

## **Central Sensitisation: Assessment and management**

Faculty:

Cormac Ryan

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Central sensitisation is a phenomenon where the central nervous system amplifies any input across multiple organ systems resulting in myriad presentations. A better understanding of neuroscience now provides valuable tools for identifying and addressing these signs and symptoms and investigating more effectively. Early consideration and recognition of central sensitisation can result in better rapport, reduced over medicalisation and better overall care. Studies estimate that annual mean indirect costs (including absenteeism, unemployment, early retirement, and disability) can exceed 30000 dollars annually for managing conditions where central sensitisation is dominant. This symposium will provide an overview of the condition, the benefit of early recognition, available testing strategies and management plans.

### Topics Covered

- Central sensitisation (CS) – an overview
- Examples of CS and early recognition and investigations
- Management strategies and future directions

### Learning Objectives

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

1. The definition and prevalence of CS
2. How to recognise and investigate CS
3. Management techniques for CS

### **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](http://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' Pain™, a UK-wide public health campaign to improve public understanding of pain ([www.flippinpain.co.uk](http://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. John Srbely

*Dr John Z Srbely DC PhD*, is a full-time Associate Professor in the Department of Human Health and Nutritional Science, University of Guelph (Guelph, Ontario, Canada). He previously held a Canadian Chiropractic Research Foundation (CCRF) Research Chair in Spine Mechanics and Neurophysiology (2008-2013).

His interests in neurophysiology evolved during his formative years as a primary health care provider in chiropractic and acupuncture that focused on treating and managing chronic myofascial pain. His two decades of clinical observation underscored the fact that these, and other commonly adopted conservative clinical therapies/interventions, have a profound impact on human physiology, the scope and mechanisms of which are still poorly characterized.

Accordingly, his primary research interest centres around the study of the physiologic mechanisms and role of central sensitisation and neurogenic inflammation in the pathophysiology of myofascial trigger points and the clinical manifestations of chronic myofascial pain. He has received a prestigious Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Grant to study the causal relationship between central sensitisation and the physiologic expression of sensitivity, morphology and electrophysiology of the myofascial trigger point within the human peripheral muscle.

His research program aims to advance both experimental and clinical techniques for the quantification of central sensitisation in humans, which can contribute to advancing diagnostic techniques for chronic myofascial pain. In addition, he and his team are investigating the neurophysiological mechanisms underlying the formation of MTrPs in an animal model and co-registering these with ultrasound and histologic findings.

### 4. 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.

## 5. 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.