

## TREATMENT OF IDIOPATHIC PULMONARY FIBROSIS

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

This is a short, and rather hasty, version which deals only with the protocol itself and not all of the rationale I have for the protocol. (I will be redoing this as a lengthy monograph when I can. There will be several thousand citations and a far deeper analysis of IPF and other chronic lung conditions as well as an exhaustive exploration of how the interventions I suggest act in treating the conditions.) This short version is just a quick look so that people with this terminal condition can get started on treatment.

As a brief comment, people with *emphysema* who have used variations of this protocol – as noted in the material that follows – have not seen significant worsening of their condition nor have they had their usual yearly troubles with flu or the regular hospitalizations they once experienced as that flu worsened into pneumonia; and yes, they did take the flu shot every year. Some of those with COPD have reported similar outcomes. I will go into neither of those conditions here.

The protocol which follows has been developed over eight years of deep research, study, and personal use. I have reviewed every medical text I could find to buy and some 10,000 articles in peer reviewed journals. Some extremely useful studies emerged from the Covid pandemic simply due to the impact of that disease on lung tissue.

## The Protocol

I was first diagnosed with COPD by a physician. It was a misdiagnosis. It was only when I later obtained and read my CT scans that I realized that the radiologist had more properly diagnosed me with Usual Interstitial Pneumonia (UIP). The form I have is the most common, idiopathic pulmonary fibrosis (IPF). Regrettably, IPF has, depending on the source consulted, either a 2-3 year or a 2.5-5 year prognosis. In any event it is a terminal diagnosis and is more serious than many cancers.

I noticed the first symptoms in spring 2012 after a severe flu episode which became pneumonia before it was treated successfully. (I had badly overworked, it was burnout that began it.) CT scans were taken the following year which showed UIP. I began my research then and started my very early protocol soon afterward.

I am now in year 9 (or 10) depending on how you figure such things. The protocol has been working well for me. The protocol that I use has been modified and refined many times over the past nine years. Here is its current form.

- 1) Tincture formulations
- 2) Powder formulation
- 3) Supplement powder
- 4) Additional supplements
- 5) Nebulizer and nebulized inhalants

\* **Tincture Formulation:** *Salvia miltiorrhiza*, *Cordyceps spp*, *Angelica sinensis* (Dong quai),

*Lonicera japonica* (Japanese honeysuckle flowers), *Polygonum cuspidatum*

(Japanese knotweed root), and *Astragalus membranaceus*. Two parts of the Salvia, one part of each of the others. In other words, buy two ounces of Salvia and one ounce of each of the others, blend together, and bottle and **label** clearly.

**Dosage:** 2-3 tsp daily, one in am and one in pm before bed. An additional tsp can be taken at lunch if desired and depending on severity of fibrosis. If stomach upset occurs, take after eating.

**Brief Comment on the Herbs:** Each 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. Additionally, these herbs have a wide range of actions that are applicable in 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.)

**Note:** While there are a significant number of studies on the use of plants for treating fibrosis the majority of them are used to prevent fibrosis in bleomycin damaged lungs in rats and

mice. Far fewer studies look at reversing existing fibrosis. Of note is *Salvia miltiorrhiza*, red sage, it is the strongest and most effective of all plant medicines in this regard.

\* **Powder Formulation:** Note: Buy all the herbs pre-powdered, trust me on this one. Get them in one pound lots, it will last around a year. Get organic or US grown if you can. If not, get what you can. Amazon and Etsy are the best sources. All these herbs are blended in equal parts. I generally use two ounces (postage scale) dry weight of each of the herbs (in large, empty yogurt container for weighing them – remember to offset for the weight of the container). I remake it as necessary.

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

**Dosage:** 1/4 cup of the powder in liquid of your choice, before bed. Every night. If it keeps you up (it doesn't bother me) take it in the morning as a green drink. To blend it, I use a glass or plastic jar with a screw-top lid, add 4-6 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: turmeric – very antiinflammatory and 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 chronic disease.

\* **Nebulizer:** Nebulizing the following protocol is essential. It allows direct contact of substances with the affected tissues. 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 which is not necessarily the best, just what someone recommended early on).

2. A nebulizer cup. Many of these are made with very cheap plastic which degrades fairly quickly. I use the Respiroics brand; they have a multiple use form (and a throw away form). The multiple use form holds up very well. Get 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. When I began I nebulized glutathione. It is a far better mucolytic than NAC which is generally all that most physicians will suggest to you. (The studies on the effectiveness of NAC reveal, over and over, that it is not very good.) Glutathione is better. IF you have this kind of lung condition or similar, there is often a build up of mucus in the lungs. This is a perfect breeding ground for infectious organisms; it also interferes with breathing. The use of a mucolytic is, in this kind of disease, essential. If you have nothing else use glutathione. I used reduced L-gluathione plus from Theranaturals. A great product. It is effervescent. I just put 5 ml of sterile saline in the nebulizer cup, broke open the capsule and poured it in and let it dissolve. Then nebulized it.

*Note:* I think the addition of one drop (only) of eucalyptus essential oil increases the

mucoytic actions considerably. I used that (with one drop peppermint EO and sometimes one drop oregano EO) for 6 years without adverse reactions despite some of the hysterical commentary that you might find on the internet. Again, terminal condition. Again, side effects from pharmaceuticals (read some of them sometime) are incredibly dangerous, far more so than herbs. Period. End of story. (And yes, sometimes people have adverse reactions to plants but it tends to be relatively rare. Just pay attention and if you start feeling funny, stop the herb.)

4. IFN-g and heparin as discussed below is what I use now instead of the glutathione and EO.

### **Interferon gamma and Heparin, Brief Comments**

I now use two main substances: interferon gamma and heparin. (Though I am exploring the use of some further substances to see if they can help facilitate fibrosis reversal in my lungs. Too soon to tell.)

The interferon gamma (IFN-g) is potently antimicrobial. It is a natural substance made by our bodies. It is a first line defense to prevent infection by microbial pathogens. This is why such pathogens (such as the coronavirus) shut down its production immediately. It had been found to both stop the progression of fibrosis and to reverse fibrosis. And to modulate cytokine activity. The diffusing capacity of the lungs for carbon monoxide (DLCO) is “significantly improved following inhaled IFN-g for the treatment of IPF.” IPF stabilized, pulmonary function tests improve, dyspnea is reduced. One case report on its use with a patient notes: “The experimental protocol was concluded after 1.5 years of therapy but he was able to secure the drug and continued treatment without interruption for a total of 7 years. His most recent DLCO is 69%.”

**Note:** Most studies on the use of IFN-g for IPF has been with the use of IFN-g injections. The outcomes were poor. This is because that use did not get the material to the affected location. Further studies on its use as an aerosol have found quite the opposite.

IFN-g is legal for use in the EU, UK, and Australia but not in the US. I could be used off label but the one company in the US that carries it has a monopoly on its import and use in this country. Here it costs around one million dollars a year USD. In the EU/UK it runs 24k-30k USD. In Russia it is around 12k USD.

US pharmaceutical companies have recently released two drugs to treat IPF, both are very expensive and have a number of serious side effects. I suspect this is why IFN-g (and the monopoly as well) is not being used in this country.

*Note: IFN-g has NO side effects when nebulized. Period.*

Again: Heparin is a natural substances made by our bodies. Unfractionated heparin (that is the whole molecule) is strongly antiinflammatory and antimicrobial and the best mucolytic I know of. NAC is useless and I don't know why it is still being recommended. The studies in the journals are not all that kind in their findings re NAC.

Heparin is active against the majority of the most common pulmonary pathogens experienced in chronic lung conditions. It also inhibits neutrophil elastase-induced HMGB-1 secretion and airway inflammation, restores healthy macrophage function and increases bacterial clearance from damaged tissues, among other things.

*Note: Heparin has no side effects when used as an inhalant. Period.*

**Studies on the Use of IFN-g in the treatment of IPF and other Lung Conditions**

There are many of these, all concealed at google scholar in open access peer reviewed journals. I have over one hundred in my files. I suggest beginning with this one:

1) Fusiak, Timothy, et al. Pulmonary fibrosis treated with inhaled interferon-gamma, *Journal of Aerosol Medicine and Pulmonary Drug Delivery* 28(5):2015.

### **Studies on the Use of Heparin**

There are a large number of studies that can be found on google scholar. (Again, I have several hundred.) The research on this is very good. The two I suggest you begin with are:

1) from King's College London, J. K. Shute, et al. Inhaled nebulized unfractionated heparin improves lung function in moderate to severe COPD: A pilot study, 2017. It's open access.

2) Frank M. P. Van Haren, Clive Page, et al. Nebulized heparin as a treatment for Covid-19: scientific rationale and a call for randomized evidence, *Critical Care* 24, 2020. (Note: this is the best look at heparin's many actions in one place.)

### **Where To Get Interferon-gamma**

Most of the studies on the use of IFN-g for treating IPF (and other chronic lung conditions) use 2,000,000 IU vials. That is because both the US and EU IFN-g comes standard in two million IU vials. The Russian form is 500,000 IU and I think it just as good. There are some studies utilizing lower doses, their outcomes are similar to the larger dose studies. Note: IFN-g It always comes in a powder form and is mixed with sterile saline for nebulization.

Russian companies are the easiest sources I have found from which to get IFN-g.

Rusmedicines used to be very good; they had the best mailing service and packaging (DHL, in an



insulated container with ice packs). Unfortunately their site was shut down for awhile and when it came back up it was not as good. You may need to use an international fund transfer service such as Transferwise (now Wise) to send funds. Some use Paypal, others want a bankcard. They tend to be helpful when it comes to payment. These companies receive orders from around the world.

Other than a pharmacy that used to sell IFN-g and which never did mail what was paid for, all the sources have been reliable to my knowledge. Ruspills is the cheapest; they may take 7-10 days for them to mail it (I suggest using the fastest mail service offered even though it is more expensive) and then another 7-10 days for arrival. Pharmru is also good. Rupharma is fine as well. Prices for a box with 5 vials of 500,000 IU IFN-g run from 88-180 USD.

There is also a nasal inhalant powder which is 100,000 IU. It is commonly used throughout Russia for preventing Covid-19 infection. As soon as the virus enters the nose it shuts down IFN-g production by the body to enable infection. It is very susceptible to IFN-g. I do not suggest it for nebulization.

### **Heparin and Where to Get It**

Nebulized heparin should always be unfractionated (i.e., full spectrum heparin). This is the form generally used in nebulization studies and trials and it does produce better outcomes. It is extremely useful for IPF and all chronic inflammatory lung diseases. Please note that when heparin is nebulized its “blood thinning” actions are negated and do not occur. Again: *There is no blood thinning impacts when heparin is nebulized.* If you are wishing your MD to help you with this, make sure the MD is an outside the box kind of person who is willing to read the

journal articles that discuss this intervention. (Same applies to the IFN-g.)

Regrettably it is very difficult to get high dose heparin in the US since the only available form is the injectable. There are three forms: preservative free, parabens preserved, benzyl alcohol preserved. *Do not under any circumstances use the benzyl alcohol form as an inhalant.* That substance is not good for the lungs. Parabens is fine. Regrettably, the preservative free is very expensive. I think that the 1,000 IU parabens stabilized will work as a standard dose for nebulizing, though could combine 5 of those in the cup, which I also did in the beginning as I was working up to the final doses I used. This form is easiest to get with a prescription, you can pick it up from Walgreens or CVS if your MD calls in a prescription.

The dosage I began with was 1,000 IU, then I slowly went up to 30,000 IU. Ultimately when I was able to get the pure chemical heparin I began with 150,000 IU, then after a month dropped it to 75,000 IU, and am now at 35,000 IU which my body now prefers. Some people buy their heparin from Chinese pharmaceutical suppliers. The cost of 99.9% pure runs around \$15,000 USD per kg but 99.4% is only around \$1500 USD or so for a kg. That will last a very long time.

Few physicians in the US will support going outside the medical monopoly in this country to obtain the pharmaceuticals you need. (Greater numbers of people are doing so anyway and I applaud them.) My position is that if I have a terminal diagnosis and that system cannot treat it effectively or if the medicines that will treat it effectively are prohibitively expensive, then I don't care what the system says. Either medicine is to help the sick or it is to help companies and individuals to get rich. If the latter, the system is evil. Period.

**Dosage for IFN-g and Heparin in the treatment of IPF and other chronic lung diseases:**

I alternate the heparin and IFN-g. Thus: 500,000 IU IFN-g Monday, Heparin Tuesday, and so on.

Again, the IFN-g comes as a powder in vials. Add about 2 ml of sterile saline (which is all the vial holds), shake well, and then pour it into the nebulizer cup and add the rest of the saline for 5 ml total. The IFN-g vials are generally used to prepare it for injection. However, I just remove the aluminum top, pull the stopper, add the liquid, replace the stopper, shake, then pour into the nebulizer cup. .

The heparin is used on alternate days from the IFN-g. The trial in the King's College study used a variety of doses but found 75,000 IU and 150,000 IU to be the most effective. However, after awhile I went to 35,000 IU and found it just as effective for me. Note: most parabens stabilized is in 1000 IU vials. I tried that in the beginning before I got the pure drug from China, it does work. I think it fine to use, especially important if there is a lot of mucus buildup, it is exceptional for that. I would not skip it, esp after you read what it can do for the lungs. I use 5ml sterile saline with it as well. The saline solution for nebulizers that I use is modudose saline solution for inhalation sold by Amazon, 5 ml each, 100 to a box, \$16.50.

**\* Additional supplements:**

1) Glutrasol 1E, a powder. This is essential, it is highly active against cytokine cascades that cause inflammation; it helps keep up energy as well. You can read about it online.

2) I highly suggest the use of expensive probiotics (PB8 is the cheapest I recommend). The lungs have an extensive microbiome that few doctors are aware of, what happens in the GI tract does not stay there. This is a long discussion I don't have time to go into but probiotics are

essential.

3) Lumbrokinase, Buluoke only. IPF sufferers almost always have heavy sedimentation rates. It has to be addressed. Mine are bad. Additionally, these substances are antifibrotic and will help reverse and reduce the fibrosis in the lungs. I take 3-6 capsules a day. Expensive.

4) Vitamin D3. I take 5000 IU daily.

This is the core of it, I do use other things. But they are add ons.

I hope this helps. It has helped me very much.

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