

Occupational Therapy: Fatigue Management (Managing Long Covid)

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As of February 2021, 3.8 million cases of Long Covid have been confirmed in the UK. Fatigue is one of the symptoms post Covid-19, and of Long Covid.

Fatigue affects people on three levels

- Physical
- Cognitive
- Emotional

Physical: Inactivity via illness can cause weak muscles by decreased muscle mass. Physiological changes can cause muscle, nerve and joint pain either globally or regionally. Hypersensitivity can occur.

Cognitive: Our brains are always active. Fatigue will affect cognitive processes of recall, retention, processing and planning. This is typically called “brain fog”

Emotional: Illness can cause stress, anxiety, low mood and depression. You may find yourself more irritable and tearful than usual, with a feeling of being “run down”. Sleep disturbance can perpetuate this.

These three components are fundamental to enable us in Activities of Daily Living (ADL). Even the most basic of tasks may now appear overwhelming as our automatic requirements to enable participation in ADL’s are significantly compromised. Essentially, washing, dressing, shopping, housework, occupation, leisure and hobbies are all affected. This causes deconditioning, which further exacerbates a decline in our physical, cognitive, and emotional function. This cycle often means that people do less, or do more, both of which are damaging to long term recovery.

Fatigue causes lowered levels of physical activity

- Disruption to daily routine
- Poor sleep
- Poor diet
- Low mood, anxiety and stress

The Physiology of Fatigue

Viral illness causes inflammation. This causes cytokines to be released, which are proteins released directly into our blood circulation and tissues.

If you become very unwell cytokines are produced at a much higher rate referred to as a “cytokine storm”.

Evidence suggests that the immune system does not switch off in response to this cytokine storm and too many cytokines in our system becomes harmful. Cytokines cause high fever, inflammation (they are both pro and anti-inflammatory), severe fatigue and nausea. The body undergoes stress trying to cope with the over production of Cytokines. This process causes ongoing, or prolonged, fatigue.

It is also possible that there becomes a problem in the way in which energy production is taking place at a cellular level, inside muscle battery like structures called mitochondria, often referred to as the “powerhouse” of each cell.

Research is proving that Covid-19 hijacks mitochondria and impairs dynamic cellular activity causing cell death.

There is further emerging evidence that people with Long Covid have similar symptoms to POTS (Postural Orthostatic Tachycardia Syndrome). POTS is triggered by infections. It causes, palpitations and fatigue, and a light head / dizzy feeling when upright (Orthostatic).

POTS happens because your body's way of avoiding and drop in blood pressure when standing is not working properly. Normally, gravity makes some of your blood flow downwards which causes decreased blood pressure. Your body responds to prevent this by narrowing the blood vessels and slightly increasing your heart rate. However, with POTS, this does not happen. So when you move to an upright position, as the blood to the heart and brain drops, your heart beats faster to compensate.

The Royal College of Physicians (RCP) have published guidance for doctors to recognise orthostatic problems with Covid. RCP recommends that people who experience breathlessness, palpitations, fatigue, chest pain and fainting should be checked carefully for Orthostatic problems.

Recovery Through Activity

As Covid-19 is a new illness, we are still learning about how people will recover from it. How quickly you are able to get back to activity will vary from person to person. In the short term you will build tolerance, stamina and cognition so that longer term you can achieve self-care, productivity and leisure. It is important to build activity levels slowly, by 10-20% each week, based on occupation.

Fatigue management based on the concept of “the three P’s”

- Pace
- Plan
- Prioritise

Pace: Break activities down into manageable chunks. Rest between activities. Even a short rest of 10-15 minutes is valuable. Rest before you become exhausted. You can use an Activity Log to manage this.

Plan: Plan each day according to the energy levels you are experiencing. Allow this to be flexible. Spread tasks across the day. Alternate “high demand” and “low demand” activities. Consider the three components, Physical demand, Cognitive demand, and Emotional demand in this. Physically demanding activities include things like washing up, or gardening. Cognitively demanding activities are such as office work and watching TV. Emotionally demanding activities are things like family meetings. Prepare for activities in advance, collect required equipment etc. You can use the Daily Activity and Fatigue Chart to plan this.

Prioritise: Does it need to be done today? Can I delegate tasks? The Royal College of Occupational Therapists (RCOT) have published the following recommendations, encompassing the pace-plan-prioritise approach, into Activities of Daily Living (ADL).

Washing and grooming:

Pace

- * Sit to wash your face, brush your teeth and dry your hair. Have rests after each.
- * Pat yourself dry rather than rubbing.

Plan

- * Keep all the things you will need in the same place.
- * Put a mirror at face level when sitting.
- * Liquid soap lathers more quickly than a bar.
- * Use long-handled equipment, such as a long-handled sponge.

Prioritise

- * Try dry shampoo.
- * Use electrical items, such as a toothbrush and razor etc.

Bathing and Showering:

Pace

- * Allow plenty of time and take rests.
- * Sit in the shower if possible.

Plan

- * Open an inside door to allow good ventilation.
- * Use long-handled equipment.
- * Equipment can help you get in and out of the bath or shower, such as a rail or chair.

Prioritise

- * Is bathing an activity you enjoy and are willing to spend a lot of energy on?
- * Is a daily bath or shower necessary?

- * Can you have a strip wash at the sink instead during your early recovery?

Dressing:

Pace

- * Sit to dress.
- * Break up tiring tasks with easy ones and take rests.
- * Dress your lower half first, when you have the most energy.

Plan

- * Keep all the things you will need in the same place.
- * Collect all your clothes before you start.
- * Wear clothes that fasten at the front and are loose.
- * Put pants and trousers on at the same time and then pull them up together. Put skirts on over your head.
- * Sit down to put on shoes and socks. Lift and cross one leg onto your knee to bring your foot closer.

Prioritise

- * Can you rearrange your wardrobe and drawers so that all your clothes are close together?
- * Can a member of your household get your clothes out and help you get dressed?

Making the bed:

Pace

- * Put on the sheet, stop for a rest, then the pillowcases, then rest again.
- * Sit for some of the task, such as doing the pillows.
- * Get help with the duvet cover.

Plan

- * Have your bed positioned so that you can walk all the way around it.
- * Start and finish one side, then move to the other so you only circle the bed once.

Prioritise

- * Can you take turns with someone you live with, or can they make the bed instead?

Cooking:

Pace

- * Spread the preparation throughout the day. Peel vegetables in the morning, cook in the afternoon and reheat in the evening.
- * Sit to prepare food or when waiting to stir.
- * Take rests during and after cooking.

Plan

- * Cook large amounts and refrigerate or freeze extra portions.
- * Get everything you need ready before you start.
- * Find recipes with a short preparation time.
- * Use a trolley to move cooking equipment or cutlery for the table.

Prioritise

- * Buy frozen ready meals for days when you are very tired.
- * Can a member of your household cook for you?

Shopping:

Pace

- * Have a rest when you get the shop.
- * Take your time collecting your items.
- * Put heavy items in different bags.
- * Use a trolley to push your shopping home rather than carrying a bag.

Plan

- * Make a list that follows the aisles and means you only need to visit one or two shops.
- * Shop at quieter times.

- * Avoid large/deep trolleys to reduce bending when putting in and removing items.
- * Pack items together that go in the fridge/freezer or same cupboard, so it is easier to unpack.

Prioritise

- * Can a member of your family help?
- * Can you do online shopping?

Laundry:

Pace

- * Spread the tasks throughout the day. Load the machine in the morning, empty in the afternoon.
- * Sit down to iron.
- * Use a low clothes horse and sit to hand out washing.
- * Take rests during and afterwards.

Place

- * Wear clothes that wash, dry and iron easily.
- * Do several smaller loads each week, rather than one large wash.
- * Store everything you need in one place, such as powder and pegs.
- * Use a laundry basket on wheels.
- * If possible, have your dryer at chest height.

Prioritise

- * Is it necessary to iron all of your clothes?
- * Can someone help you fold large or heavy items, such as sheets and towels?
- * Can someone else do the laundry?

Housework:

Pace

- * Spread heavy activities throughout the week. For example, Hoover a different room each day.
- * Do a mix of heavy and light activities in a day.
- * Have a rest during and between activities.
- * Sit down for tasks like polishing or washing up.

Plan

- * Collect all the items you need before you start.
- * Use long-handled equipment where possible.
- * Use a mop to clean floor spills rather than bending over.
- * Allow washing-up to air dry.
- * Use small rubbish bags so you don't have to lift one heavy bag.

Prioritise

- * Can someone else do the heavy activities instead?

Other General Tips:

It is important to avoid prolonged and repetitive postures. Try to avoid pulling, lifting, bending, twisting or reaching where possible. Push or slide items rather than lift them. Ensure you bend from your knees rather than your waist if you do need to bend.

Consider ergonomics, can I use assistive equipment, can I sit to do this task etc.

Be gentle with yourself. Pushing to, or beyond, a level of exhaustion will mean your body will need longer to recover, as this then decreases your productivity rather than increasing it. Your body has to work hard to restore the depleted energy. It has been proven that short, frequent rests are better than a few prolonged rests. Avoid a "boom and bust" pattern. This feeds the fatigue and keeps you trapped in the fatigue cycle.

Recovery Through Sleep

Sleeping too much, or too little, will upset normal sleeping routine and this needs to be relearned.

- Establish a good routine by trying to go to sleep, and get up, at the same time each day.
- Give your body and brain “clues” that sleep is pending. Set signals (e.g. dimmed lights, minimal noise, warm drink). Set these before you feel extremely tired. A warm bath lowers inner/core body temperature which signals the need to sleep.
- Avoid stimulation like TV and electronics. It is recommended that these type of activities should be stopped two hours before going to bed. This is because the blue light from electronic devices delays the production of melatonin which is a sleep-inducing hormone.
- Avoid caffeine, which interferes with the natural process of sleep.

Recovery Through Diet

There is some evidence to suggest that the inclusion of anti-inflammatory foods like wholegrain, olives, and olive oil, yoghurt, cheese, red wine and dark chocolate may help.

Recovery Through Emotions

The natural reaction of the body to deal with stress is to release adrenaline. This prepares the muscles, heart and lungs to work harder and the mind becomes more alert. This usually lasts until the crisis passes, but if stress continues adrenaline will continue to be released, eventually causing physical and mental exhaustion.

Fatigue is “invisible” and different to “feeling tired”. Talk about how it affects you with friends and family. It helps to process your emotions and enables others to understand what you are experiencing. This can then feel less of an isolating experience, and the guilt of saying “no” can start to lift as you prioritise your recovery.

Good old-fashioned convalescence, rest and relaxation is key. Aim for deep, restorative rest. This type of rest switches your stress mode off and promotes healing and recovery. Try meditation, mindfulness, aromatherapy, Tai-Chi or reading.

It is important to acknowledge that in order to enable your body to run its systems, fight infection, and aid recovery, you need to keep a reserve of energy.

Your treatment is a prescription to rest.

The aim of rest and relaxation is to achieve a state of minimal neurological activity and to therefore reduce the feelings of overload, both mentally and physically. If you continue to struggle with Depression / anxiety / stress, it may be worth considering psychological / talking therapies which are free on the NHS. You can self-refer or your GP can refer through Livewell South West.

Recovery Through Cognition

Engagement in activity requires concentration, recall, planning, processing and retention, better known as the executive functioning of the brain.

Brain fog will impair this.

- Reduce distractions
- Take regular breaks
- Pace yourself
- Be aware of neurologically stimulating activities. Pace these and do not use them as a form of rest. Prior to becoming fatigued, a lot of people may have found reading, watching TV, or talking on the telephone a good way to relax. With chronic fatigue these types of “relaxation” appear to be more like actively due to the effort required concentration, and level of stimulation.
- Use external aids, i.e. diaries, list etc.
- Share your feelings with others.
- Engage in activities that are meaningful to you. Remedial activities can help to stimulate and challenge cognition e.g. cards, crosswords, board games etc.

Useful Resources

- [NICE Guidelines: Managing the long-term effects of Covid-19](#)
- [NHS Guidance: Supporting your recovery after Covid-19](#)
- [Royal College of Occupational Therapists Guidance: Quick guide for OT's](#)
- [ME Association Post Covid-19 Management](#)
- [BACME \(The British Association for CFS/ME professionals\) Post Viral Fatigue](#)
- Livewellsouthwest.co.uk
- Devonnewscentre.info/support/available-for-people-experiencing-long-Covid
- Yourcovidrecovery.nhs.uk

Your notes:



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