Post COVID-19 Syndrome

Gerald Coakley PhD FRCP
Consultant Rheumatologist & Physician

The Harley Street Clinic
16 Devonshire Street
London W1G 7AF

Lewisham & Greenwich NHS
Stadium Road
London SE18 4QH

The Fatigue Clinic
Keats House
24-26 St Thomas Street
London
SE1 9RS

Winchester House
Independents Road
Blackheath
London
SE3 9UD

— THE —
HARLEY STREET CLINIC®
part of HCA Healthcare UK

1

The Fatigue Clinic

Circle Health Group

Our Staff

Dr Gerald Coakley (Consultant Physician)

Ms Gabriella Airey (Cognitive Behavioural Therapist)

Dr Alastair Santhouse (Consultant Psychiatrist)

The MDT at Vitality360

— THE —
HARLEY STREET CLINIC®
part of HCA Healthcare UK

2

Post COVID-19 Syndrome

Circle Health Group

- **Patients emerged from around June 2020 with unresolving symptoms after proven or suspected COVID infections**
- **Around 5-10% of people are affected, approximately 60,000 in the UK's first wave, perhaps a further 100,000 in the second wave**
- **Most non-admitted patients seem to have classical post-viral fatigue, although there are rare subsets with clear respiratory, cardiac or neurological damage**
- **There is added complexity because of the occurrence of thromboembolism and hyperinflammation in hospitalised patients**

— THE —
HARLEY STREET CLINIC®
part of HCA Healthcare UK

3

Case Study 1: Dr John Smith

Circle Health Group

44 year old Consultant Physician

Developed COVID 21 March 2020

Positive throat swab PCR and subsequent serology

Spent a week in bed – fever, sweats, nausea, headache, myalgia and diarrhoea.

Lost taste and smell at day 10, worsening vertigo, increasing anxiety

— THE —
HARLEY STREET CLINIC®
part of HCA Healthcare UK

4

Dr John Smith

Previously fit and well, regular gym-goer, full time NHS plus private practice

By July 2020 could walk well but cannot tolerate exercise due to palpitations, breathlessness and fatigue

Sleeping from 23.00 to 08.30 but waking 4 times per night

Bloods, CXR, MRI Brain scan all normal

5

Dr John Smith - management

By July 2020, he reported two attempts at a graded return to work in April/May, then was signed off long term sick from June to October

I advised that a 3rd graded return to work was key to avoiding CFS/ME and its careful handling was critical

Three half days per week, one from home. No increments more frequent than every 2 weeks, and only if no worsening of symptoms

Involvement of a Consultant OH Physician

No set end-point, increments to stop before symptoms become intolerable

Referred to Vitality360 for rehabilitation

6

Dr John Smith - outcome

From October 2020, Dr Smith was back working part time, and as of April 2021 works 4 days a week, not including medical take. He has not resumed his private practice

He often has to sleep when he gets home from work. His other symptoms have gone

He has now stopped medications he used to help symptoms, including Propranolol for headache, Famotidine and Sertraline. He found advice from a fatigue-specialist Physio helpful

As of April 2021 he continues to improve, but slowly

7

Case Study 2: Mr Tom Cobley

36 year old lawyer

Developed COVID 15 March 2020, clinical diagnosis, not hospitalised, never bed bound.

Wife gave birth on 18 March, had just moved house, start of lock-down

Recovered but developed numerous physical symptoms including fatigue, poor sleep, post-exertional malaise, sore throat, tingling limbs, sore glands

Bloods normal

8

Mr Tom Cobley

Symptoms were intruding on work from home. He could do law but nothing else

Advised reducing to 5 x half days

Use freed up time to read, relax and have gentle walks

Then referred for 1:1 CBT remotely in August 2020

9

Mr Tom Cobley – outcome

In his own words, January 2021:

"I was diagnosed with post-viral fatigue and advised to work half-days for a month. I saw some consequential improvement and, after a follow-up consultation, I was referred for a course of CBT. I had immediate further improvement as a result of starting CBT and with encouragement I slowly began to exercise again. I am now able to work full time again and to exercise 3-4 times a week. My symptoms have not entirely disappeared, but they have diminished very significantly and, to all intents and purposes, I am now leading a normal family and work life".

10

Case Outcomes

Two example patients with Post COVID-19 Syndrome, both skilled professionals at the peak of their careers

Both long-term incapacitated after COVID without evidence of major organ damage

Both needed detailed advice on how to manage their employment in the long-term interests of their own health and recovery

Both made substantial progress with treatment, either physical rehabilitation or CBT plus time

Neither is back to 100% of their pre-COVID state

11

Post COVID-19 Syndrome

- Trish Greenhalgh's BMJ review is good, and recommends the following to exclude PE or carditis:

FBC, U&E, LFT, CRP, CK, D-dimer, BNP, Troponin, Ferritin as well as CXR, ECG and urinalysis

12

Post COVID-19 Syndrome

- Trish Greenhalgh's BMJ review is good, and recommends the following to exclude PE or carditis:

FBC, U&E, LFT, CRP, CK, D-dimer, BNP, Troponin, Ferritin as well as CXR, ECG and urinalysis

- Support after excluding serious complications involves treating fever with Paracetamol or NSAID, breathlessness with breathing exercises and pulse oximeters, chest pain requires standard history and evaluation, including cardiology referral where appropriate, and measurement of psychological distress

13

Post COVID-19 Syndrome

- Trish Greenhalgh's BMJ review is good, and recommends the following to exclude PE or carditis:

FBC, U&E, LFT, CRP, CK, D-dimer, BNP, Troponin, Ferritin as well as CXR, ECG and urinalysis

- Support after excluding serious complications involves treating fever with Paracetamol or NSAID, breathlessness with breathing exercises and pulse oximeters, chest pain requires standard history and evaluation, including cardiology referral where appropriate, and measurement of psychological distress

Management of post-acute covid-19 in primary care. Greenhalgh T et al. BMJ 11 August 2020

14

Post COVID-19 Syndrome

- Rapid guideline from NICE, SIGN, RCGP
- Advises a chest radiograph by week 12 if there are continuing respiratory symptoms
- Suggests blood tests similar to the Greenhalgh article
- Suggests exercise tolerance test checking pulse and O2 sats
- For those with palpitations or dizziness, a lying and standing bp and pulse after 3 or 10 minutes
- Refer to acute services if severe hypoxaemia or exercise desaturation, severe lung disease or cardiac chest pain
- If symptoms persist in the absence of severe illness or alternative diagnoses, refer to appropriate MDT
- Support graded return to education or work

- BMJ 2021;372:n136

15

Post COVID-19 Syndrome Research

Various groups are investigating:

- Tim Spector and the Zoe/ KCL COVID Symptom Study App show 5% are symptomatic beyond 2 months, around 60,000 people in 1st wave
- PHOSP-COVID study is a comprehensive survey of over 10,000 patients hospitalised with COVID, with blood workup and lung volume measurements in all cases, and in subsets further analysis of biomarkers alongside cardiopulmonary imaging and stress testing, as well as mental health measures, and should start to report by 2022
- The NIH is putting $1.15 billion into research aimed at characterising the disease and its potential mechanisms
- The University of Chicago is studying 500 patients admitted to ITU for long-term evaluation

16

Post COVID-19 Syndrome Research - Rockerfeller Institute Pre-Print

- Analysis of intestinal biopsies obtained from asymptomatic individuals 4 months after COVID-19 onset, using immunofluorescence, or PCR, revealed persistence of SARS-CoV-2 nucleic acids and immunoreactivity in the small bowel of 7 out of 14 volunteers.
- We conclude that the memory B cell response to SARS-CoV-2 evolves between 1.3 and 6.2 months after infection in a manner that is consistent with antigen persistence

17

Retrospective Cohort Study of UK Hospitalised Patients

- Study of 47,780 individuals discharged from hospitalised with COVID by 31 August 2020
- Nearly 1/3 (14,060) were readmitted
- Nearly 10% died (5875)
- Rates of respiratory disease, diabetes, cardiovascular disease, chronic kidney and liver disease were all significantly higher than in age matched controls

- Post-COVID syndrome in individuals admitted to hospital with COVID-19. Ayoubkani D et al. BMJ 2021;372:n693. 24th April 2021

18

NHS Post COVID-19 Syndrome Treatment

- The NHS announced on 15 November 2020 that it was launching 40 "Post COVID-19 Syndrome" clinics within weeks

- They will bring together MDTs to provide physical and psychological assessments of those experiencing enduring symptoms

- It has provided £10 million funding

19

NHS Post COVID-19 Syndrome Treatment

- Clinics will treat patients who have been hospitalised, diagnosed after a test or "reasonably believe" they had COVID-19

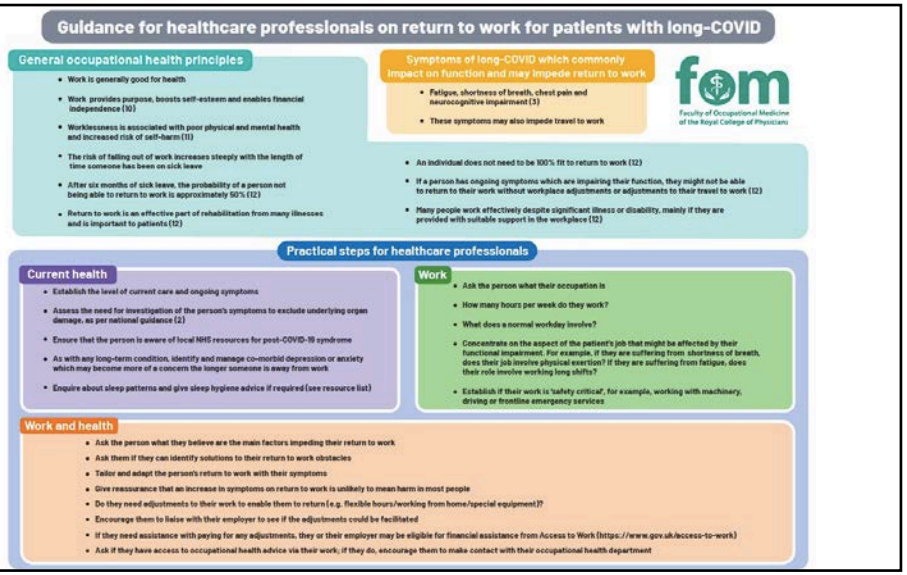
- There are 10 sites in London, which opened in December 2020 and closed in January 2021 due to the second wave

- An NHS taskforce is being set up to help manage the NHS approach to Post COVID-19 Syndrome and produce information and support materials for patients and healthcare professionals

20

NHS Post COVID-19 Syndrome Treatment Centres London

- University College London Hospital Trust
- Barts Health NHS Trust
- Chelsea and Westminster Hospital NHS Trust
- St Mary's Hospital
- St Thomas' Hospital
- King's College Health Foundation Trust
- St Georges NHS Trust
- Homerton University Hospital Foundation Trust
- Barking, Havering and Redbridge NHS Trust
- London North West University Healthcare NHS Trust



Summary

- Post COVID-19 syndrome is a complex disorder with multiple potential mechanisms including biomedical and biopsychosocial factors.
- In younger adults, it appears likely that organ damage plays little or no role and the disorder appears indistinguishable from classical post-viral fatigue and should be treated accordingly unless evidence to the contrary emerges

Summary

- For those in healthcare and beyond who have always been sceptical about the existence of PVFS and CFS/ME, the enormous numbers of intelligent, capable, fit adults reporting potentially career-terminating persistent symptoms after COVID-19 are a wake-up call

Post COVID-19 Syndrome Useful Resources

- https://www.yourcovidrecovery.nhs.uk/
- https://www.csp.org.uk/public-patient/covid-19-road-recovery
- https://www.rcot.co.uk/how-manage-post-viral-fatigue-after-covid-19-0
- https://www.rcot.co.uk/conserving-energy
- https://www.bmj.com/content/370/bmj.m3026
- https://www.nice.org.uk/guidance/ng188
- https://www.nhsemployers.org/covid19/staff-terms-and-conditions/staff-terms-and-conditions-faqs/pay
- www.vitality360.co.uk

25

Dr Gerald Coakley PhD FRCP
Consultant Rheumatologist & Physician

The Fatigue Clinic
Keats House
24-26 St Thomas Street London
SE1 9RS

Winchester House
Independents Road
London
SE3 9UD

The Harley Street Clinic
16 Devonshire Street
London
W1G 7AF

Tel: 07460 719269
Fax: 020 8836 4935
PA: Anne Brock
secretary@geraldcoakley.com
www.fatigueclinic.co.uk

26

Thank you for watching

27