also been stated in earlier reports that many biochemical reactions only take place within a narrow pH [acid or alkaline] range[12,13,14]. Therefore, one of the first strategies to consider is to change the acidity or alkalinity of the growth environment and see if progress results. What has been observed in the cultures thus far is that an increase to the alkaline side does indeed appear to inhibit the growth of the culture. It does NOT "kill" the "organism(s)", specifically the bacterial-like forms, but it does appear to put them into

a state of dormancy or stasis. At this point, nothing can be stated to extinguish the organism(s) in their entirety. As has mentioned extensively in prior reports, the structures have been subjected to extreme chemical and heat conditions and the potential, if not the capability, to survive remains intact.

Nevertheless, potential dormancy is a preferable alternative to active growth. There is a great deal of literature in the health fields that extols the virtues and benefits of a shift to the alkaline side within the human diet and body. There are many individuals in these fields that emphatically declare that many diseases and ill conditions are a direct result of the acidic diet and acidic state of current generations. There are many resources that contrast alkaline diets in opposition to acidic diets, and it becomes difficult to argue with the merits of the foodstuffs of an alkaline diet[15]. There are health professionals that claim that the pH of the urine is one of the methods[16] by which the body can be assessed with respect to its acidic or alkaline state and that discuss the respective health concerns that accompany the acidic condition. There are also some individuals that think that alkalizing the diet is a meaningless and worthless venture. The first part of the proposal, therefore, is that the effects of alkalizing the growth medium, be it a culture dish or the human body through a chosen diet, be considered as one potential mitigating factor to the damages that have been observed. I will leave it to the reader to pursue this avenue of research in consultation with the health professionals of their choice. If additional information in the laboratory setting becomes available that affects the specifics of the current observations, I will continue to make that information freely available.

Now let us talk further on the subjects of oxidation and free radicals, which brings us to the second aspect of the current "proposal". The evidence at this point shows that oxidation, in general, increases the growth within the stated culture medium. The growth rate is quite dramatic and has been verified by observation under the microscope at high magnification. The chlamydia-like and mycoplasma-like forms grow explosively under the oxidative conditions that have been developed.

The obvious approach to reversing the results of oxidation is to consider the use of anti-oxidants.

At this time, a specific interest in seeking an anti-oxidant to the hydroxyl radical has been pursued. The topic of research is therefore, at this stage, that of seeking a "hydroxyl scavenger", i.e,, a compound or agent that will combine with the free hydroxyl radical and form something that is inert or less damaging than the original radical. The work here has been conducted solely with the objective of reducing the growth rate within the culture medium. However, as in the case of alkalization of the diet and body, there are many health professionals that will pronounce the merits of anti-oxidants and their beneficial effects on human health. There is a plethora of literature and research on the effects of oxidation and free radicals to human health. This is also a subject that can be discussed and researched at great length; again I will have to forego this in the interest of time and progress to the reader.

Three such candidates have been identified in a search of the literature thus far; this list includes ascorbate, glycerin and "ester salts". [17,18,19] **It is anticipated that many other candidates will be added to the list if this research gains further momentum. The specific ester salt that has been developed and applied in this test case is sodium citrate; numerous potential candidates could be developed from the patent that has been referenced.**

Note: Edit of Jun 02, 2011 – Please note this additional candidate and reference to be included in any future inhibition analysis, i.e., garlic compounds:"Abstract: The antioxidant properties of garlic compounds: allyl cysteine, alliin, allicin, and allyl disulfide.

Garlic and garlic extracts, through their antioxidant activities, have been reported to provide protection against free radical damage in the body. This study investigated antioxidant properties of garlic compounds representing the four main chemical classes, alliin, allyl cysteine, allyl disulfide, and allicin, prepared by chemical synthesis or purification. Alliin scavenged superoxide, while allyl cysteine and allyl disulfide did not react with superoxide. Allicin suppressed the formation of superoxide by the xanthine/xanthine oxidase system, probably via a thiol exchange mechanism. Alliin, allyl cysteine, and allyl disulfide all scavenged hydroxyl radicals; the rate constants calculated based on deoxyribose competitive assay were 1.4-1.7 x 10(10), 2.1-2.2 x 10(9), and 0.7-1.5 x 10(10) M (1) second(1), respectively. Contrary to previous reports, allicin did not exhibit hydroxyl radical scavenging activity in this study. Alliin, allicin, and allyl cysteine did not prevent induced microsomal lipid peroxidation, but both alliin and allyl cysteine were hydroxyl scavengers, and allyl

disulfide was a lipid peroxidation terminator. In summary, our findings indicated that allyl disulfide, alliin, allicin, and allyl cysteine exhibit different patterns of antioxidant activities as protective compounds against free radical damage.[20]”

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Note: Edit of Jun 12, 2011 – Please note the role of bile in the alkalizing process and the role of the liver in toxin removal:

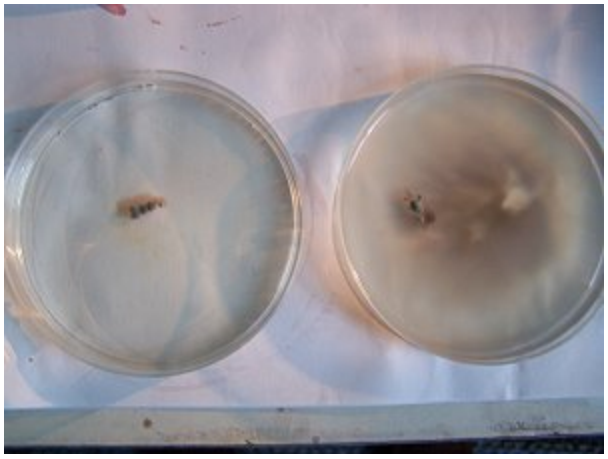
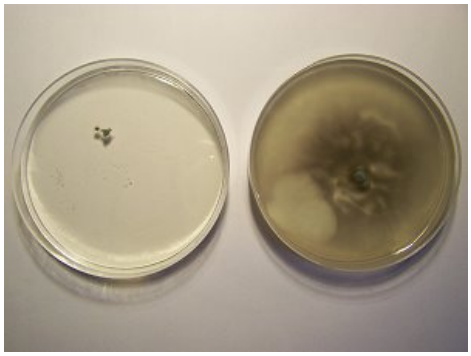
Please also become familiar with the following video presentations (no product endorsement or promotion by this site; educational purposes only):

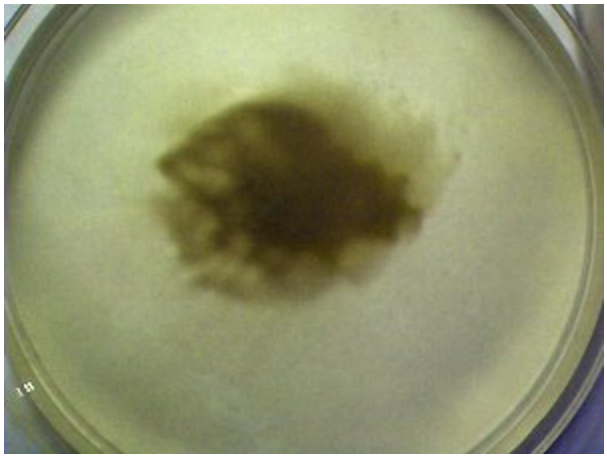
Gallstones, Liver, Gallbladder, Kidney Cleanse Part 1
Gallstones, Liver, Gallbladder, Kidney Cleanse Part 2
Gallstones, Liver, Gallbladder, Kidney Cleanse Part 3

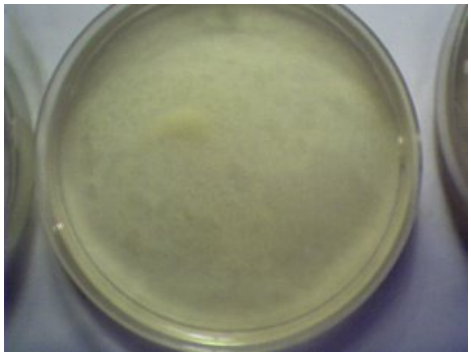
[“Gallstones, Liver, Gallbla…” The YouTube account associated with this video has been terminated due to multiple third-party notifications of copyright infringement.- 12/13/15]

The important question to be answered at this time is whether or not the application of such “hydroxyl scavengers” can suppress the growth rate within the culture. In the interest of brevity, I will report the results of the testing underway in a condensed fashion. This is a classic case where a set of photograph reveals more than can be written about under the circumstances. If additional time permits in the future, this discussion can be continued.

PHOTOGRAPHS – HYDROXYL RADICAL SCAVENGER TRIALS

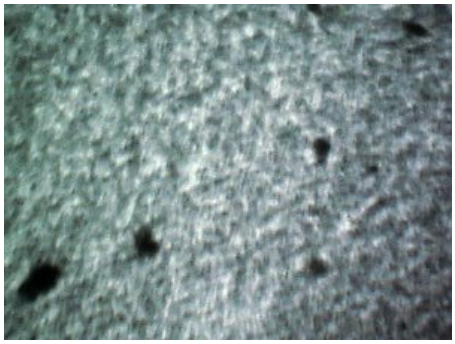
	
A comparison of culture trials with and without antioxidants added. On the right side is a white wine culture medium with the filament stage (final stage) of the pathogenic form introduced. In addition, iron sulfate and hydrogen peroxide has been added. The growth of the culture (bacterial-like forms) in the culture on the right side is evident. Elapsed period approximately 24 hrs. On the left side are the same conditions as those on the right, except for the addition of three hydroxyl radical scavengers, as identified through a literature search. Vitamin C, glycerol (glycerin) and sodium citrate has been added to the culture preparation on the left side. Sodium citrate is strongly alkaline. No such rapid or extension of the bacterial-like growth has occurred in this trial. The antioxidant dosages used can be described at a later time, although in general repeated doses at regular intervals were required, and they were substantial relative to the mass of the entire culture. Once the growth reaction is in full progress, it appears difficult if not impossible to arrest. For any success in inhibiting growth, the antioxidants were required to be introduced at the same time that Fenton's reaction is commenced, i.e., before the growth develops.	A trial culture similar to that described in the photograph set to the left, with the exception that more time has elapsed. Several days have elapsed with the growth of the culture that is shown here (right side). There is no claim whatsoever that no growth of any kind occurs in the antioxidant trial (left culture dish); only that the growth of the culture does appear to be inhibited with the addition of these specific antioxidants. Determination of growth of any kind can only be determined at the microscopic level at sufficient magnification (~10,000x). It should also be stated that this represents the early stage of growth development (bacterial-like forms only) and that inhibition trials at the filament stage may represent an entirely different set of conditions.

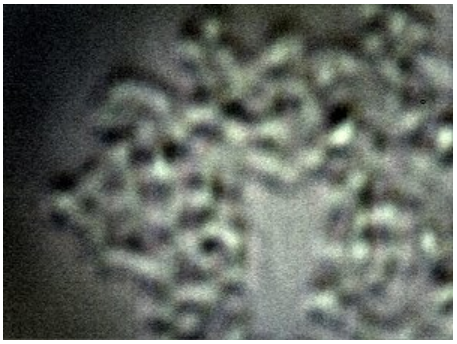


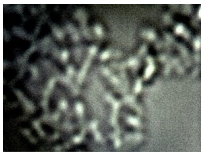


Another example of unrestrained growth of the culture without antioxidants. This culture differs from the above in that it uses a transfer from a filament culture that has been subjected to an alkali and heat, as described in earlier reports. The original source material is therefore presumed to in a “dormant” stage, and is primarily composed of the bacterial-like forms as opposed to the filament stage.

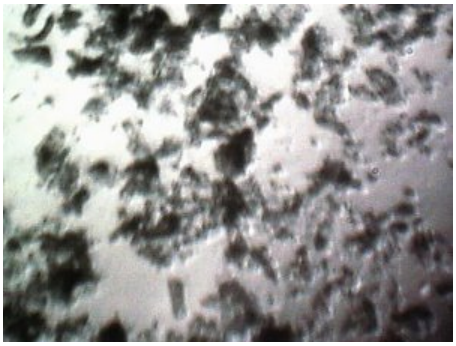
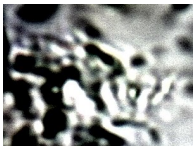
This culture is again the same as on the left side of this set of photographs, with the exception of the addition of the three antioxidants mentioned. Each antioxidant alone appears to have some inhibitory effect, however the combination of all three antioxidants appears to be the most successful in suppressing growth. Additional extensive research is required to clarify the numerous variables of chemistry and metabolism that are in effect.







An example of unrestrained growth at approx 300x. This magnification is sufficient to reveal only the gross structure of culture development. There is, however, a unique structural aspect that is characteristic of the growth than can be established with sufficient observation.	The unrestrained growth of the culture at 10,000x. This high level magnification is required to uniquely identify the bacterial-like forms that are the subject of this and many previous reports. This photograph reveals primarily the pleomorphic form (mycoplasma-like) however the chlamydia-like form is also evident upon sufficient observation.	Another example of unrestrained growth of the culture, not subjected to the three antioxidants. Magnification approx. 10,000x.

		
An example of the growth that has been affected by or apparently restrained with the presence of the three hydroxyl scavengers mentioned : Vitamin C, glycerol and sodium citrate. Magnification approx. 300x. The antioxidants appear to create somewhat of a “precipitate” form and to alter or destroy the general structural integrity of the majority of the bacterial-like colonies. Again, absolutely no claim of termination of the bacterial-like forms is stated here; it does appear, that growth has been suppressed to some degree.	An example of the restrained or altered growth with the addition of the hydroxyl radical scavengers at high magnification, approx, 10,000x. This photograph is appropriately compared with the one that is immediately above. Alteration to a precipitate like form reduces the level of detail at this high magnification. Evidence of extensive growth of the bacterial-like structures is not readily apparent.	Another example of the altered or restrained growth at high magnification (~10,000x). Also appropriately compared with the two photographs immediately above.

In summary, the discovery aspect of this paper identifies certain biological and chemical conditions that appear to be highly favorable to the growth of the bacterial-like organism(s) that are found to be in direct association with the so-called "Morgellons" condition. These chemical conditions include an acidic environment and the existence of the hydroxyl (OH neutral) free radical. When these conditions are met and various oxidizers are introduced into the culture, the growth is rapid and extensive at the bacterial-like level. The bacterial-like stage of growth represents the earlier stage in the development of the organism(s), and the culminating stage manifests as the filament form.

With respect to the proposal aspect of this paper, it is suggested that the state of acidity and alkalinity within the culture (or the body) be considered as a potential significant factor that is expected to affect the growth rate of the organism(s). It is established that growth of the organism(s) is favorable within an acidic environment, and there is strong evidence that an alkaline environment is suppressive to this growth. It is suggested that the benefits of an alkalizing diet and foodstuffs be evaluated with the appropriate health professionals, and that the extent of the acid-alkaline influence be thoroughly evaluated. A shift toward a more alkaline diet is not a trivial affair, and it is at odds with many of the dietary conventions of our generation.

Secondly, on the proposal aspect, it is suggested that the detrimental influences of free radicals and oxidation be researched thoroughly by all parties concerned. There is a particular interest in the hydroxyl free radical that has emerged from the current studies. It is also suggested that the benefits and effects of antioxidants be evaluated, both with respect to the particular conditions under examination here as well as with respect to general health. Again, health professionals of choice are to be consulted in any decisions that are to be made.

It is of interest that the proposals from this work are in accordance with much of the general consensus that has emerged with respect to improved health over the past decades. It is also apparent that the contemporary lifestyles and the environmental conditions that we find ourselves immersed in are, in many ways, in strong opposition to these guidelines of health. It is difficult to argue with the general benefits of a more alkaline diet and with the evidence that has emerged over decades with respect to free radical damage. It is true, however, that current habits of many of us are not in general accord with these very same principles and as a consequence contemporary society is often subject to its detriments.

It is quite obvious that the work before us is immense. As is common, many questions have emerged with any new findings. It should be apparent by now that such problems are not going to fix themselves or go away, and the sooner that we recognize the stakes of health and life that are at play, the sooner that we may prosper in that same health and good life. Once again, I call for your recognition of the seriousness of the issues, and for your participation in resolving them. Thank you.

Clifford E Carnicom
Feb 22, 2010

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Edit Jun 02, 2011:
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MORGELLONS: GROWTH INHIBITION CONFIRMED

MORGELLONS :
GROWTH INHIBITION CONFIRMED
Clifford E Carnicom
Mar 15 2010

Note: I am not offering any medical advice or diagnosis with the presentation of this information. I am acting solely as an independent researcher providing the results of extended observation and analysis of unusual biological conditions that are evident. Each individual must work with their own health professional to establish any appropriate course of action and any health related comments in this paper are solely for informational purposes and they are from my own perspective.

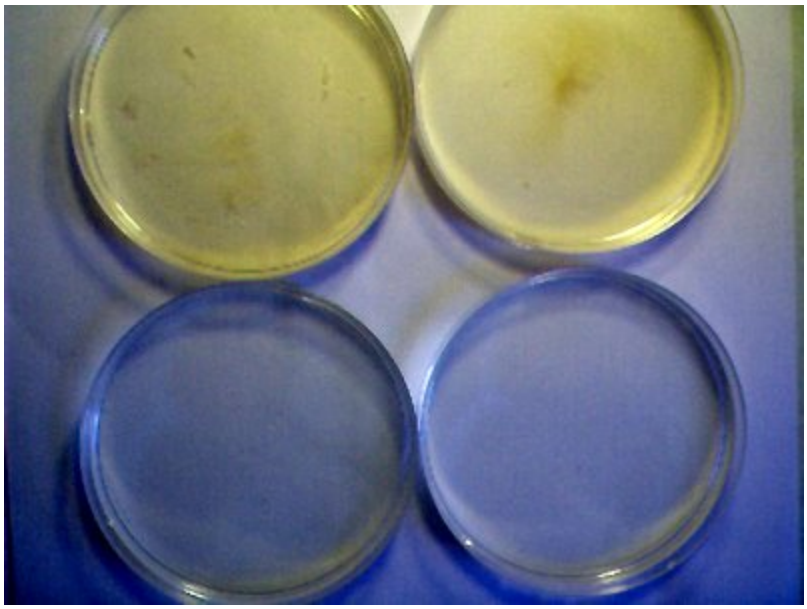
The growth of the bacterial-like organisms that appear to be at the foundation of the so-called *Morgellons* condition has been positively inhibited. The basis of the rationale that is used in these trials has been outlined in detail in a previous report entitled *Morgellons : A Discovery and a Proposal*[1]. The basis of that report is the application of a set of specific antioxidants that inhibit the growth of the organism(s) in the presence of the hydroxyl free radical and the creation of a more alkaline environment. It has been established in that earlier report that the organism(s) thrive in an acidic environment in the presence of the hydroxyl radical and oxidizers in general.

The basic strategy that has been adopted is a transformation of the growth environment to a more alkaline condition along with adding specific antioxidants that are directed toward the scavenging of the hydroxyl radical. Please also refer to the earlier paper for the rationale behind the selection of the particular antioxidants that have been used.

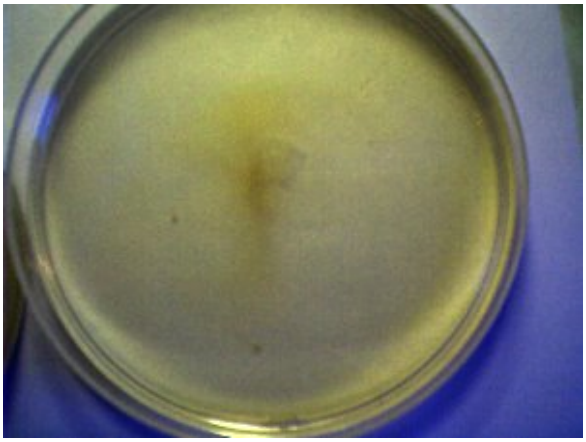
There is absolutely no statement herein that indicates the particular organism(s) has been terminated or extinguished, only that growth of the organism(s) under the specific conditions and trials mentioned has been inhibited. There is no assurance that all agents used in these trials is required to produce these results, nor that they be used at the arbitrary dosage levels that have been chosen for the cultures. Future work will examine the reduction or restriction of these same agents and dosages with the goal of replicating the results.

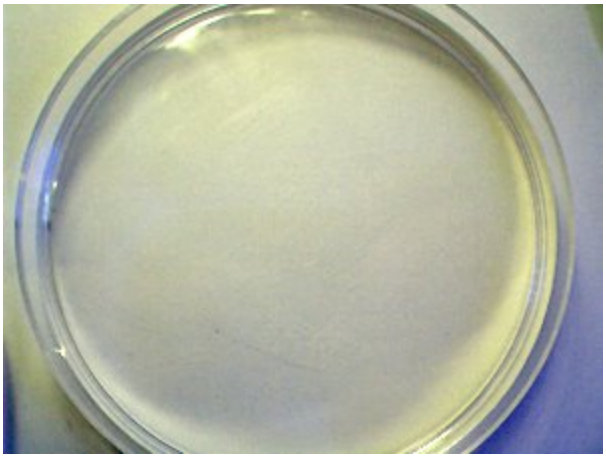
This paper shall be brief as it confirms the proposal of the preceding paper more explicitly. The primary purpose of the paper will be to demonstrate the inhibition that takes place in confirmation of the earlier work and to enumerate the specific antioxidants that have been used in these trials. There remains an overwhelming amount of work that remains to be done, and these results simply promote one particular strategy that is worthy of exhaustive and intense study. It is anticipated that other antioxidants that emphasize scavenging the hydroxyl radical and that alkalize the growth environment may also be effective.

PHOTOGRAPHS



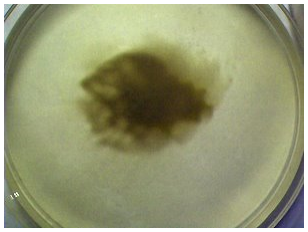
An overview of the trial results. The top two petri dishes demonstrate the early stages of the growth of the bacterial-like forms that precede and lead to the growth of the filament stage as outlined in earlier culture reports. The growth medium is white wine as has also been discussed previously. This repeatable growth stage occurs in an acidic environment in conjunction with the presence of the hydroxyl free radical. The presence of the hydroxyl radical is established with the use of Fenton's reaction (iron sulfate and hydrogen peroxide) as has been discussed previously. The top two dishes have no attempts to inhibit or reduce their growth. The bottom two petri dishes are the same culture trials but subjected to the presence of three specific hydroxyl scavenging antioxidants at the beginning of the trial. The specific antioxidants being used are that of ascorbic acid, sodium citrate and glycerol. Please refer to the earlier paper[2] and references for the rationale behind the selection of these specific hydroxyl scavenging antioxidants. In the lower two dishes the bacterial-like stage of the growth process does not succeed at any level commensurate to that of the above.



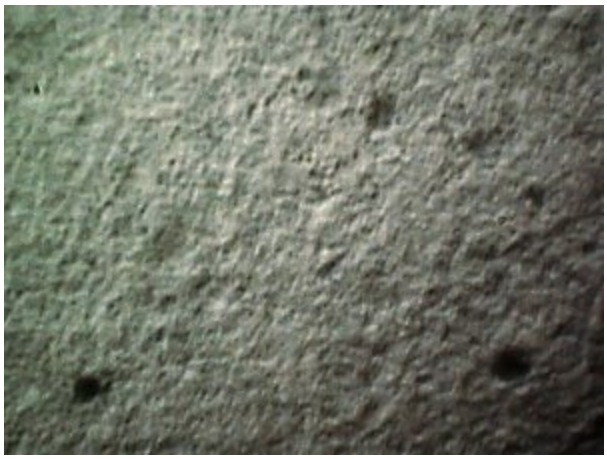


The growth of the early stage of the culture in an unrestrained form in more detail. Examination of the detailed morphology of the culture requires high level magnification (approx. 10,000x) and has been reported on extensively in earlier papers. This culture is approximately 3 to 4 days old.

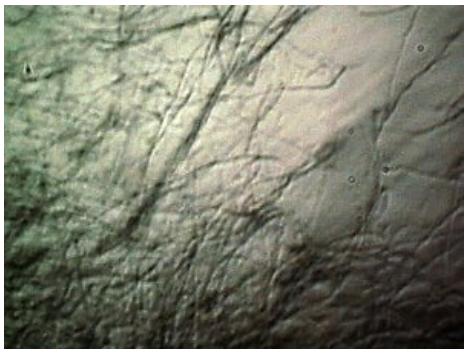
The growth of the early stage of the culture in a restrained form in more detail. The culture has been subjected to three specific hydroyl radical scavenging antioxidants : ascorbic acid, sodium citrate and glycerol. The absence of the bacterial-like stage of growth of the culture is apparent. This culture is approximately 3 to 4 days old.



A more advanced stage of the bacterial-like (chlaymidia-like and mycoplasma-like) growth of the culture under conditions identical to that immediately above. This culture is approximately 1-2 weeks old and is in white wine. The success and advantages of the white wine and clear culture (simulated wine) has been previously described.	The more advanced stage of surface filament growth in a wine culture medium as has been reported on extensively and as developed by an independent researcher that is in the process of duplicating a portion of this work. This photograph represents the first presentation of the filament stage of growth in a white wine vs. a red wine environment. This demonstrates the lack of dependence upon the color of a red or white wine to produce this culminating stage of growth. This culture has been developed from a separate red-wine filament culture and not from the bacterial stage exhibited above. This filament growth is identical to that which originates from the dental sample cultures that have been reported on extensively in this site. The filament growth exhibited here has also been shown to be identical in form, size and structure to that developed from certain environmental samples, namely that which has been refused for identification by the U.S. Environmental Protection Agency.



A view of the developing bacterial-like stage of growth in the petri dish as shown above under relatively low magnification, i.e., approx. 300x after approximately 3 to 4 days. This is the unrestrained growth example that is presented above. The general gross structure of the colony can be examined at this level, but individual detail requires high magnification (approx. 10,000x). The growth in this photograph is substantial and appears as essentially a continuous layer of growth under the microscope.



Another view of the developing culture at approximately 300x. This photograph is showing the emergence of the filament stage of growth within the culture; this filament stage is not visible by eye. Individual detailed study of the early growth of the culture requires high magnification (approx. 10,000x).

The restrained, or inhibited, growth of the culture under relatively low magnification (approx. 300x) in the petri dish at the end of the same time period, i.e., approximately 3 to 4 days. The lack of growth is apparent. Essentially what is being viewed here is the bottom surface of the petri dish looking through a white wine solution. The particular set of antioxidants chosen (under a specific and arbitrary dosage level) successfully inhibits the further development of the culture.

Additional notes:

Note: I am not offering any medical advice or diagnosis with the presentation of this information. I am acting solely as an independent researcher providing the results of extended observation and analysis of unusual biological conditions that are evident. Each individual must work with their own health professional to establish any appropriate course of action and any health related comments in this paper are solely for informational purposes and they are from my own perspective.

The white wine medium in each dish is 30 ml. At this point, no distinctions in growth have been determined between different varieties of wine, either red or white. The white wine cultures offer the advantage of clarity in observation.

Some reports on toxicity levels of ascorbic acid and Vitamin C reported on are as follows:

> "Since ascorbic acid is a water-soluble vitamin, toxic levels are not built up or stored in the body, and any excess is lost mostly through urine. If extremely large amounts are taken gastrointestinal problems may appear, but will normalize when the intake is cut or reduced. To determine a level where a person might experience discomfort is difficult, since some people can easily stomach up to 25,000 mg per day, while others start having a problem at 600 or 1,000 mg."[3]

> "Vitamin C exhibits remarkably low toxicity. The LD_{50} (the dose that will kill 50% of a population) in rats is generally accepted to be 11.9 grams per kilogram of body weight when taken orally.[56] The LD_{50} in humans remains unknown, owing to medical ethics that preclude experiments that would put patients at risk of harm. However, as with all substances tested in this way, the LD_{50} is taken as a guide to its toxicity in humans and no data to contradict this has been found."[4]

Approximately 30 mg. of ascorbic acid has been added to the volume of 30 ml of white wine (approx. 1000 mg. / kg of solution). Equating this roughly to the human body (assume 70 kg.), this translates to a single dosage of approximately 70 gms. Assuming an ingestion of 1000 mg per day, this equates to distributing the above dosage over a period of approximately 70 days to reach the equivalent result. An ingestion rate of 10,000 mg. of ascorbic acid per day leads to a time period of approximately 7 days to reach an equivalent result.

This example points out the outstanding and continuous need for all individuals to consult with their own medical professionals to manage their own individual health requirements and objectives; I have not and I will not provide any medical or diagnostic advice. I have reported and I will report on laboratory conditions and the results achieved from that work.

Approximately 0.1 ml (~.126gms.) of glycerol (USP) (glycerine) has been added to the volume of 30 ml. of white wine (equates to approx. 4.2 gms / kg.).

With respect to glycerol, some of the toxicity information available is as follows:[5]

> " IPR-RAT LD50 8700 mg kg^{-1}
> ORL-RAT LD50 12600 mg kg^{-1}
> SCU-RAT LD50 100 mg kg^{-1}
> ORL-MUS LD50 8700 mg $kg^{-1:}$"

Additionally,

> "A recent GLP compliant oral gavage study in rats given glycerol formal for 90 days at dosages up to 25 mg/kg indicated no treatment changes in physical signs of animals, bodyweight gain, hematological, biochemical or urine analysis."[6]

To equate 25 mg. / kg. as referenced in the latter report to a human body, this equates to a daily intake of approximately 1.75 gms. / 70 kg.

From the former report, LD50 (lethal dose 50% probability) orally of glycerol is therefore approximately 12.6 gms / kg. for rats. This equates to approximately 882 gms. per 70 kg. of the human body. At 25 mg. / kg., 4.2 gms. / kg. is to be distributed over a period of approximately 168 days to reach an equivalent dosage.

Approximately 0.25 ml of sodium citrate solution has been added to the volume of 30 ml. of white wine. The sodium citrate solution has been prepared by combining lemon juice with baking soda to reaction completion.

With respect to the toxicity of sodium citrate, the following is identified:

> "LD50: Oral rat LD50 >8 g/Kg"[7]

This equates to the human body in mass at approximately > 560 gms / 70 kg. Sodium citrate is an alkalizing agent, may have interactions with other ingredients or compounds and its potential application must be coordinated and directed though medical consultation[8,9]. If any information in this section is found to be incorrect or requires revision, please contact me at [cec102@usa.com] with the appropriate and supporting documentation. Future trials will consider reductions in dosage since at this point the dosage reference levels are entirely arbitrary. This paper terminates with the commencing condition of release:

Note: I am not offering any medical advice or diagnosis with the presentation of this information. I am acting solely as an independent researcher providing the results of extended observation and analysis of unusual biological conditions that are evident. Each individual must work with their own health professional to establish any appropriate course of action and any health related comments in this paper are solely for informational purposes and they are from my own perspective.

References:

1. Carnicom, Clifford, Morgellons : A Discovery and a Proposal, http://carnicominstitute.org/wp/7471-2/, Feb 22, 2010.
2. Carnicom, Feb 22.
3.Ascorbic Acid – Vitamin C – Information, http://www.anyvitamins.com/vitamin-c-ascorbicacid-info.htm
4. Vitamin C, Wikipedia, http://en.wikipedia.org/wiki/Vitamin_C
5.Safety Data for Glycerol, http://msds.chem.ox.ac.uk/GL/glycerol.html
6.Committee for Veterinary Medicinal Products, Glycerol Formal Summary Report, http://www.ema.europa.eu/pdfs/vet/mrls/010896en.pdf
7.MSDS, Aqua Science Inc., http://aquascience.thomasnet.com/Asset/31-244_FerroVer.pdf
8. Citric acid and sodium citrate, http://health.yahoo.com/urinary-medications/citric-acid-and-sodium-citrate/healthwise–d03952a1.html
9. Citric acid-Sodium citrate, http://www.healthline.com/goldcontent/citric-acid-sodium-citrate

MORGELLONS : THE EXTENT OF THE PROBLEM

MORGELLONS :
THE EXTENT OF THE PROBLEM
Clifford E Carnicom
June 14 2010

Note: I am not offering any medical advice or diagnosis with the presentation of this information. I am acting solely as an independent researcher providing the results of extended observation and analysis of unusual biological conditions that are evident. Each individual must work with their own health professional to establish any appropriate course of action and any health related comments in this paper are solely for informational purposes and they are from my own perspective.

Those that are familiar with my work know that I take issue with the claim put forth that the so-called "Morgellons" condition is a highly restricted situation that affects only a few individuals that happen to manifest a certain set of skin conditions. To the contrary, the work shows that the general population appears be to subject to the condition and that the criteria used to establish its existence should be focused on biological change and manifestations WITHIN the body. It is my position that filaments that occur within the body and the alteration of the blood are more suitable criteria upon which to establish the presence or absence of the condition.

Thus far, every individual that has participated in this testing reveals this internal change, and it is only the degree of change and alteration within the body that varies. It remains hopeful that exceptions to this generalization will be found in the future as a basis for more study. Given the state of affairs, however, these changes can in no way be considered to be *"normal"*, just as the engineered physical alterations to our planet (with emphasis upon our atmosphere) can not be accepted as *"normal"*. This is a truth regardless of the amount of time that we are subjected to these injustices.

The purpose is this paper is to make an emotional appeal to you. Adequate time to lay the groundwork of scientific method and discovery has been provided in a myriad of ways and it is now time to ask the more basic and fundamental questions:

At what point do you realize that you are involved?

At what point do you realize that your children are involved?

At what point do you realize that those you know and love are involved?

At what point do you realize that life beyond yourself is involved?

And at what point do you realize that the life and health of the planet itself is involved?

Rest assured, I will add to our "clinical body of knowledge"… But if this is all that can be seen, and if this is all that you are looking for at this stage of the game, then you have missed out on the scale of the problem and of your own participation in the problem. A passive acceptance of injustice is no longer excusable if the future course of events is clear with no underlying change in prospect.

Let us now go on in the more comfortable vein of providing you with "more evidence" that there is indeed a problem. Over the past couple of years, I would estimate that at least three dozen people have participated in the study of *internal* biological changes that I have initiated. The studies were an outgrowth of the initial studies that focused upon the skin (*external*) alterations that are more commonly reported to establish the existence of the condition. It became apparent to me that such external examinations were not sufficient to establish the underlying basis of the condition. Only time and proper effort will identify the true distribution of the condition and the causative factors, but based upon the work herein it is certainly statistically fair at this point to include the entire population as under risk. Furthermore, the work shows that examination of the human form alone is myopic enough in its own right.

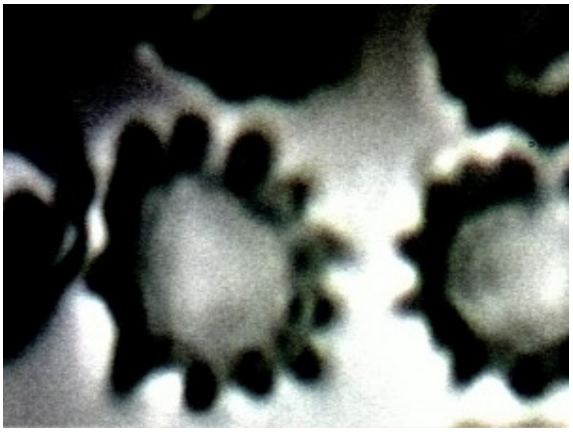
I do not always have the means, time or resources to continue repeating certain tests unless additional cause or information comes to light. Such additional cause of information is the subject of this paper. The opportunity to further investigate the influence of diet and age upon the Morgellons conditions has arisen, and my appreciation is extended to these two individuals that have added to our body of knowledge on this subject. One of the individuals that has participated in this study is that of a 37 year old life-long vegetarian male and the other is that of an 8 year old male child. The results of the work are presented below for your *study*. When you have finished with your study on this occasion, I am asking you to return to the series of questions that have been asked of you above. This time, for us to continue with this dialog, I must ask YOU for YOUR answers.

PHOTOGRAPHS:

37 Year Old Vegetarian Male :

A case of the dental sample for the 37 year old vegetarian male. The process of sampling is as follows: The mouth of the subject is cleaned thoroughly so that no evidence of any solid material within the mouth is visible whatsoever. The individual then takes approximately 20 ml. (i.e., a swig) of red wine and vigorously swishes the wine in the mouth, gums and teeth for approximately three minutes. The contents of the solution after this time period are expelled into a petri dish and the majority of the wine siphoned off. The procedure is then repeated two more times, for a total exposure of approximately 9-10 minutes. The individual shows no anomalies at the skin level. The material shown here is of a filament nature (it is not a precipitate; this will be discussed further below) and it has been reported on and described in detail extensively on this site. The correspondence of this material from inside the body has been made with filament samples acquired from the skin (i.e, exterior of the body). The correspondence of this sample material with that of certain environmental samples has also been made. See prior reports.

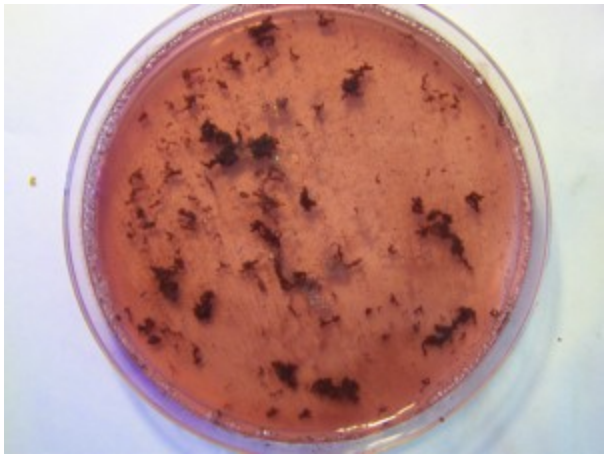
The red blood cells of the same 37 year old vegetarian male examined under the microscope at high power (approx. 10,000x). This individual states himself to be in apparent good health prior to the observations provided here. The correspondence of the structures that are degrading the cell membranes of the red blood cells (bacterial-like) and those that have been continually found within the filament samples (environmental, skin and dental) has been repeatedly made. Please also refer to the paper entitled "A Mechanism of Blood Damage" dated Dec. 14, 2009 for further information on this subject. The damage to the integrity of the cell membranes is apparent, and is identical to that first observed as characteristic of individuals manifesting skin anomalies reported in association with the so-called "Morgellons" condition. The condition of the cells shown in this image is typical and representative of the entire sample observed.

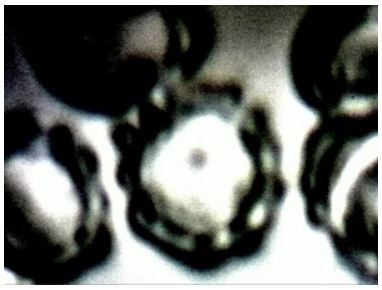


An additional example of the condition of the red blood cells of the 37 year old vegetarian male. This individual eats dairy products but no meat. This individual has the distinct background of having been a vegetarian from a very early age (i.e., approximately since he was 4 years old). Magnification approx. 10,000x.

An additional example of the condition of the red blood cells of the 37 year old vegetarian male. The significant disruption to the cellular structures as has been reported on extensively on this site is apparent. Individuals sampled thus far vary widely in age, location and are of both sexes. Magnification approx. 10,000x.

8 Year Old Male Child :





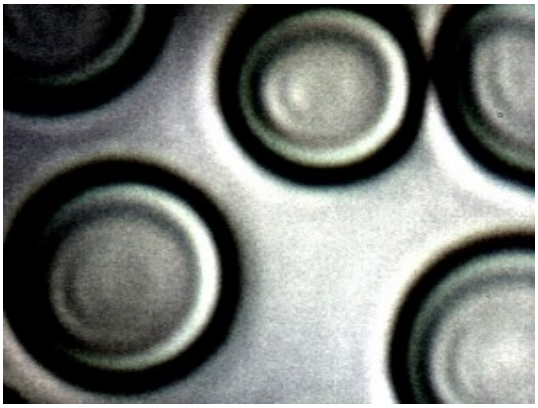
The case of the dental sample for the 8 year old child. The procedure followed is identical to that described for the 37 year old male above. Filament samples are once again visible. The material is of a filament nature; it is NOT a precipitate (see additional note below). This is the second occasion on which a child has participated in the studies with the permission of the parents. In both cases the results are affirmative and identical with respect to the presence of the filaments INTERNAL to the body. The individual displays no skin anomalies. For previous work that is relevant to this presentation, please refer to the paper entitled "And Now Our Children", dated Jan 11, 2008.

The condition of the red blood cells of the 8 year old child in coincidence with the dental samples provided in this test. No additional comments will be made. Please refer to the voluminous work on this subject prior to this paper. I also refer you to the series of questions that are the basis of this paper.
Magnification approx. 10,000x.

An additional example of the condition of the red blood cells of the 8 year old child in coincidence with the dental samples provided in this test.
Magnification approx. 10,000x.

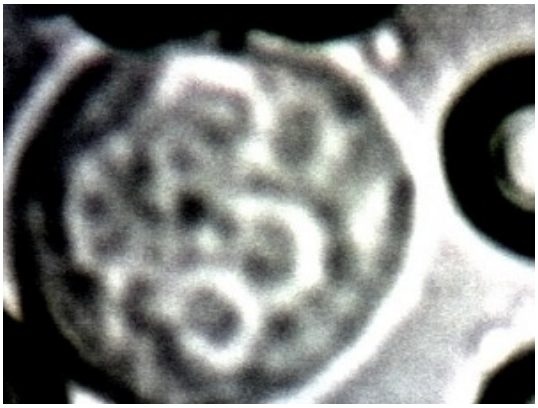
An additional example of the condition of the red blood cells of the 8 year old child in coincidence with the dental samples provided in this test.
Magnification approx. 10,000x.

Some Prospects for the Future :



This series of photographs is NOT presented as a cure or solution to anything. They do, however, present the potential merits of dedicated research that are in opposition to any acquiescence to the current state of affairs. These photographs represents the condition of the blood of an individual that has pursued certain strategies that have been recently proposed and outlined through this site. The strategies are centered on the benefits and disadvantages of alkaline vs. acidic diets and on the role of anti-oxidants with respect to health. The strategies are the result of certain filament culture trials that have described at some length on this site. No medical advice or diagnosis is implied or stated herein; each individual is responsible for consultation with the health professional of their choice for any choice of action pursued. The information provided on this site is for informational purposes only. Please refer to the notice at the beginning of this paper and as pronounced ubiquitously on this site.
Magnification approx. 10,000x.

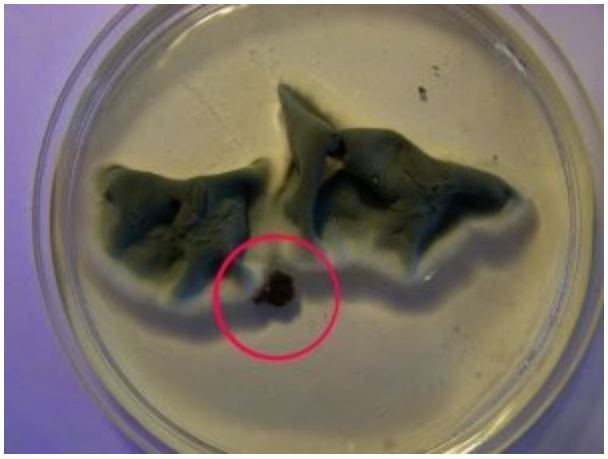
The photographs of the red blood cells shown here are representative only on the date of this work, approximately May of 2010. Indeed, one of the conclusions that has been reached through observations is that the condition of the blood can change fairly rapidly, e.g. over a 3 week interval. The life cycle of a red blood cell is approximately 3 months, however, significant changes in the general condition of the blood (both improvement and degradation) have repeatedly occurred within the fairly brief interval of 3 weeks. Monitoring of the blood on a continuous basis is therefore another strategy that may be evaluated as to its merit in the assessment of the “Morgellons” condition. What is generally shown here is a return of the cells to a more uniform geometry and integrity that does follow a period of increased alkalinity and antioxidants within the diet of the individual. It is also true to state that the condition of the cells of this individual, several months past, were quite similar to the degraded examples shown above. Sharp and fairly rapid periods of degradation have also been observed, and therefore these photographs present only potential benefits from the current research and not absolute benefits. **Each individual must consult with their own health professional to evaluate any strategies for improved health.**
Magnification approx. 10,000x.



This photograph shows what appears to be a white blood cell in the process of engulfing the bacterial-like structures that have been under extensive study. This type of observation has in general been quite rare. The observation suggests the enhancement of the immune system may have some effectiveness in diminishing the numbers of the growth form. Magnification approx. 10,000x.

This photographs is representative of why emphatically no solution or “cure” to this biological condition is claimed or implied herein. It has been observed that the blood serum appears to be a primary carrier of the bacterial-like structures (see A Mechanism of Blood Damage). Therefore, cases have been observed where the blood cell geometry has returned to a more normal form but the distributions of the bacterial-like forms remain extensive in the surrounding serum. Each individual is to consult with their own medical professional for any interpretation and advice of any results shown here or on this site. Magnification approx. 10,000x.

A Typical Example of What We Are Facing :



This is a representative example of the filament culture in mid-stage growth. This filament growth has resulted from a dental sample "seed", as outlined in red within the photograph. The culture medium is white wine. Various mediums have been found to be productive, but the simplest and most useful thus far is that of both red and white wines. There are four primary stages of growth that have described in the reports. The first is the chlamydia-like (bacterial like) growth stage. The second (additional, not replacement) is the pleomorphic growth for which mycoplasma-like forms remain a candidate. The third stage (additional, not replacement) is the filament growth (as shown here) . The fourth stage (additional, not replacement) is the development of erthyrocytic forms within the filament growth.

Within the filament stage of growth, there are 3 stages of sub-growth that occur. The first stage of filament growth is pure white in color. This stage can be seen on the boundaries and edges of the primary growth shown above. This stage is short-lived, commonly on the order of 1-3 days. The second stage is a transformation to a greenish color, and this dominates the mid-stage of growth as shown above. This stage can commonly last on the order of two to three weeks. The final stage is a transformation to a deep black color (not shown). The complete process can take commonly on the order of two to three months to complete. When the black stage of growth is complete (mature stage) the consistency of the growth begins to approximate a tar-like nature. The growth solution (originally wine) becomes darker and more viscous in nature.

Additional Note: It is claimed by some "parties" that the dental samples obtained are "normal" and that there is "nothing to be concerned about" with the subjects of these reports. The basis of this claim is a known reaction that takes place between red wines and saliva, whereby a precipitate is formed. It is claimed that such precipitates are the basis of these reports, and hence there is no concern for the findings shown.. These claims are inadequate and false for the following reasons:

1. **What is observed and reported upon, for many years now, is a FILAMENT structure. It is NOT a precipitate.**
2. The reaction between saliva and red wines does indeed occur, and it has been studied

extensively under the microscope. The precipitate is in no way identical or similar to the filament material that is the subject of the reports.

3. The sheer volume of filament materials produced, as in the first example shown above, is enough to eliminate any realistic portrayal as a precipitate formation.

4. The precipitate test can be easily reproduced and examined outside of the body, as it is not dependent upon material that emanates from the gums of the individual, as the specimens of these reports do. The wine-saliva-precipitate reaction is dependent only upon the interactions between wine and saliva, and is relatively trivial compared to the materials that are shown here. The material that is the subject of this report emanates from the gums of the individual.

THE BREATH OF A DECADE

THE BREATH OF A DECADE
Clifford E Carnicom
Dec 18 2010
Edited Jan 10 2011

This paper is written to let it be known that the basic problems related to environmental contaminants disclosed over a decade ago remain essentially the same. An airborne filament sample has again been received and it has been properly documented. This material is identical in form and structure to that sent to the U.S. Environmental Protection Agency for identification. This agency refused identification of the material and declared that it was not their policy to do so. All available evidence indicates that the general populace has been subjected to the ingestion of these materials through airborne methods for more than a decade, at a minimum. The filaments have been analyzed in detail to the degree possible with available resources and they have been reported on extensively within this site.

The filaments have been shown to contain (and continue to do so with this report) complex internal structures and biological components. These environmentally dispersed filaments have been shown to have a high degree of similarity and correlation with those that are characteristic of the so-called “Morgellons” condition. Human samples of filaments representative of the “Morgellons” condition have been cultured extensively, and they continue to show the same level of similarity with the environmental samples that are disclosed here.

I shall not belabor the issue as ample opportunity and notification to the public has been provided as to the seriousness of the case. The purpose of this paper is to inform the public that:

1. The problems as identified more than a decade ago remain.

2. All evidence indicates that the general populace has been repeatedly subjected to the ingestion of these airborne filament materials. The airborne filaments, at the smallest level of division, measure at the sub-micron level in thickness (less than that of asbestos fibers).

3. The filaments contain a complex internal structure and they contain biological components, potentially related to chlyamydia-like organisms. Erythrocytic forms have also been repeatedly identified or cultured from both environmental and human filament samples.

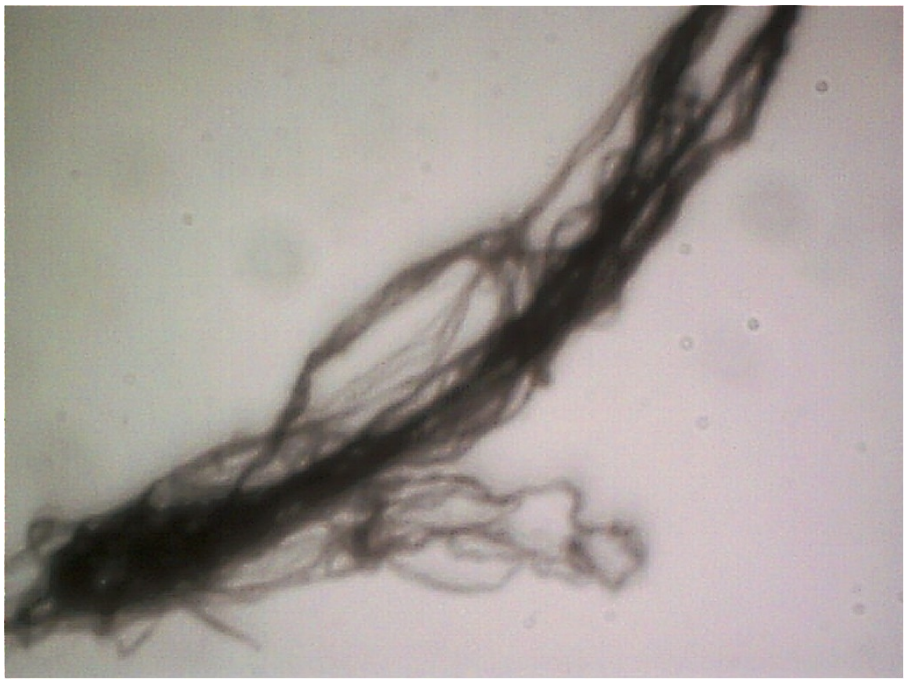
4. The characteristics of these environmental filaments and those of the so-called Morgellon’s condition appear to be essentially identical.

5. From a statistical standpoint, it appears that the general populace is subject to the so-called “Morgellon’s” condition.

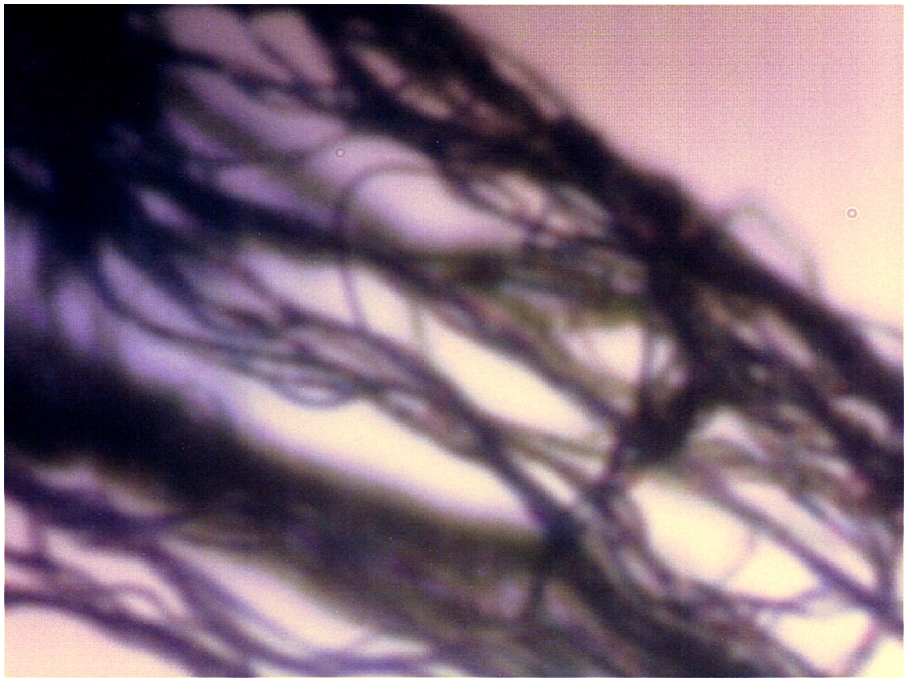
6. Proper identification and analysis of both the environmental samples and the “Morgellon’s” condition remains undone.

7. The Carnicom Institute has the desire to have the proper work completed in a publicly accountable fashion with the proper resources; the Institute is dependent upon public participation and support to further this cause. Significant resources will be required to make further progress. Public service and government agencies, environmental organizations, health institutions, academia and private organizations have failed to serve the public’s environmental and health needs.

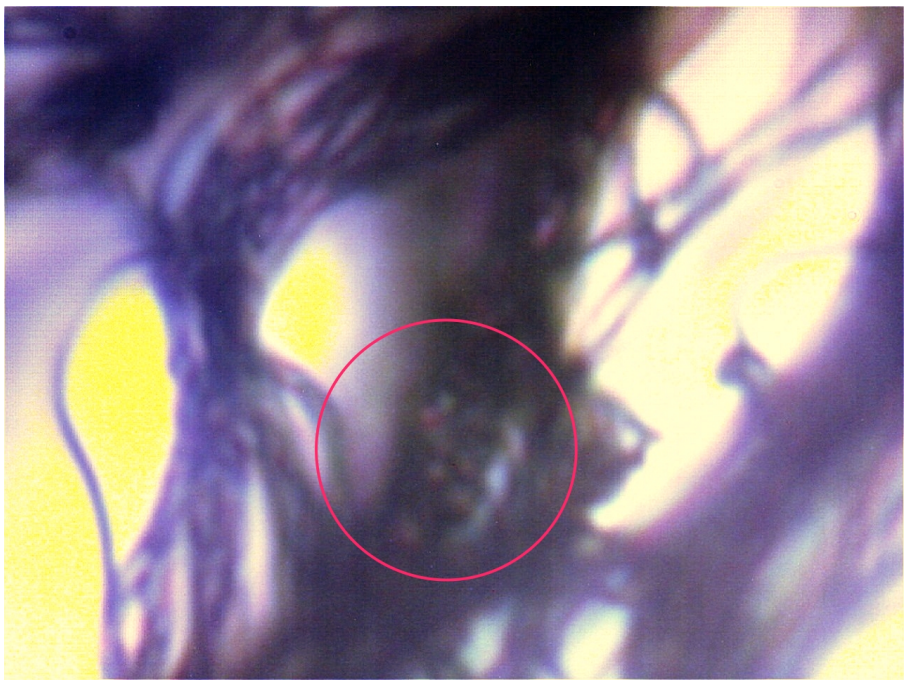
8. The vitality and viability of human existence and life on this planet, as it has been known to exist, is under threat.



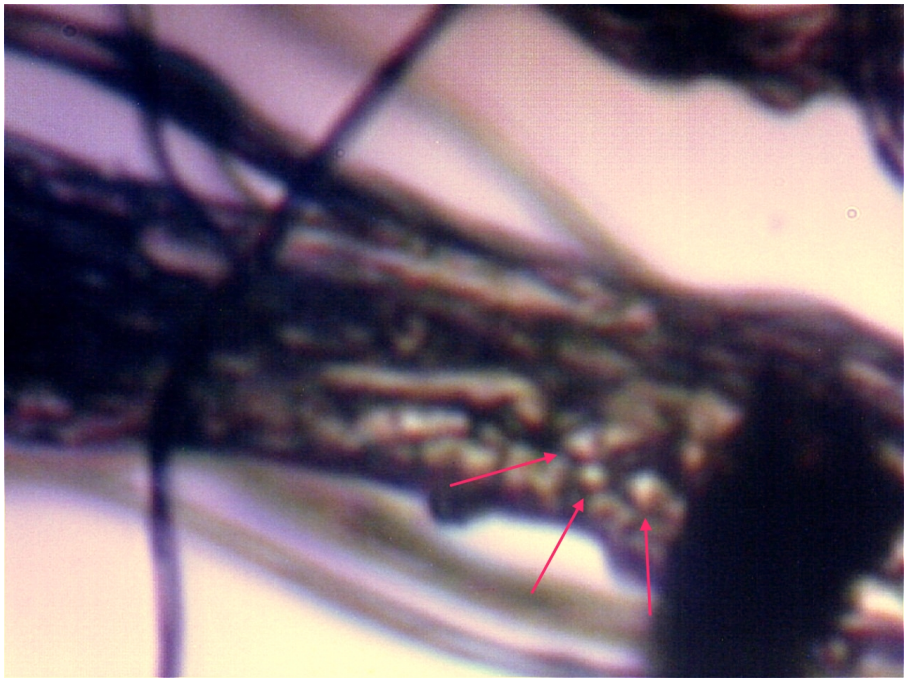
Airborne Filament Sample, Atwater CA Nov 14 2010
Magnification Approx. 250x.



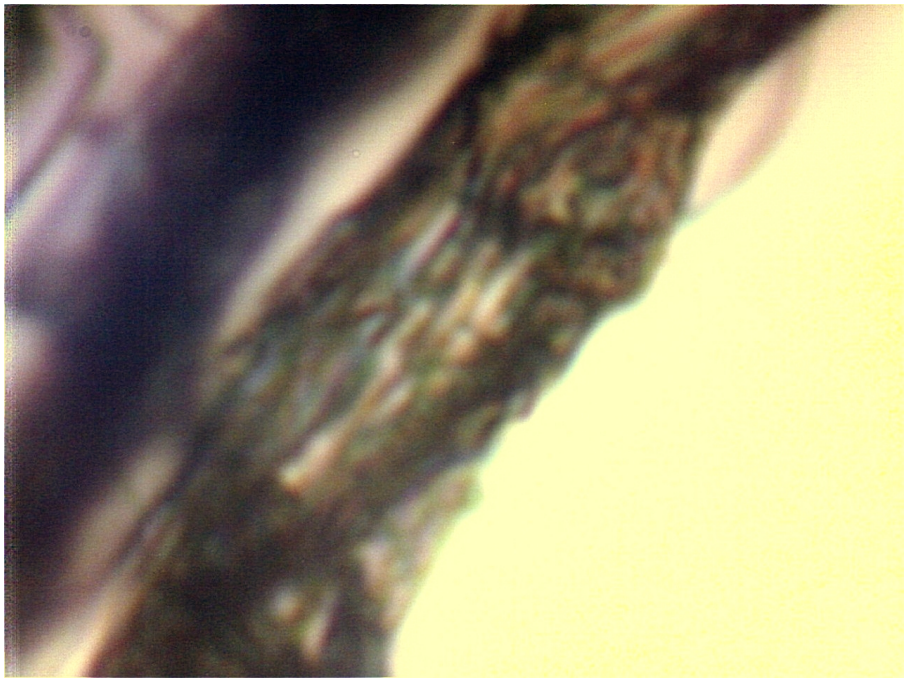
Airborne Filament Sample, Atwater CA Nov 14 2010
Magnification Approx. 625x



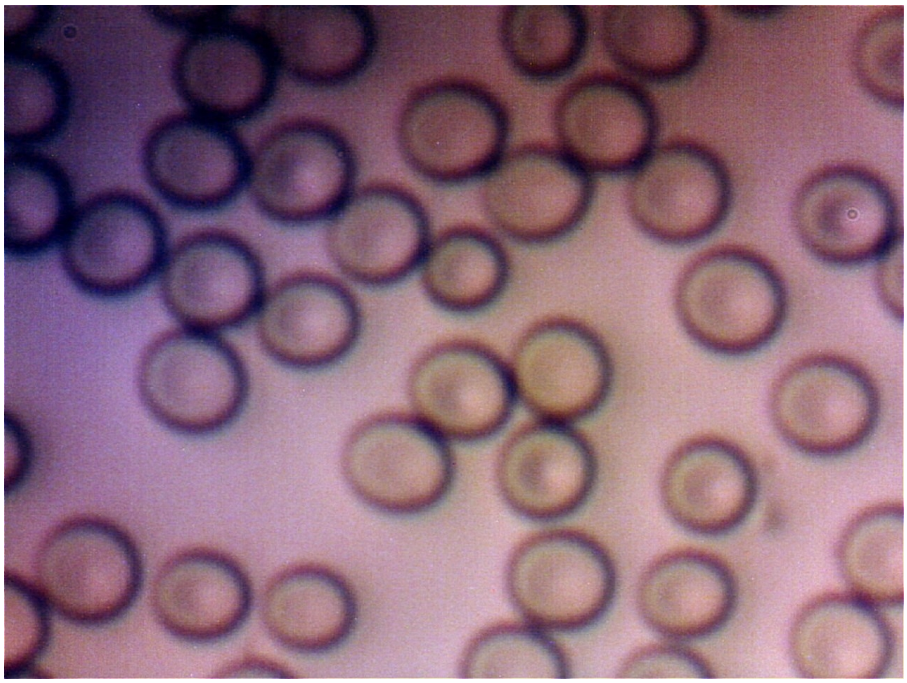
Airborne Filament Sample, Atwater CA Nov 14 2010
Internal biological clustered structures(chlamydia-like) visible.
Magnification Approx. 2500x



Airborne Filament Sample, Atwater CA Nov 14 2010
Internal individual biological structures(chlamydia-like) visible.
Magnification Approx. 2500x



Airborne Filament Sample, Atwater CA Nov 14 2010.
Complex internal structure apparent.
Magnification Approx. 2500x



Human Blood Cells:
Control Photograph for Reference Magnification Purposes.
Magnification Approx. 2500x

Please also consider viewing this recent video that is available.

["Quelques expériences avec l…" The YouTube account associated with this video has been terminated due to multiple third-party notifications of copyright infringement.12/13/15]

A translation to English will be helpful; please send to info@carnicominstitute.org if possible. Thank you to the individuals that have made this video available and for any translation assistance.

Clifford E Carnicom
Dec 18 2010