

Treating the Long Covid Client: Considerations, Modifications and Suggestions

The start of the pandemic in Europe in 2020 led to huge concerns about the acute impact of SARS-CoV 2 virus and as a result most of Europe implemented lockdowns to reduce the spread of the virus and protect health services from being overwhelmed. However, since then the chronic effects of the virus have caused massive problems for people now suffering from Long Covid. As of 31st October 2021, there were around 1.2 million people in the UK affected by Long Covid (ONS, 2021). So what is Long Covid and how can we treat it?

What is Long Covid?

This is when a cluster of symptoms associated with the virus (and not attributable to other factors) persist for more than four weeks after being infected.

The typical symptoms associated with Long Covid are shown in Figure 1. Fatigue (56%), shortness of breath (40%), loss of smell (32%) and difficulty concentrating (31%) are the main self-reported symptoms experienced by Long Covid sufferers (ONS, 2021).

But why are there so many symptoms associated with Long Covid?

Well, it is thought that when the SARS-CoV 2 virus enters into the lungs, it causes the immune system to over-react leading to a cytokine storm. This causes small tears in the air sacs (alveoli) of the lungs, which burst and allow the virus to use our own blood vessels as a tube network to circulate and hang out in different parts of the body. Whichever destinations (organs) the virus arrives at, potentially that will give rise to related symptoms.

For many people, the symptoms do not have a predictable pattern and part of the difficulty and frustration for clients in managing this condition is the variability of the symptoms.

Figure 1: Long Covid clients can experience a cluster of the following symptoms:

- Breathlessness/dyspnoea, chest pain
- Ongoing cough, change in voice, 'lung burn'
- Fatigue and/or post-exertional fatigue
- Poor sleep or sleep that isn't refreshing
- Brain fog, cognitive impairment, 'fuzziness', memory loss,
- Headaches
- Orthostatic hypotension, dizziness, light-headedness
- Muscle and joint pain
- Skin rashes: urticaria, 'Covid-toe', skin mottling
- Heart issues such as racing heart rate, myocarditis, arrhythmia
- Anosmia (loss of smell), parosmia (distorted taste/smell) and ageusia (loss of taste)
- Blood coagulopathy, microembolisms, stroke
- Gastrointestinal issues, abdominal pain, nausea

(Goërtz et al., 2020; Al-Jahdhami, Al-Naamani and Al-Mawali, 2021)

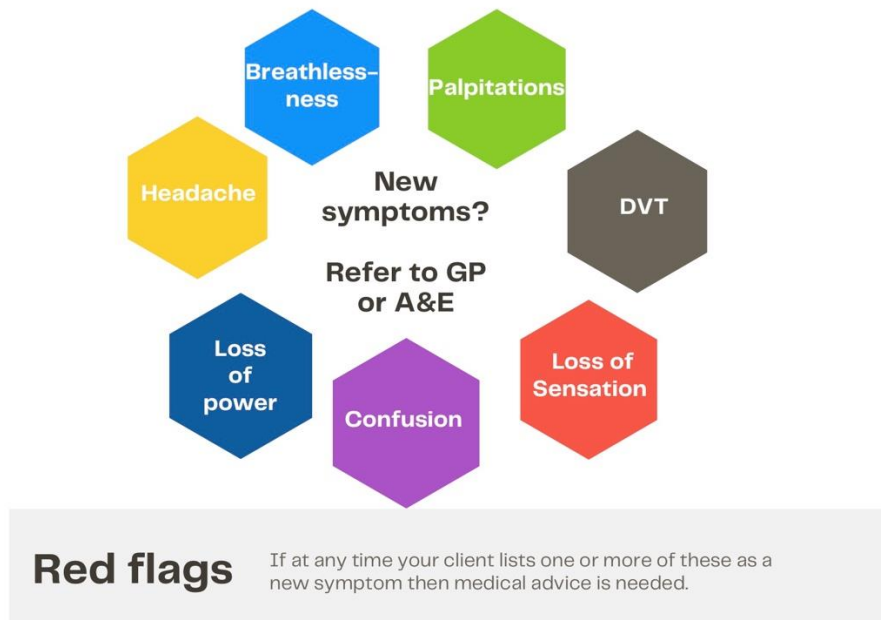
What we can see from the range of symptoms is how many of the body's systems are affected. This means that we need to be really thorough in our consultation to ensure we elicit all relevant information from our clients.

Factors to Consider in the Consultation Process

As many of us work independently, it is important to understand when it is appropriate to treat and when to refer the Long Covid client to a GP or A&E, especially since there is such a broad spectrum of severity and symptoms.

If at any time your client complains of new symptoms (Figure 2) such as breathlessness, palpitations loss of sensation/power, chest pain, headache or confusion these are red flags and medical advice is needed (Lawrence, 2021). In addition, if your client is less mobile, there is inflammation as a result of the infection, and your client's blood is sticky this can increase the risk of Deep Vein Thrombosis (DVT) so again, a referral for urgent medical advice must be sought.

Research has shown that the risk of thromboembolic events, for example, stroke, heart attack, DVT or pulmonary embolism is significantly higher in the first seven days after a positive SARS-CoV 2 infection result and remains elevated for at least two months post-infection (Ho et al., 2021). So it is important to be aware of this increased risk especially if you are treating clients in that 4-8 weeks post infection period.



Red flags

If at any time your client lists one or more of these as a new symptom then medical advice is needed.

Figure 2: Red flags that would prevent treatment of client.

If a client is experiencing fatigue and/or brain fog then one of the first things to consider is splitting the initial appointment into two: a virtual consultation followed by a clinic

appointment if appropriate. This way, if the client is fatigued after the consultation, they have time to recover before the clinic appointment, thereby giving you and the client the opportunity to maximise both parts of the appointment!

For many clients with Long Covid they may also have underlying co-morbidities that need to be taken into consideration as part of their treatment plan. Using the consultation to find out information about their health status before and post infection could provide some useful indicators. For example, neuropathy of fingers and toes has been experienced by some people with Long Covid. However, if your client was a diabetic pre-Covid or has had chemotherapy then this symptom could also be related to their diabetes or cancer treatment so clarify if they had symptoms beforehand and if these are new or different.

Similarly, what were your client's activity levels before Covid compared to now? Find some clear benchmarks to assess against. Someone who was very active and fit pre-Covid probably wants to get back to that same state but if they are constantly relapsing they might be frustrated at the lack of consistent progress.

Although they might feel deconditioned in comparison to how they were pre-Covid, their deconditioned could be quite different to someone who was not used to regular exercise pre-Covid. This is where our language and communication with the client is also important as we want to encourage a positive mindset as they try to recover; and for some people the damage caused by the virus may mean they don't get back to pre-Covid fitness. Therefore, managing expectations can be an important factor in treating the Long Covid client.

So, ask probing questions, get some specific benchmarks to measure progress against, evaluate the information from the client to help set realistic goals. Ultimately, we are using the consultation to help us make informed decisions about our treatment for this client and provide some concrete examples of progress being made.

Modifications to treatment

As massage therapists we already have a wealth of experience in treating chronic conditions: ME/CFS, fibromyalgia, myofascial pain syndrome and polymyalgia to name but a few. From these we will have a number of transferable skills that we can utilise with our Long Covid client.

As mentioned earlier, the over-reaction of the immune system in response to SARS-CoV 2 infection is a possible contributory factor to the symptoms experienced. If we consider the Autonomic Nervous System (ANS), the Sympathetic Nervous System (SNS) is responsible for the 'flight or fright' stimulus and the Parasympathetic Nervous System (PNS) the 'rest and recover'.

One of the universally accepted benefits of massage is that it can help people de-stress. This indicates that we have a positive effect on helping the PNS to have more effect on the body than the SNS. This could help with the recovery of some Long Covid symptoms. Massage with moderate pressure has been shown to have a beneficial effect on slowing heart rate and aiding relaxation (Diego et al. 2004) so this is something we could incorporate into treatment.

Orthostatic intolerance (when the body does not cope well with a sudden change in position and can cause dizziness or fainting) is another symptom that can cause problems for Long Covid sufferers. In particular, if this is accompanied by a racing heart rate, these indicate a client might have Postural Orthostatic Tachycardia Syndrome (POTS).

Modifications during treatment might be to get the client to move legs and arms before getting the client to turn or sit up at the end of treatment. You could start with some isometric contractions for the legs, followed by raising the legs or performing some active stretches for the legs and arms. Once the client is sitting upright, a glass of water to help add some additional fluid into the system might also be of benefit.

When suggesting appropriate exercises for the client, managing fatigue levels can be a challenge as it can depend on a variety of factors. As a broad guideline, VanNess (2020) suggests that heart rate should not exceed 15 beats per minute above their average resting heart rate. Fortunately, as many people now wear smart watches, this biometric can be assessed and recorded. Doing too much may not have an immediate effect but it can impact the client one or two days later.

Self-care suggestions

Many people report breathlessness as a key symptom of Long Covid so helping the client to retrain any dysfunctional breathing patterns is an important part of their recovery. A simple strategy is to use a 'rectangle' cue for breathing, for example depending on client's capacity you might start with inhaling for 4s and exhaling for 6s.

This could be a self-care technique you deliver during your initial online consultation, especially as at the time of writing a new Omicron variant that is easily transmissible is circulating and it is important to minimise the risk of infection.

Getting clients to use an activity log where tasks are broken down into really small tasks can help people manage their lives particularly where brain fog and fatigue are causing them difficulties in their day-to-day life. It can also help in identifying any patterns in post-exertional fatigue relapses.

Switching off smart phones and tablets for 2 hours before bedtime can improve sleep quality. If they can't do this then suggest they buy a light filter to use for evening screen time.

Encouraging the client to incorporate mindfulness or meditation in their day will help tune into the PNS.

These are just a few ideas to help empower the client in their recovery from Long Covid. Typically, most people do recover within 8 weeks but for some people recovery can take 5 months or more. For a small proportion they will have some long-term residual effects from the virus. Hopefully, you have a basic framework to consider how you could help treat these clients.

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