

AONM Long Covid – how to treat

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29 April 2021

# Post viral syndromes are common

.....and are about to become much more so.

12 weeks after acute CV19, you find Long Covid afflicts 10%.

Common symptoms include fatigue, foggy brain, shortness of breath, insomnia, temperature, cough, headache and more. Many are so ill that they are unable to work. It is a serious disease.

Long Covid clinically looks like ME, but the shortness of breath is peculiar to Long Covid

# Post-infection syndromes have been long recognised in the medical literature.

They are comprised of many different symptoms which follow a viral infection. We all know of the post herpetic neuralgia which may follow shingles.

We all know of the chronic fatigue syndrome which follows glandular fever (Epstein Barr syndrome). In both cases it is clear that there is a direct viral driver. We know that the risk of post herpetic neuralgia is greatly increased with the severity of the disease, hence the importance of using anti-virals as soon as is possible with acute shingles. Thanks to the work of Dr Martin Lerner<sup>2</sup>, we know that anti-virals are often effective in treating post viral EBV.

However, we do not have good anti-virals prescriptions for all viruses.

What we do not know in all cases are the precise mechanisms which drives these nasty symptoms but we can work through them in a logical manner

# What is Long Covid?

It is NOT a diagnosis – it is a clinical picture. Essentially

**CFS = poor energy delivery mechanisms**

**ME = CFS PLUS inflammation**

The mechanisms which result in the clinical pictures of CFS, ME and Long Covid:

Poor energy delivery mechanisms

The clinical picture of CFS is characterised by three groups of symptoms all of which result from poor energy delivery mechanisms:

- physical fatigue with poor stamina, muscle weakness and post exertional malaise
- mental fatigue with foggy brain, poor short-term memory and poor concentration
- energy conservation symptoms such as procrastination, depression and apathy – this is the body being ‘self-protective’ – it is NOT a cause of the illness.

These symptoms we treat by addressing energy delivery mechanisms.

The mechanisms which result in the clinical pictures of CFS, ME and Long Covid: Inflammation

Symptoms of inflammation include pain, loss of function, heat, redness and swelling. Indeed, inflammation is the great mimic - it can produce any symptom including death.

Acute covid death often results from the cytokine storm where there is great excess of inflammation. Incidentally, vitamins C and D prevent this.

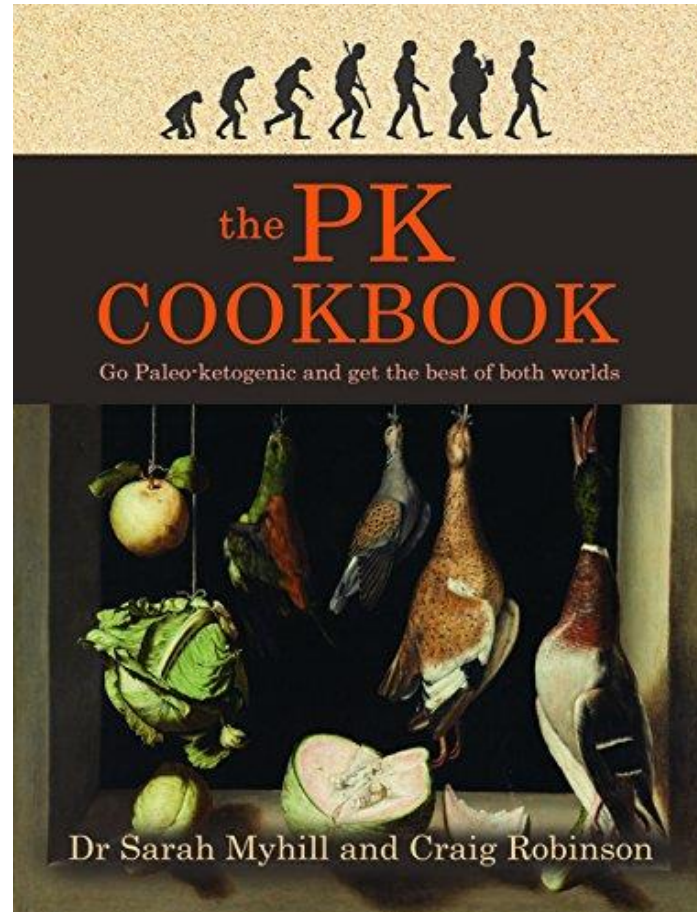
These symptoms we treat by looking for the cause of the inflammation.

# Improving energy delivery mechanisms

The body is a machine, and the car analogy helps explain. For your car to run you need

- the correct fuel in the tank (PK diet, gut function),
- an engine to use this fuel (mitochondria) together with
- the thyroid accelerator pedal
- and the adrenal gear box.

# The Paleo-Ketogenic Diet





# Gut – sort the upper fermenting gut

If your carbohydrate intake is too high you will end up with an upper fermenting gut (auto-brewery syndrome) – this is a problem because:

Products of fermentation are toxic (eg alcohol, D lactate, hydrogen sulphide, ammoniacal compounds)

This liver has to detoxify these ferments and that drains it of energy and raw materials

Microbes are as hungry for micro-nutrients as we are – supplements feed the microbes first and you miss out! An expensive mistake.

A fermenting gut is a leaky gut – acid leaks out and the hypochlorhydria that results impairs protein digestion, gut motility, gut sterilisation and mineral absorption

Microbes also leak out into the blood stream, get stuck in distal sites and drive inflammation in joints, muscles, arteries, skin and airways.

Treatment of the upper fermenting gut is a two –fold approach

Starve the little wretches out with a PK diet

Kill 'em with vitamin C to bowel tolerance (more details later!)

# Correct the engines, I mean mitochondria

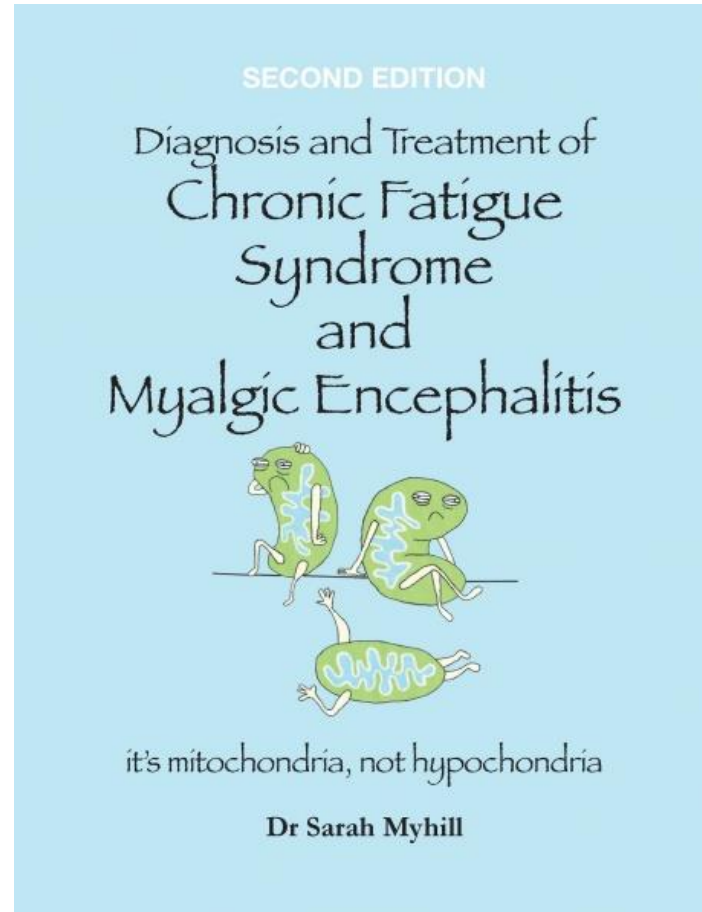
They may be going slow because:

- They have the wrong fuel in the tank
- They lack the raw materials to function
- They are blocked by something (lactic acid, products of the fermenting gut, immune mediators, chemical toxins)
- The control mechanisms are wrong

# The bare minimum of raw materials in order of importance are

- magnesium 300mgs (and vit D 10,000iu for its absorption),
- co Q 10 100mgs
- niacinamide 1500mgs,
- AL carnitine 1 gram (especially for vegies and vegans)
- D-ribose 5-15grams as a rescue remedy if you really overdo things.  
BUT this must be part of your carb count in the Paleo Ketogenic diet

Then we have the control mechanisms: the thyroid accelerator pedal and the adrenal gearbox



# It is important to do things in order

[https://drmyhill.co.uk/wiki/CFS/ME Protocol - order of introduction of interventions](https://drmyhill.co.uk/wiki/CFS/ME_Protocol_-_order_of_introduction_of_interventions)

## FIRST the PK diet

- Makes sure you are in ketosis
- Make sure you are eating enough protein
- Make sure you are eating enough calories
- Make sure you are eating enough fibre

THEN Vitamin C to bowel tolerance

THEN sort the mitochondria

THEN look at the control mechanisms

Then tackle the inflammatory component of Long Covid  
*An ounce of prevention is worth a pound of cure* – Benjamin Franklin.

The natural treatment of Long Covid starts with restoring natural immunity and immune function.

Indeed, the question that no-one seems to be addressing is why it is that some get infected with coronavirus and sail through with virtually no symptoms whilst others die from it. As Bill Clinton famously said when asked what he considered to be the important election issue replied ..... “It’s the economy, stupid”.

It is equally obvious with covid “It’s the immune system, stupid”.

# Put the immune system in tip top shape now to prevent acute covid and start to treat Long Covid

Life is an arms race – you and I represent a free lunch – if microbes are able to move in, they find themselves in a highly desirable environment with free food, water and warmth. There they can enjoy free sex and multiply. Once ensconced, they steal our energy and raw materials and so make us ill – even more symptoms of illness result from the immune system's fight to get rid of the invading pathogen. This is why immune suppressing treatments like paracetamol are so dangerous – they prevent us running the fever which kills virus and suffering the pain which forces us to rest, thus freeing up energy for the immune system to fight the good fight.

The first principle of treatment is do not symptom suppress!



Start with the PK diet!

Yes, sigh, all roads lead to Rome

All infections love sugar and carbohydrates. This is why the overweight and the diabetics run such a high mortality from CV19. A colleague of mine working on the frontline gave me the April 2020 statistics from his hospital – the 38 patients in ITU all had a BMI above 30 – 8 patients died, and they all had a BMI above 34. The starting point to treat LC is a low carbohydrate diet.

# Vitamin D is highly protective

The high mortality in black and Asians (BAME) is a consequence of vitamin D deficiency. This BMJ rapid response letter lists 40+ studies showing that Vitamin D mitigates CV19 - <https://www.bmj.com/content/371/bmj.m3872/rr-5> There is a straight-line relationship between vitamin D levels and death rates. BAMEs have low levels of vitamin D because their dark skins prevent them making vitamin efficiently from sunshine.

We should all be taking 10,000iu of vit D daily, equivalent to one hour of full body midday summer sunshine. This is over twenty times the [risible government recommended dose](#) of 400iu daily (2.4 minutes of sunshine). In Long Covid patients are in a state of inflammation and vitamin D is the most important modulator of such. All should take vit D.

# Vitamin C is highly protective.

It is humans, fruit bats and guinea pigs that cannot make their own vitamin C. In response to an infectious challenge dogs can produce up to 20,000mgs of vitamin C daily, goats will make up to 15,000mgs. Compare this to the again risible government recommended dose of 30mgs a day. My view is we should all be taking at least 5,000mgs (5 grams) daily on a regular basis to prevent and we should increase the dose markedly at the first symptom of any cough or cold or other sign of infection.

Vitamin C attacks from the inside out  
Iodine attacks from the outside in

Use iodine mixed with coconut oil as a salve for the skin, scalp, nose, ears, around the eyes, mouth, perineum etc. Because it is volatile and penetrates the skin well, apply to the skin over swollen lymph nodes. Use as often as necessary to keep the skin stained yellow.

Use Lugol's iodine inhaled in a salt pipe for all upper and lower respiratory infections eg pharyngitis, tonsillitis, laryngitis, sinusitis, otitis media, rhinitis and bronchitis.

Gargling clears CV in seconds

<https://www.medrxiv.org/content/10.1101/2020.09.07.20180448v1>

# Reducing inflammation

First try to identify the specific cause which may be driven by chronic infection (treat with anti-microbials), allergy (do your best to avoid) or auto-immunity (always difficult).

Inflammation is like a fire – once lit and roaring it has a life of its own and is hard to switch off. There are many general interventions from the PK diet to vitamins C, D, B12, omega oils, detoxification regimes, herbals, micro-immunotherapy and more which further assist in quenching that inflammatory fire. Much more detail in our books<sup>5</sup> “The Infection Game” and “Ecological Medicine”.

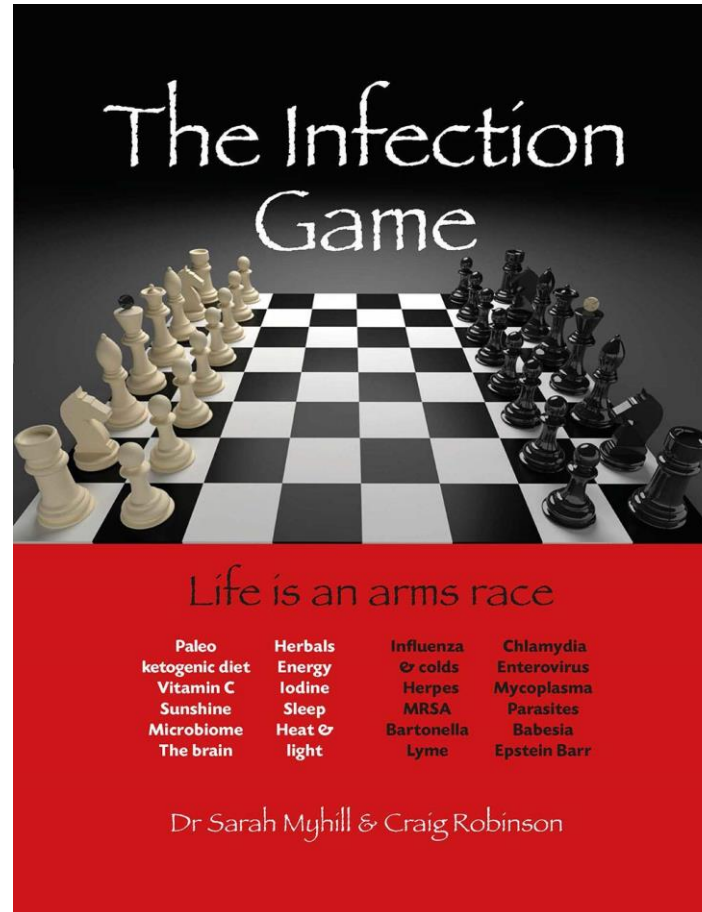
# Groundhog Chronic

[https://drmyhill.co.uk/wiki/Groundhog\\_CHRONIC %E2%80%93 the starting point to treat any chronic infection AND to live to our full potential](https://drmyhill.co.uk/wiki/Groundhog_CHRONIC_%E2%80%93_the_starting_point_to_treat_any_chronic_infection_AND_to_live_to_our_full_potential)

This summarises all the non-specific interventions which put the body into the best possible shape for fighting chronic infection

Having done that then we look at specific interventions to reduce the infectious load and re-educate the immune system

These are detailed in our book  
“The Infection Game”



Treatments to deal with specific infections include:

Prescription drugs

Herbal remedies

Micro-immunotherapy

There is a fabulous summary of all remedies for acute covid which you can see at

[Real-time database and meta analysis of 549 COVID-19 studies](#)

and

<https://swprs.org/on-the-treatment-of-covid-19/>

We have yet to find which will work for Long Covid



# Micro-immunotherapy

[https://drmyhill.co.uk/wiki/Reprogram\\_the\\_immune\\_system\\_with\\_micro-immunotherapy](https://drmyhill.co.uk/wiki/Reprogram_the_immune_system_with_micro-immunotherapy)

Remedies that reduce the infectious load

For CV 19 - -use remedy EID

We know CV19 unmasks under-lying infections - the best documented is EBV.

The precise remedy will depend on the clinical picture - -is the patient immuno-suppressed or is the immune system overactive

Watch this space!

# Shortness of breath

- Evidence began to accrue that long-COVID patients were breathing shallowly through their mouths and into their upper chest.
- By contrast, a proper breath happens in the nose and goes deep into the diaphragm;
- It stimulates the vagus nerve along the way, helping regulate heart rate and the nervous system.
- In patients with post-acute COVID syndrome, lung inflammation or another trigger appeared to have profoundly affected the process.

# Clinically this is hyperventilation

- Similar symptoms (fatigue, shortness of breath, racing heart) occur in people who have low carbon-dioxide levels in their blood—a condition known as hypocapnia, which can be triggered by hyperventilation, or shallow, rapid breathing through the mouth.
- After a week, everyone in the breath work pilot program reported improvement in symptoms like shortness of breath and fatigue.
- Hyperventilation is adrenalin driven – and the starting point to reduce adrenalin levels is a PK diet

If you would like more information then join a workshop

[https://drmyhill.co.uk/wiki/Workshops for Ecological Medicine](https://drmyhill.co.uk/wiki/Workshops_for_Ecological_Medicine)