TREATMENT OF

CHRONIC INFLAMMATORY LUNG DISEASE

Stephen Harrod Buhner

The healthy adult lung is known to possess a remarkable endogenous regenerative capacity. Ng-Blichfeldt, et al. 2019

Over the past several years I have been exploring the world of chronic inflammatory lung disease (CILD) in order to understand what it is and how to effectively treat it through the use of sophisticated herbal medicines. My motivation for this was my diagnosis by a local pulmonologist of COPD, chronic bronchitis type . . . though by that time I already knew I had developed a chronic pulmonary disease. The question was, what kind was it and how much had it progressed; I wanted to have a CT scan to find out.

I had no desire for the medical system or the pulmonologist to treat the condition. For a great many reasons, it is exceptionally rare for me to allow medical practitioners to treat any health condition I have (but yes, I do go to dentists). I have known for a very long time how poorly they understand, diagnose, and treat most non-acute disease conditions – which is why, during the past thirty years, I have rarely turned to them for help.

Despite this, my experiences over the past several years have been disheartening. While few will say so publically, the entire medical system, from its education to its training to its implementation is a travesty . . . or a con game . . . or a pyramid scheme . . . or a [*fill in the blank*]. It certainly doesn't exist to help the sick. And it certainly doesn't care about me or you or

that guy over there either.

The reasons are many, a number of them rooted in how this form of healing came to dominate American medicine out of the ten or so that were common in 1900 (lobbying and pharmaceutical money, a very good PR campaign and bitter hatred of other approaches . . . the usual culprits). Another is that this particular form of medicine cast its lot with the increasing dominance of a particular kind of restrictive rationality just as it was emerging in the early years of the twentieth century. Then there is the system's capture by corporate capitalism. And as well, just plain greed – for control, for power, for dominance of the market, for money. Human beings are human beings . . . even if they do have a medical degree.

Some of this I will regrettably have to discuss here and there since it bears strongly on those of us with chronic lung disease, how we are diagnosed and treated, and just why the most common of these conditions exist and are increasing every year. And, as well, I guess I should say, those factors are also the reasons why the western medical system doesn't really understand or know how to treat most chronic lung disease conditions with any sophistication (though *some* forms of cystic fibrosis are an exception to this). The answers lie outside their preconceptions, outside the paradigm they have been taught. It's all very disheartening. As Gary Paul Nabhan once put it (in *Cultures of Habitat*), "Our epitaph [as a species] may well read: "we died of a particular strain of reductionism, complicated by an attack of elitism, even though there were ready natural cures close at hand."

(A deeper look into the various aspects of the medical system that I have mentioned here can be found in *An American Sickness* by Elizabeth Rosenthal – which looks at how physicians, hospitals, and pharmaceutical companies control and game the health care system (for money and

power) in the U.S. . . . and its effects on healing and the people who come to them in need; anything by Marcia Angell – former chief editor of the *New England Journal of Medicine*; *Green Pharmacy* by Barbara Griggs (I prefer the original edition, not the updated version) – which has a very good overview of how the current system gained dominance.)

Chronic Inflammatory Lung Disease

One of the first problems with the world of chronic lung disease is the lack of coherent, reliable terminology. When I first began looking into this, I initially focused on what is called COPD, that is, chronic obstructive pulmonary disease. This is the most commonly used term; most people have heard of it, and most doctors still use it. Unfortunately, it turns out that the term is, for all effects and purposes, useless; it really should be abandoned.

The diagnostic label COPD (supposedly) applies to a broad grouping of conditions (I'd guess around 5-7 but the experts aren't really sure either). In the real world it applies only to two: chronic bronchitis and emphysema. So, really, why not just say chronic bronchitis or emphysema? Both have different impacts on long term structure and function of the lungs; they are not the same thing. I will only use COPD in the following material if the journal studies I am mentioning use that term.

Less well known is the relatively large group of conditions included in what is called usual interstitial pneumonia or UIP. (Sometimes these are put under the COPD umbrella, mostly they are not.) Under this diagnosis are some 200 or so conditions of various sorts (a complete list is difficult to find, nevertheless all the journal articles I've read cite that figure). The most common form of UIP (about 60% of the diagnosed have it) is idiopathic pulmonary fibrosis (IPF).

Then there is asthma which is sometimes under COPD, sometimes not. Cystic fibrosis or as it is usually abbreviated CF (COPD or not COPD, depending on the writer) and so on. What is more accurate and to the point is that all of these are chronic inflammatory pulmonary diseases (or more succinctly CIPD). Some of the causes are genetic such as with CF and alpha-1 antitrypsin deficiency. Others are the result of working in any industry where long term exposure to inhaled particulate matter causes the condition: e.g., silicosis, asbestosis, black lung disease.

Here I am only looking at non-genetic, idiopathic forms of chronic inflammatory lung diseases.

What Causes It

CILD (or CIPD, depending on whether you use pulmonary or lung as the main term) arises from a number of interacting/intersecting factors which combine to produce a spectrum of deleterious impacts on the lungs and their functioning. The factors involved in the development of CILD take time to work their magic. It can take years, often decades, before the body and the lungs just can't take it anymore. At some point a chronic, self generating inflammation begins in the lung tissue. This continues even if the (presumed) primary factor ceases (e.g. cigarette smoking). Over time, this low-level, chronic inflammation begins to degrade or deform various areas of the lung tissue and its functions. The lungs can't properly heal themselves or re-generate the damaged tissues (as they normally do). Over time, this causes decreasing health, less functionality, and eventually an often difficult and unpleasant death, usually in a hospital or nursing home.

Or at least that is the story the medical world tells us . . . and for the majority of people

who use that system as their only approach, that is generally what happens. But it doesn't have to be – the lungs are, like many of our organs, highly capable of regenerating themselves . . . *if* the inflammation is removed, a healthy microbiome re-established, plants (whether herbal or food) that are convivial with lung regeneration and microbiome health are ingested daily, and pharmaceutical use is significantly diminished (if at all possible).

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After a review of several thousand peer-reviewed journal articles, here are the main factors the studies make clear are core to the emergence of CILD. (These factors are not necessarily listed in their order of importance. Their degree of impact depends on where in the world a person lives and the nature of their lifestyle. However, for those of us in the U.S., these are listed in decreasing order of importance.)

- 1) medical intervention and technology
- 2) technologically produced food and its additives
- 3) inhaled volatiles, specifically: synthetic hydrocarbons
- 4) inhaled pollutants: cigarette smoke, woodsmoke, occupational dusts of various sorts
- 5) various types of infections either in the lungs or not
- 6) aging

These factors should be viewed as a complex grouping that combines in every person in unique ways. Different lifestyles, diet, cultural and geographical locations alter how prevalent any one

factor is and how they all combine together. Thus, in places where wood is burned for cooking or heating, that will be a stronger factor than in places where it is not. In places that use a great many pharmaceuticals and medical interventions, that is a stronger factor than in places where they are not.

In the United States the two primary factors are medical interventions of any sort (including pharmaceuticals) and agri-business produced foods. And contrary to what you have heard: *It is not tobacco smoking*. Regrettably this is a fact (not an opinion) that is carefully left out of every media report that I have read on lung disease. Smoking (and smokers) are just too easy to castigate and single out as the cause of COPD in the U.S. It would be nice if life were so simple . . . but it isn't.

Medical Factors

While it is clear that the authors of the studies I have reviewed were uncomfortable doing do, every one of them carefully, if timidly, gathered their courage in their hands and noted that medical care was a primary cause of chronic lung disease. Here are the medical factors they found to be the most impactful in the emergence of CILD:

- a) use of any pharmaceuticals, esp antibiotics, with the young infant
- b) caesarian birth in a hospital
- c) bottle feeding
- d) exposure of newborns to the hospital environment
- e) use of any pharmaceuticals esp antibiotics by the mother in the year prior to birth

f) an agribusiness diet heavy in additives by the mother in the year before birth.

All of them noted that antibiotics should never be used except in acute circumstances or where the microbe is clearly identified (something very rare in practice). The dose should be specific to the circumstance and the drug should be only taken as long as absolutely necessary. Probiotics should be taken concurrently and for at least a month afterwards . . . and permanently if the person has any form of CILD.

All these medical factors have one thing in common: they disturb the microbiome of the mother and infant as well as interfering with the establishment of a healthy microbiome in the infant at birth. *It turns out that a disturbed microbiome is an essential element in the emergence of all chronic inflammatory diseases; this is especially so in CILD*. (And it is not just that the mouth or the GI tract or the lungs or the skin that have a micrbiome, so does the placenta, the eyeball, the uterus, the amniotic fluid, the prostate, the penis, the vagina, the bladder and so on and on. From a certain perspective, we are *only* sophisticated complexes of interconnected microbiomes.)

Thus: The first thing any physician should do is prescribe probiotics and diet alteration for any and every atient diagnosed with CILD of whatever sort, including genetic. That few do so is . . . well, words fail me. Probiotics have been shown in a number of studies to retard the progression of many CILD conditions, even to reverse some of them if caught soon enough. (Such studies are concealed in open access sites on the internet where doctors can't seem to find them.)

Of equal importance in the healing of CILD is understanding that the GI tract microbiome

and the lung microbiome are in fact a single, interconnected microbiome. What happens in one always happens in the other. (Not everything stays in Vegas.) If the GI tract microbiome is unhealthy, so will the lung microbiome be unhealthy. This is why oral probiotics also improve lung function.

Commentary on the Six Main Factors in the Emergence of CILD

Here, I will go into a bit more depth on the six primary factors involved in the emergence of CILD.

A. Medical intervention and technology: All researchers and studies are clear: hospital, physician, and pharmaceutical interventions directly create a number of CILD conditions (such as asthma). Further, there are strong indications that CILD emerges very early in life but the *symptoms* only appear later in life – normally in the aged, because their immune systems and repair mechanisms are weaker and they have had years more exposure to the factors that stimulate the emergence of CILD conditions. The initiation of low-level chronic disease (in whatever system) begins in the hospital at birth and becomes more pronounced with every pharmaceutical we are given. The more antibiotics (for example) that we take, the more likely we are to contract a long term, chronic inflammatory condition whether in the lungs or not. (And all drugs, not just antibiotics, disturb the microbiome.)

B. Agribusiness foods and their additives: These, as well as the chemicals used in the production of commercial foods, are directly implicated in the disturbance of the healthy human microbiome. (Side note: the plants we eat as salad have a microbiome on their surfaces, those grown by agribusiness have unhealthy microbiomes on their surfaces unlike the microbiomes on

organically grown plants.) Many of the additives put in processed foods have been found to directly affect healthy microbiome function, its community organization, and behavior. Alteration of diet in the successful treatment of CILD is essential (but not in any of the preachy, highly irritating I'm-healthier-and-more-pure-and-holy-than-you forms, it's just important to feed the microbiome. This is not rocket surgery.)

C. Inhaled volatiles, specifically synthetic hydrocarbons: are extremely damaging to the lung microbiome and lung function. We inhale these every time we walk down a city street, or along the toilet paper aisle in the grocery store, the candle aisle, by the perfume counter, or fill our gas tanks. We breathe them in in every town and city; they are generated from automobile exhaust and by every "modern" industry humans there is.

Additionally, women are highly susceptible because of their (often more regular) exposure to cleaning chemicals in the home (than men), their makeup and soaps, and their perfumes. (This is one of the reasons why COPD rates remain high in women despite fewer of them smoking.)

Men who work in construction, auto repair, or in industrial plants are continually exposed to these kinds of hydrocarbons. They are in paints, oil finishes, glues and pretty much everything that is used to maintain infrastructure. Many of these synthetic hydrocarbons directly damage the microbiome of the lungs; they also directly damage lung tissue.

The microbial community of the lungs, esp the bacteria, are very similar to the ones in the GI tract *except* that in the respiratory system they are focused on the volatiles in gases rather than the natural phytochemicals in food. Bacteria in the lungs metabolize (eat) volatile hydrocarbons, creating many by-products we (and our lungs) need for health while doing so . . . and this is true

for every organism that breathes, including plants. Metabolizing synthetic hydrocarbons instead is a very different thing. This creates by-products that are quite the opposite of healthy. Further, the microbiome alters its nature, function, and structure under their influence.

This is one of the processes little understood, or examined, by the western medical world . . . they almost never factor it in. (Until ten years ago, the western medical system insisted that the lungs were sterile, that they did not have a microbiome.)

This is an important reason why reducing exposure to synthetic volatiles and increasing exposure to the ones we are evolutionarily used to is important. Hence forest bathing. This is a term I strongly dislike, it somehow makes "a walk in the woods" into something grandiose (and yes, you can find far too many ridiculous and superficial books about it on the internet). Nevertheless . . . forest bathing has been shown to help COPD in a number of studies – all, as far as I know, conducted in Japan.

Forest bathing, again, is simply walking in wild landscapes for extended periods. In wild landscapes we breathe in the natural hydrocarbon aromatics that plants breathe out as they respire; this is natural to us. Those natural volatiles contain molecules that are essential to the healthy functioning of the lungs and to the bacteria (and viruses and fungi) in the microbiome itself. They are foods that the microcommunity metabolizes and needs to heal itself, to efficiently self-regulate, to deal with stressors, including disease.

D. Inhaled pollutants: This includes but is not limited to cigarette smoking, wood smoke inhalation, and occupational dust exposure. Some people don't smoke but continually inhale wood smoke as they heat or cook food. Some people never experience wood smoke but smoke one or more packs of cigarettes a day. Some people just work in mines or industrial plants or

sand exotic wood all day.

To be clear here: smoking is *not* the cause of CILD or COPD, it is just a factor. Only around 20-25% of smokers develop COPD – if smoking were the cause everyone who ever smoked would have COPD – they don't.

Unfortunately, none of the studies I have reviewed (at least the several hundred I looked at so far) ever seem to factor in diet, medical interventions, or occupation in the emergence of chronic inflammatory pulmonary diseases in those who smoked. (There is actually a category called "healthy smokers" who never seem to suffer ill effects or get lung disease – anti-smoking advocates don't like them much or the fact they exist.) Nor did any of the studies of second hand smoke take heed of these factors. While smoking is *definitely* not healthy for lung tissue or its microbiome (and I am not saying it is) – it is *not* what it has been made out to be. It is not *the* causative factor. The science on cigarette smoking, in terms of comprehensiveness, is very poor. What most people, including physicians, believe that is, that smoking is the primary cause of CILD, is wrong.

Occupational exposure is a very strong factor in the development of CILD. Many of the interstitial lung diseases are directly related to work inhalation – such as asbestosis, silicosis, and black lung in coal miners. The most common work factors however are not mining but construction, woodworking, auto mechanics, and industrial plants where workers are exposed to inhaled particulate matter for years or decades. Fire fighters, for instance, are especially

susceptible since they inhale smoke as part of their jobs . . . but that inhalation is far worse than wood smoke since what they inhale is laden with whatever it is that is burning. (This is why the 9/11 responders have suffered so badly from lung disease.)

Inhaled pollutants also include plant allergens and microbial inhalants such as mold spores that can occur in our homes or workplace. Aspergillus and black mold are especially troublesome stimulants of CILD, especially with long term exposure or for those with weak immune function (from age or disease). Normally, the lung microbiome can deal with fungal inhalants without too much trouble.

(The current hysteria over black mold is overblown . . . and yes, it is a concern worth paying attention to – and I am not saying it is not. However, not every disease is at root caused by a parasite or black mold – or genetics, or not enough exercise, or eating "bad" food, or living an unhealthy lifestyle. In the old days diseases came from sin or maybe not praying enough or perhaps the wrath of the gods. We really are not all that different than our ancient ancestors.)

E. Infections: play a big role in the development of CILD. The reasons are complex but in short infections (lung or GI tract) disrupt the lung microbiome in very specific ways, depending on the causative organism. Certain viral infections can facilitate pathogenic bacterial overgrowth which then takes the form of bacterial pneumonia. Various fungal groups such as aspergillus or black mold, if they take hold, can sometimes generate a chronic condition. *Many times the emergence of CILD symptoms occurs after yearly, severe flu infections for five or more years with, eventually, a bout of pneumonia.*

This process tends to occur more commonly among aging populations whose immune systems are weaker and in which the microbiomes have been seriously disrupted.

F. Aging. This is, simply, the bodily wear and tear that occurs over decades of living and its reduced ability to regenerate and actively deal with stressors, including infections. All of us are biodegrading, it is built into the system. *We're supposed to.* If Einstein and Lao Tsu did not become immortal, what chance do the rest of us have? It is just the way things are.

The Medical System and the Treatment of CILD

The medical system in the U.S. is. – sorry, there is no other way to put it – a travesty. I have seen too many people permanently damaged or bankrupted by the system. Though I do my best, these days it takes a great deal of effort on my part to maintain an emotional balance or a reasoned tone. Nevertheless, the medical system's failings have to be discussed, for they impact everyone of us who develops any form of CILD. And the impacts are highly negative.

Patients, irrespective of the condition, continually report patronizing and dismissive attitudes on the part of medical professionals, especially MD s. Further, they commonly note that their diagnosis was rarely accurate (even at "prestigious" centers such as the Mayo Clinic or Johns Hopkins), that they often received multiple, competing diagnoses, each utilizing a different treatment pharmacology (each of which had different impacts on the body and mind), that they have felt more like herd animals being processed through a rendering plant than human beings seeking help from other human beings. (Contrary to popular belief or media pronouncements, the U.S. medical system rarely gets its diagnoses right the first time . . . or even the third time – which is usually not a charm.) Patients continually report that communications from them to their doctors about what is actually going on in their bodies are routinely ignored, dismissed, or redefined.

For those infected with one of the Lyme group of stealth infections, for instance, proper diagnosis takes, on average, 5 years and 5-7 physicians. Those without a bull's eye rash are almost always misdiagnosed – everything from: "It's just menopause; you are overworked is all; I think you need to be on antidepressants; it's all in your head" to diagnoses of MS or Parkinson's or schizophrenia and so on, endlessly. Some patients with Lyme have been involuntarily hospitalized and medicated. Some have died or become permanently disabled, simply from physician refusal to seriously consider the human being in front of them and actually focus on finding out what is wrong. Fifteen minutes is not enough time to accurately diagnose anyone, no matter what tests are ordered . . . and the various Lyme tests are all terribly flawed, as research has shown for over 30 years.

Failure on a patient's part to accept, without question, the physician's point of view (and just shut up and take the recommended medication) often results in them being "fired." All patients, with or without insurance, report price gouging, inability to obtain explanations for charges, severe financial hardship, and, often, harassment by medical bill collectors.

As regards my situation: the pulmonologist I went to misdiagnosed me with COPD, chronic bronchitis type. What I actually have is idiopathic pulmonary fibrosis with periodic bouts of hypersensitivity pneumonitis (during pollen season). This significantly misdirected my research and slowed the development of effective treatment protocols. (He wasn't really open to being questioned.)

Studies continually show that the majority of people in the U.S. loathe the medical system, how they are treated, how ineffectual it is, and how much it costs. It is the main cause (other than divorce) of bankruptcy in the country. The commonality of these feelings among as

many as one third of the American public (over one hundred million people) rarely makes it into media reports. Essentially the system exists to make doctors, hospitals, pharmaceutical companies, and the rest of the industry rich. It does not exist to understand disease or heal the sick. This is not news, it is just that no one talks seriously about it. Nearly everyone has been convinced that there are no other options to our health care than the technological medical system that currently dominates the market. *Nevertheless, there are*.

Despite my comments here, I still know that the western technological medicine can be useful, sometimes very useful indeed. This is especially true in many acute conditions or with severe trauma. It is, however, not true when it comes to most chronic conditions and this includes CILD. *Axiom: The closer the current medical system is to an acute condition, the better it generally is at treating it. The further away it is from an acute condition, the worse it becomes.*

There is very little that the technological medical system can do to treat any form of CILD. Their interventions are almost always limited to antibiotics if you get really sick, corticosteroiod inhalers, and oxygen supplementation when the condition deteriorates. This is what they call *palliative care*. (Palliative, btw, means "relieving pain or alleviating a problem without dealing with the cause.")

The medical system does work well for a few chronic lung conditions such as CF (in *general* – not always – cystic fibrosis pulmonologists are often very good) and asthma inhalers really are essential to deal with acute episodes. Nevertheless the system does not work for most people or types of CILD. The system's focus is on what they call palliative care (some version of here, take this aspirin) and, if things get bad enough: lung transplantation. Most forms of CILD carry a terminal diagnosis. Idiopathic pulmonary fibrosis, for example, is considered terminal for

all people so diagnosed, the majority dying within three to five years. Only a tiny percentage live ten years.

Nearly every form of CILD is considered progressive and untreatable. Unfortunately, most if not all medical interventions make the conditions worse over time. *Any* use of antibiotics makes them worse . . . and very few to no physicians prescribe probiotics for those with CILD. Any use of bronchodilators makes them worse, or statins, or anti-depressants, or muscle relaxants, or [*fill in the blank*]. All of them disturb the microbiome – either directly in the lungs or in the GI tract, which always affects the lung microbiome.

Another common intervention that is medically suggested for many people with severe CILD is cardiac surgery. *This should be avoided except under certain limited circumstances*. The rationale is that it will help the heart pump blood more efficiently and thus make more blood available to be oxygenated by what lung function still remains. Ninety percent of the time, it doesn't significantly help. But the one thing cardiac surgery always does is subject a person who is already very ill, who already has depleted energy reserves and immune function, to severe trauma, and a long hospital stay . . . the one place no one with CILD should ever go if they can avoid it. (The spectrum of drug-resistant organisms that affect the lungs in hospitals are legion, highly present, and very aggressive.)

If you find a very good, very knowledgeable MD they can help – but they are very hard to find – I have met five in 50 years. (Sophisticated, competent, and knowledgeable herbalists, TCM practitioners (whether Asian or not), naturopaths . . . all are very hard to find as well.) Don't expect to find one. But . . . *very important* . . . always do your own research . . . on every drug or procedure suggested (even on everything I am saying in this article). Take charge of your

own health and the path you are taking toward healing. Believe me, you will almost always be a great deal more healthy if you do . . . and you will have many fewer side effects from whatever it is that you do decide to do.

Remember, despite physician belief . . . *you are hiring them*. *They* work for you. They hate being told this by the way. In their minds, all of us are just lucky to get some of their time.

Healing or at Minimum Slowing Down the Progression of CILD

While there are caveats (and I am stating this somewhat over simplistically) CILD is caused by a decades-long disturbance of the GI tract/lung microbiome, the weakening of immune function from age or other causes, and the emergence of a continual low level inflammation in the lungs generated by a stealth pathogen in the lungs (which is breaking down cellular tissue in order to feed) and which (nearly always) cannot be found through current medical diagnostic procedures. This process may or may not be accompanied by direct damage to lung tissues in the early stages. But it is this low-level inflammation that, over time, causes the damage to the lungs that interferes with the capacity to breathe. The various types of idiopathic, non-genetic, non-inhalant forms of CILD that occur result from the *part* or *parts* of the respiratory system in which the inflammation occurs, what particular organism is in play, and the general health of or damage to the various structures of the pulmonary system.

Treatment of the various forms of CILD varies depending on the exact nature of how the condition is appearing in the tissues, the symptoms, the part affected, and so on. In general successful treatment is based on the following interventions.

1. Restore, protect, and enhance the microbiome of the GI tract and lungs.

2. Restore and enhance immune function.

3. Reduce or eliminate the chronic inflammation in the body, especially the lungs.

4. Repair the damaged areas of the lungs or at the very least stop any further damage.

5. Reduce or eliminate symptoms if possible.

6. Review side effects of and reduce (or eliminate) the number of pharmaceuticals being taken if at all possible.

7. Eliminate or control the offending organism.

Note: There are three primary ways to put limits on a stealth pathogen: kill it, restore the microbiome (which will itself put limits on the organism – this is something the microbiome naturally does), or counteract the cytokine cascade the organism is using to break down cellular tissue in order to feed. This latter intervention will significantly reduce the numbers of the organism in the lung tissues.

Unfortunately, the offending organisms can rarely be identified, thus direct killing is not usually possible. (It is important to note, however, that people with CILD are often subjected to years of periodic antibacterial regimens of varying sorts. None of them have shown reliability in killing the organisms involved. *Only* if the causative organisms are known is an antimicrobial intervention effective.)

General Protocol Outline

1. Restoring, protecting and enhancing the microbiome.

This has two parts: a) Probiotics (supplement capsule daily – and yogurt in diet, at least for a

little while); *b) Diet alteration* (just say no to food fanaticism) through the use of microbiomeenhancing foods (prebiotics). I will look at some prebiotics/microbiome foods/diets in the future when I expand this article, however, two deserve singling out here: fermented foods (e.g., kimchee, sauerkraut, pickles) and fiber.

Fiber is important *only* because the microbiome in the lower bowel ferments it to produce, among other things, SCFAs (short chain fatty acids). These circulate throughout the body and are *very* anti-inflammatory. People with CILD almost always have low levels of SCFAs. Increasing SCFAs in and of itself can help reduce CILD progression and symptoms as well as acute episodes.

2. Enhance immune function.

The use of adaptogenic herbs is crucial. I include three formulations, all necessary, that I have found effective.

3. Reduce or eliminate inflammation in the body.

Healing the microbiome and enhancing immune function will take care of this to some extent. (Especially so since the immune formulations I use contain herbs and mushroom species that are specific for doing so.) I also suggest the use of several tincture formulations that will strongly affect systemic inflammation as well as . . .

4. Repair of damaged areas of the lungs.

This is a complex discussion, I will look at it very briefly in some of my comments on treating specific conditions that follow later in the text.

5. Reduce symptoms if at all possible.

Some are hard to reduce (e.g., breathlessness) others relatively easy (acute bronchitis). Discussed

in the protocol sections to some extent.

6. Reduce or eliminate prescription medications, especially antibiotics.

It is difficult to talk about the over prescription and over use of pharmaceuticals without being labeled an anti-science fanatic or anti-medical fool. Nevertheless, very, very few MDs understand the kinds of systemic impacts that occur from the use of the drugs they prescribe. Virtually none know anything (and care less) about the microbiome. Virtually none know anything about the synergy between the drugs they prescribe. And for sure . . . *none* of them know anything about plant medicines or how sophisticated than can be in the treatment of serious or chronic disease.

Many of the symptoms people with chronic disease struggle with are in fact from the drugs they are taking. Some of the drugs are necessary . . . others are not. Some make CILD far worse than it would be otherwise . . . and others, interestingly enough, can, if used with sophisticated knowledge and judiciousness actually help to correct the condition.

Don't expect your doctor to know anything about this or to respond favorably if you bring in journal articles which discuss it. Nearly every time they will dismiss whatever it is that you find, one way or another. Don't expect them to respond favorably if you tell them you are using herbal protocols, they will almost always talk about how dangerous they are (various reasons) and try to frighten you into stopping – always humorous since they have never studied them. It would be like me, oh, I don't know, having strong opinions on how to rebuild the engine in a Ford truck without any experience or training in auto-mechanics.

Nevertheless, there is one core truth here: nearly all CILD diagnoses are

terminal conditions. The medical system can't heal them using their paradigm and your doctor won't really put any time into finding alternative pathways to healing. So . . . why does it even matter what you do? A true healer would be interested to find out if any of it works – for then they could help others with the same condition. Further, and importantly, the two of you would then be engaging in a shared journey. But that is not the kind of response you are going to get.

Given all this, it is crucial that you inform yourself about your condition. Except in very rare situations, your doctor won't explain it very well; only the high points will get attention. *Very* few physicians ever read journal studies or articles, much less the thousands of them they should read every year – even in their own fields. Regrettably, they don't actually know very much – and much of what they think they know is wrong or out of date. *Again: Until ten years ago, all pulmonologists, physicians, and medical schools insisted that the lung did not contain a microbiome. Until the late 1980s the medical industry believed that antibiotics could be used with abandon and without consequences. Most physicians still believe it.*

(*Idiopathic* by the way means from no known cause, I tend to think of it as a word that means idiot/pathetic physician, a term which is diagnostic of any and every MD that uses that particular word.)

7. Eliminate the offending organism. I won't talk about this one at this time.

Protocol for Idiopathic Pulmonary Fibrosis (IPF)

IPF is a condition where the very thin layer of cells between the alveoli and the blood vessels becomes chronically inflamed. The inflammation does not heal properly, scar tissue forms, and over time that cellular layer gets thicker and thicker, inhibiting gas exchange between the lungs and the blood. Breathlessness grows more pronounced until not enough gas exchange occurs to keep you alive.

Generally, depending on how advanced the condition is, the protocol I outline here will, at minimum, slow down the progression of the fibrosis. In some instances it can reverse the fibrosis (but that depends on many factors including how far advanced it is). *Don't assume it will reverse it – if it does, go buy a very expensive bottle of champagne and celebrate with your loved ones.* Do assume that it will slow it down to one extent or another, or even hold it in place indefinitely. You will definitely feel better and have a better quality of life.

Important Point: If you wish to treat your condition at all successfully, it means that your old way of life is permanently over. It will take focus and persistence and consistency over months and most likely years – everything has to change. And I mean everything.

CILD, including IPF, is a condition that takes years or decades to develop; it is also a very serious condition (as if I need to tell you that). *Thus*: it will take time and focus to turn it around, even to stabilize it. There are a number of things necessary to make this happen. *They are a pain in the ass*. Further, it is relatively expensive to gather all this stuff together, especially if you buy it already made for you. (It is however, not as expensive as dying or using the medical system, even with insurance.)

I highly suggest you begin with pre-made formulations and see how you do for you might find this kind of approach just doesn't work for you or doesn't agree with your body. If you do seem to tolerate the protocols and wish to get into it in depth, then I highly recommend you buy all the herbs needed and do it yourself. For the dry formulations this means buying herbs by the pound, already powdered. For tinctures, you can get them non-powdered, which usually means what is called cut and sifted. (I have extensive medicine-making instructions in my book *Herbal Antibiotics*, second edition, published by Storey Books.)

CORE PROTOCOL FOR IPF

The core protocol has an unfortunate number of elements, all irritating to varying extents. In essence, no more lying on the couch and eating twinkies while watching re-runs of *Seinfeld*. Here is what is involved:

- a) core tincture formulation daily
- b) powder formulation daily
- c) nebulizer formulation daily
- d) supplements daily
- e) diet alteration

f) a variety of formulations for symptoms (herbs, tinctures, or supplements of various sorts, depending on your condition)

- g) most likely: room vaporizers
- h) walking or hiking in wild landscapes regularly
- i) protocols for acute exacerbations or lung infections

j) possibly, sooner or later, a fast (this is not as bad as it sounds, I will go into it when I expand this article in the future. In essence, the purpose is three-fold: microbiome regeneration, autophagy – look it up, and giving the body a rest so it can regenerate itself).

When I get really tired of all this (and all of us do), I just think to myself, well it is a breathless death or this. It does help to remember that as I hold the glass up to my lips and think: "I can't swallow this stuff one more time, ever."

The Specifics

Note: I am not going to go into all the parts of the protocol for IPF in this post; I want to get this posted without more delay. I will add more depth on things like diet, walking, symptoms, and so on another day.

* **Tincture Formulation:** Equal parts of *Angelica sinensis* (Dong quai), *Salvia miltiorrhiza*, *Cordyceps spp*, *Lonicera japonica* (Japanese honeysuckle flowers), *Polygonum cuspidatum* (Japanese knotweed root), and *Astragalus*.

Dosage: 2 tsp in morning then 1 tsp 2 more times daily *up to* a dosage of 1 tbl 3x daily depending on degree of fibrosis and condition of the lungs. The more fibrosis there is, the larger the dose used. *However*... start with 1 tsp 3x day for a week to see how well it sits with you. *Note:* This formulation sometimes upsets my stomach, whether I eat first or not. I generally take 3-4 very tiny, very potent peppermint coffee mints along with it in the morning.

All of these herbs have been found to stop the progression of or even reverse

fibrosis in every organ in which low level inflammation creates it, including the lungs. (There are other anti-fibrotic herbs included in the immune tonic formulations.)

Note: Dosage should be high and continual. This is a terminal condition for everyone who gets it. The herbs are essential until the condition is completely resolved – if it can be resolved. However, it *is* however possible to hold it in place and stop the progression. Additionally, these herbs have a wide range of actions that are applicable in CILD and IPF; they don't just stop fibrosis.

Very briefly (as examples): Lonicera and Japanese knotweed are strongly antiinflammatory, thus shutting down the chronic inflammation through very specific effects on cytokine cascades. Knotweed protects and normalizes many cellular structures and interferes with the generation of many of the most dangerous cytokines common to CILD, thus protecting the structures affected by the inflammation. It also protects as well as restores damaged endothelial structures. *Salvia miltiorrhiza* is a cytokine modulator, normalizing cytokine dynamics in damaged tissues, enhancing them where necessary, lowering or preventing where overactive. The other three herbs have, as well, a number of very good immune modulating and adaptogenic effects. (This is by no means an exhaustive look at their usefulness in this condition.)

There are some other herbs that are useful here such as *Stephania tetrandra, Ligusticum wallichii, Scutellaria baicalensis, Pueraria lobata* (kudzu), *Paeonia lactiflora* (peony), *Tripterygium wilfordii*, and milk thistle seed. There are caveats on stephania and tripterygium. Stephania is often adulterated with *Aristolochia* species which can cause kidney destruction if the herb is tinctured (but not if taken whole). Tripterygium must be carefully dosed. I would not use either of those unless you are an experienced practitioner or working with someone who is.

Scutellaria baicalensis is an extremely good herb for CILD and is widely used in China and has been for millennia. It, too, has a rare but difficult side effect. Specifically: In a small number of people it can cause, for reasons no one understands, hypersensitivity pneumonitis (essentially an allergic response in the lungs like allergic rhinitis or sinusitis or bronchitis). Again, this side effect is rare but does exist and is problematical. I think it a serious concern for people with interstitial pulmonary fibrosis simply because of the stimulus it can give to inflammation and fibrosis formation. So . . . if you do use the herb *and* you have a pneumonitis episode (unmistakable experience, google it) stop using it and see if that helps. *Otherwise*, this is a very safe herb for most people and one of the most important to use in any form of CILD.

* **Powder Formulation**: Note: buy all the herbs pre-powdered, it will work better. Trust me on this one. All these herbs are blended in equal parts *except* the ginger root powder – for the ginger use *one-quarter* part. You can use an equal part of the ginger but it does make the formulation *very* spicy.

I generally use two ounces (postage scale) dry weight (in large, empty yogurt container for

weighing – remember to offset for the weight of the container) of each of the herbs and only *one-half* ounce of the ginger. This will last a month or more.

Herbs used: Ginger (Zingiber officinale), Eleutherococcus senticosus, Licorice root (Glycyrrhiza spp), ashwagandha (Withania somnifera), Astragalus membranaceus, Milk thistle seed (Silybum marianum), turmeric (Curcuma longa), nettle leaf (Urtica dioca), chlorella, spirulina, and wheat grass juice powder.

Dosage: 1/4 cup of the powder in liquid of your choice, before bed. *Every night*. To blend it, I use a glass jar with a screw-top lid, add 4 ounces water, one-quarter cup powder, cover, shake really hard, and drink. I just use water but most people prefer juice or something tastier.

While these herbs all do multiple things, here is just a tip of the iceberg: *ginger and turmeric* – very antiinflammatory, specific for CILD, somewhat antifibrotic; *milk thistle seed* – promotes healthy liver function, antifibrotic for lungs; *eleuthero, ashwagandha, astragalus* – cytokine normalizers, adaptogenic herbs, immune tonics; *licorice* – synergist, immune enhancement, anti-viral, antibacterial, and so on; *nettle, cholrella, spirulina, wheat grass juice* powders – nutritive, plus numerous other useful functions in CILD.

* **Nebulizer:** Nebulizers are very good for CILD because they enable direct contact of medicines with the affected tissues throughout the respiratory system. You will need a number of things for this.

1. A nebulizer machine. Cheap and easy to find on Amazon or the net (I use Leader

brand). I think the nebulizer cups are better than a face mask and some cups are better than others. The ones that come with the nebulizers are often made of cheap plastic. I would not use them.

2. A nebulizer cup. Again: many of these are made with very cheap plastic which essential oils will degrade, often within a few days. (I have been unable to find any glass or stainless steel options.) I use the Respironics brand which I have found holds up very well, often for months if it is washed well after every use. (Use very hot water and soap, scrub out the cup itself with your little finger or something that can get down in there to scrub it.) This particular brand cannot be bought from the manufacturer without a prescription (which is ridiculous) so just google it and find an outlet that will sell it. Not hard to do.

3. Saline solution for nebulizers. I use modudose saline solution for inhalation sold by Amazon, 5 ml each, 100 to a box, \$16.50.

4. Effervescent glutathione capsules. Glutathione is a potent antioxident, normally present in the surfactant liquid in the lungs. People with CILD tend to have low levels of all antioxidants including glutathione. I dissolve a single capsule in the 5 ml saline solution I have already put in the nebulizer cup. (It will fizz and foam when you first put it in the liquid . . . after you have finally gotten the capsule apart that is.) I think Thernaturals, Reduced L-glutathione plus, enhanced absorption, ultra purity grade is the best one to use. It costs \$37.00 for 100 capsules/ This will last a bit over three months.

4. Essential oils. I put these in the nebulizer cup in single drop doses the very last thing. At this point I use one to two drops of ginger essential oil daily. *However:* during acute exacerbations (such as acute bronchitis, hypersensitive pneumonitis, flu, bacterial infection, and so on) I add one drop of oregano oil *and* nebulize morning and evening. This makes a huge difference.

Regarding acute exacerbations: This is the one thing that will substantially affect the inflammation process in the lungs; it makes everything much worse, often very quickly. It is to be avoided or stopped in its tracks as quickly as you can do so. Oregano oil is very helpful here, a few more suggestions later on in this article.

The essential oils I have found to be helpful: Ginger, eucalyptus, tumeric, frankincense, black pepper.

Please note: In a *very* small number of people nebulizing essential oils may create a hypersensitivity response. I would suggest that you individually smell new oils you wish to try to see how your body responds before trying them. *And*, if you have asthma, please note that essential oils can sometimes set off an acute episode, please be careful.

* **Supplements**: I will have some other suggestions in the future but the most important one is a *very* good probiotic. The really good ones tend to be in the \$30-\$50 range, the wider the variety of organisms the better. The only decent, less expensive brand is PB8 (around \$19 the last time I checked). I would go with the more expensive ones. I use Klaire Labs: Ther-Biotic Complete Probiotic, 25 billion high CFU blend from Amazon. \$48.50 for 60 capsules (a two month supply).

*Acute exacerbations and infections: I will just look at acute bronchitis and lung infections in

this incarnation of the protocol.

Acute bronchitis: This is a pain in the ass when it happens to those of us with IPF; it can last months and it does make the fibrosis and troubles with oxygenation percentages much worse. Often, former status is not completely recoverable. It is important to reduce the acute episode as quickly as possible. Here is what I have found helpful.

* *Pelargonium sidoides* (sometimes irritatingly called umckaloabo which can create difficulty for the uninitiated or those in capable or articulating 12 syllable words. Mountain Rose Herbs has the only reputable supply in the US (as far as I am concerned), both tincture and bulk herb.

Dose: 30 drops as needed, usually around 6x day at the beginning of an acute attack, decreasing to 3x day as the attack comes under control. Generally: 2 weeks, though it can be used indefinitely as far as I know. It does have some efficacy in reducing chronic bronchitis.

* *Myrtol:* one 300 mg capsule 3x day for adults, one 150 mg capsule 3x day, children. For two weeks.

This is a German formulation with some very good clinical research on it. It is a liquid in a gelatin capsule and contains three isolated terpenes from three different essential oils. You can get it through Amazon but I consider the price absurdly high. I order it through a Bulgarian company that gets its supply from Germany. In an emergency though, go Amazon. * *Menthol:* I am just starting to work with this now and will report more on it later. It can be bought online as crystals but must then be either heated in water or put into either essential oils or alcohol to make a liquid form for use in vaporizers or nebulizers. It does significantly reduce bronchitis and in vaporizers is very useful during allergy season.

Lung Infections: Colds and flu are the major problems most people experience. I do have protocols for the flu (influenza) and pneumonia in the book *Herbal Antivirals* published by Storey Books. The protocols are involved and long. Here I will just talk a bit about the most effective immediate intervention for colds and flu. (And of course, the oregano oil addition to the nebulizer, discussed already, is also quite helpful.)

* *Ginger Juice Tea:* You will need a juicer for this, I prefer Champion, the workhorse of juicers, but there are a lot of others out there. Fresh ginger juice is *strongly* anti-inflammatory and *powerfully* antiviral. You may find that one or two cups of this a day will help overall symptoms of IPD and CILD, including increasing oxygen intake.

To Make: Juice a lot of fresh organic (if you can get it) ginger. Add one to two ounces of the juice to a large mug, then a pinch of cayenne, one tablespoon (or to taste) of *wildflower* honey, and one lime wedge, squozen. Fill mug to the brim with hot water, drink 2-6x day. *Note:* fresh ginger juice contains gingerol which the essential oil generally does not (or only does in minimal quantities). This is highly antiinflammatory and will substantially help the inflammation in the lungs as well as the juice itself slowing or preventing acute viral episodes.

* *Gan Mao Ling:* This is a Chinese formulation which I have found highly effective. I usually buy ten bottles or so at a time. Do yourself a favor and get the coated tablets, the uncoated taste terrible. Hence, I use Solstice medicine company, Yang Cheng brand. Just google it and find the store selling it the most cheaply, this changes all the time. *Dosage:* six tablets 3-6x day.

* *Boiron Oscillococcinum:* This is a homeopathic blend which I have found highly effective (though I tend to use Gan Mao Ling now). Dosage as on package. Amazon carries it.

* *Herbal Tincture Formulation:* Dosage: full dropper (30 drops) minimum 6x day. *Note:* I sometimes add 20% fresh ginger juice to this combination. (So, if I make 20 ounces of the formulation, I add four more of ginger juice.) The alcohol preserves it quite nicely. (Note: part means ounce, so 3 parts would be 3 ounces, and so on).

Formulation

Lomatium, 3 parts Pleurisy root, 2 parts Elecampane, 2 parts Isatis, 2 parts Houtuynia, 2 parts Osha, 1 part Licorice, 1 part Yerba santa, 1 part

Myrrh gum (stabilized), 1 part

OTHER FORMS OF CHRONIC LUNG DISEASE

I am working on various other forms of CILD and will post more as I get it figured out. So, use the following for: emphysema, chronic bronchitis, and so on.

A number of people who have been using the formulations that follow (the initial ones I began with) have commented that their lungs are better, they need their inhalers much less often, and that their energy and quality of life has significantly improved.

Note: All the interventions I listed for use with idiopathic pulmonary fibrosis are to be used for all forms of CILD, irrespective of what you are suffering from. The only differences from the idiopathic pulmonary fibrosis protocol are: 1) a different powder formulation; and 2) a different tincture formulation. Otherwise use everything already discussed under IPF.

Basic COPD Tincture Formulation: The primary herbs around which this protocol is formulated are: Chinese skullcap root (*Scutellaria baicalensis*), Japanese honeysuckle flower (*Lonicera japonica*, an invasive in the US), and licorice root. These three herbs are in nearly every Chinese formulation for the treatment of COPD. I have done monographs on two of them in previous works, I will add Lonicera in the new book. Still, there are many other herbs in the formulation. All of them have shown effectiveness in treating COPD. This formulation can be purchased from Woodlandessence.com. **Dosage** is 1 tsp 3x daily.

To make (all herbs are tinctures):

Chinese skullcap root, 4 parts

Lonicera, 3 parts

Cordyceps, 3 parts

Sida acuta, 2 parts

Codonopsis, 2 parts

Licorice root, 2 parts

Bidens pilosa, 2 parts

Panax ginseng, 1 part

Eleutherococcus senticosus, 1 part

(Note: I also add 1 part ephedra to the one I make in my lab. Irritatingly, ephedra, every species, is now illegal in the US – but I bought a lot before the ban. You can still get it on the internet from China – or try to find the American species from southwestern harvesters. I tend to stay away from most of the Chinese suppliers due to their propensity for contaminants. Nevertheless, if you are so inclined Ephedra is a decent bronchodilator but it has other functions as well and the Chinese have found it very useful for COPD.) When I blend my formulations one part equals 30 ml but it can be any ml number you wish.

COPD Powder Formulation: In this formulation, all herbs are bought as powders, then mixed together well, then placed in large glass containers kept in the dark. **Dosage** is 1/4 cup of the powder (0.8 oz) taken just before bed – in juice or water. This means that you will use 24 ounces of the powder per month. It may cause loose stools in some people. PLEASE NOTE: Montana

farmacy is carrying this formulation for sale.)

The Formulation:

(When I blend, one part equals two ounces of powder but any amount can be used, just multiply

as needed.)

Chinese skullcap root, 2 parts (I also add baicalin powder to mine, 1 part)

Licorice root, 2 parts

Lonicera japonica, 2 parts

Eleutherococcus, 2 parts

Astragalus, 2 parts

Ashwaghanda, 2 parts

Morus alba, 2 parts

Schizandra, 2 parts

Tumeric, 2 parts

Ledebouriella divaricata root (fang feng), 1.5 parts

Atractolydes (white - Bai zhu)), 1.5 parts

Chlorella, 1 part

Japanese knotweed root, 1 part

Nettle leaf, 1 part

Wheat grass juice powder, 1 part

Panax ginseng, 1 part

Spirulina, 1 part

Milk thistle seed, 1 part

Also of Use From Time to Time:

The following two supplements are made from plants. The first is mucinex which is purified guaifenesin from guaiac tree, the second is naringin from bitter orange.

Guaifenesin thins mucus. During early stages of COPD, sometimes later on, mucus is very thick and heavy, this helps thin the mucus so it can be expectorated. (The thick mucus in the lungs is also a great medium for bacterial and viral growth so it is important to reduce it.) **Dosage:** 1 tablet 1-3x daily. I used it for about 6 months but didn't need it longer than that. Naringin is a pretty good antiinflammatory for the lungs. I used it about 6 months as well. It did help. **Dosage:** 4 capsules 1-3x daily.

I would not use either of them long term.

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