Long Covid and autonomic dysfunction: Mechanisms and Management

Faculty: Cormac Ryan Deepak Ravindran Hannah Malyon Sophie Stockbridge

Background information: Long Covid (Post Covid syndrome) is now recognised by several organisations, including the WHO, as a major public health problem. It is estimated that as many as 65 million people worldwide could be left with this condition. A huge body of research has now been generated in the last few years, which highlight significant organ dysfunction as a result of the acute COVID infection and the reaction of the nervous and immune system to this insult. One previously poorly researched and studied phenomenon has been that of autonomic dysfunction. It can present as a series of debilitating symptoms (including breathlessness, chest pain, palpitations and orthostatic intolerance) lasting for weeks or months.

Understanding the mechanisms, investigating the condition and treatments for it are all topics of intense research, and more is needed to support our patients. This symposium will explore the mechanisms and the latest research into dysautonomia and provide an overview of the various management strategies for the condition.

The topics covered:

- Dysautonomia theory and mechanisms, including investigations
- Pharmacological and Non-pharmacological techniques
- Newer advances and the use of Digital technology

Learning objectives:

By the end of the session, the attendees will have understood the following:

- 1. Prevalence/Reasons for Autonomic Dysfunction in Long Covid
- 2. How to investigate dysautonomia
- 3. Appreciate the symptom burden and provide holistic management.

About Our Speakers:

1. Cormac Ryan (UK)

Cormac is a Professor of Clinical Rehabilitation at Teesside University, UK. He has a BSc in Sports and Exercise Science, an MSc in Physiotherapy, and a PhD in pain management. He is co-lead of PETAL (Pain Education Team Aspiring Better Learning), an international collaboration aiming to facilitate better public understanding of current thought on 'how pain

works' (www.petalcollaboration.org). Cormac has contributed to guidelines/standards for organisations, including the British Pain Society and the Faculty of Pain Medicine. He is the Community Pain Champion for Flippin' PainTM, a UK-wide public health campaign to improve public understanding of pain (www.flippinpain.co.uk).

2. Deepak Ravindran (UK)

Deepak is a full-time NHS consultant in the UK and is a Fellow of the Faculty of Pain Medicine at RCOA and the Deputy Editor for ePain – the digital platform of NHS England. He is a Hon Professor at Teesside University and is board certified in Lifestyle Medicine and MSK Medicine. He helped set up an award-winning NHS service for Pain and Long Covid. He lectures nationally and internationally on various aspects of trauma-informed Pain practice and is the author of the Amazon Best Seller – The Pain Free Mindset, published in 2021. He also serves on the clinical advisory board for Pain related Digital start-ups and is the Chief Medical Officer for Boutros Bear.

3. Hannah Malyon

Lead Long Covid Physiotherapist at Berkshire Long Covid Integrated Service, Berkshire (UK), Hannah Malyon graduated in 2016 from Oxford Brookes University with BSc in Physiotherapy. She has worked across inpatient, outpatient and community settings covering several specialities and conditions. She joined the long covid team in 2021 after working in acute respiratory care for 3 years. Her specialist interests include respiratory medicine, pain management and rehabilitation for long-term conditions.

4. Sophie Stockbridge

Lead Occupational Therapist at Berkshire Long Covid Integrated Service, Berkshire (UK), Sophie Stockbridge completed her BSc Hons Occupational Therapy at Oxford Brookes University. After graduating in 2016, she has gained a variety of Occupational Therapy experience by working across multiple different fields, including acute mental health, adult social care, community paediatrics, community adult mental health, community neuro, acute adolescent mental health, the community falls team, community rapid response and Long Covid. Sophie joined the Long Covid team in October 2022.