

Pre Course Virtual Learning

ABC of MS (pre-recorded)

- **Getting the diagnosis right: an approach to diagnosing MS and its mimics**
Prof Gavin Giovannoni, Professor of Neurology, Barts and The London School of Medicine and Dentistry
- **Basic immunology and pathology of MS**
Sandra Amor, Associate Professor, Pathology, Amsterdam UMC
- **Overview of MS DMTs**
Dr Kate Petheram, Consultant Neurologist, South Tyneside & Sunderland NHS Foundation Trust
- **The Virtual/Online Examination**
Dr Saúl Reyes, MS Fellow, Barts and The London School of Medicine
- **Three minute neuro examination**
Dr Giles Elrington, Consultant Neurologist, Spire Healthcare
- **Exploring your services: what does a comprehensive MS service look like?**
Prof Carolyn Young, Consultant Neurologist, The Walton Centre NHS Foundation Trust
- **The role of the pharmacist**
Rachel Dorsey-Campbell, Senior Lead Pharmacist - Neurosciences, Imperial College Healthcare NHS Trust
- **Patient perspective**
Dr David Paling, Consultant Neurologist, Sheffield Teaching Hospitals NHS Foundation Trust and local patients: Zoey & Paul
- **Charity update - Shift.ms, MS Trust & MS Society**
Rob Sloan, Service Design Lead - Shift.ms, David Martin, CEO, MS Trust & Fredi Cavender-Attwood, Policy Manager, MS Society
- **Symptomatic management of patients with MS - spasticity, walking, motor impairment & exercise**
Dr Rachel Farrell, Consultant Neurologist, University College London Hospitals NHS Foundation Trust

Day 1 – Thursday, 10 June 2021

N.B. Cases are for illustration purposes only and may be adapted by the faculty.

09:30 Registration and refreshments

09:45 Welcome

Dr David Paling, Consultant Neurologist, Sheffield Teaching Hospitals NHS Foundation Trust

10:15 Diagnostics

Dr Wallace Brownlee, Consultant Neurologist, University College London Hospitals NHS Foundation Trust & Ruth Stross, MS Nurse Specialist, Epsom and St Helier University Hospitals NHS Trust

You see a 32 year old man in the clinic. 4 weeks ago they had a slowly worsening numbness in the left leg, and 2 weeks ago they started to notice the leg was weak and they were tripping. Their symptoms have improved in the last week. Their MRI scan shows a T2 bright lesion in the cervical spine

- Differential diagnosis
- Imaging and how this can help with diagnosis
- Understanding MS/NMOSD/MOGAD
- What is the value of a lumbar puncture
- How to support patients in the diagnostic phase of MS, and with a diagnosis of clinically isolated syndrome or MS
- How to allay concerns from internet research

12:15 Lunch

13:00 Epidemiology, statistics and data use

Ruth Stross & David Paling

You make a diagnosis of multiple sclerosis in your patient. Your patient asks if she will end up in a wheelchair and what she can do to stop that.

- What do you tell him about the prognosis of MS
- Brain health and healthy lifestyle

Your next patient is a 27 year old woman who has just had a baby. She was diagnosed with MS 1 year ago. She has questions about her baby, breast feeding, other pregnancies, and whether she would pass it on to her children

- What do you tell her about pregnancy and breastfeeding
- Genetics of MS and how you communicate this to patients
- Is MS a preventable disease
- How do you discuss MS with your family and children

15:00 Refreshment break

15:30 Pathophysiology

David Paling

A 57 year old lady has been referred to the clinic. She had a diagnosis of MS made when she was 27 when she had optic neuritis followed by sensory change in the arm. A year later. She has been well until the last year when she has noticed that her walking has got worse.

- How do you tell clinically between relapses and progression.
- What is the pathology of a relapse
- What is the pathology of progression.
- How do you discuss progression with people with MS.
- What are the differences in treatment response with different DMTs in relapsing and progressive MS

17:30 Sessions close for day 1

19:00 Pre-dinner drinks

19:30 Informal dinner

Day 2 – Friday, 11 June 2021

08:30 Registration

08:45 Feedback from the delegates – day 1

Dr Kate Petheram, Consultant Neurologist, South Tyneside & Sunderland NHS Foundation Trust

09:00 Radiology

Dr Audrey Sinclair, Consultant Neuroradiologist, St George's University Hospitals NHS Foundation Trust

Neuro radiology MDT

You have made a diagnosis of MS following a single relapse. Your patient is really unsure about how they would like to be treated. Can the MRI scan help you?

- Diagnostic criteria for MS and role of MRI
- MRI and other biomarkers to help predict prognosis.

Your patient has had a diagnosis of MS made 3 years ago. Prior to diagnosis they had two spinal cord relapses in a year. They started on dimethyl fumarate last year, but they have had a further relapse last year.

- Do MRI changes on treatment affect prognosis
- Difference between MEDA and NEDA
- Difference in location of lesions.

A 57 year old lady with a new diagnosis of secondary progressive MS. She had a diagnosis of MS made when she was 27 when she had optic neuritis followed by sensory change in the arm. Over the last 2 years she has noticed that her walking has got worse. 2 years ago she was able to walk 500metres without assistance, but now is only able to walk 200m.

- Difference in MRI changes in secondary progressive and relapsing MS
- MRI criteria for siponimod

A 47 year old man has a diagnosis of primary progressive MS. His symptoms started 7 years ago and have gradually worsened since. Over the last 2 years he has had to use a stick for distances more than 100 metres, and has noticed worsening hand function.

- MRI changes in primary progressive MS.
- MRI criteria for Ocrelizumab.

11:00 Refreshments

11:30 Treatments (disease modifying treatments)

Dr Kate Petheram

You have made a diagnosis of MS following a single relapse in a 27 year old lady. Your patient is really unsure about how they would like to be treated. What other factors should be considered?

- First line MS treatments and the NHS algorithm
- Comorbidities
- Pregnancy and breastfeeding
- Induction vs Escalation.
- Immunosuppression, infection and vaccines.
- Treatment counselling.
- Treatment monitoring

Your patient has had a diagnosis of MS made 3 years ago. Prior to diagnosis they had two spinal cord relapses in a year. They started on dimethyl fumarate last year, but they have had a further relapse last year.

- Second line disease modifying therapies
- Treatment monitoring

A 57 year old lady with a new diagnosis of secondary progressive MS. She had a diagnosis of MS made when she was 27 when she had optic neuritis followed by sensory change in the arm. Over the last 2 years she has noticed that her walking has got worse. 2 years ago she was able to walk 500 metres without assistance, but now is only able to walk 200m.

- Use of siponimod
- Treatment considerations in older people with more comorbidities.
- Treatment counselling for treatments in progressive MS

A 47 year old man has a diagnosis of primary progressive MS. His symptoms started 7 years ago and have gradually worsened since. Over the last 2 years he has had to use a stick for distances more than 100 metres, and has noticed worsening hand function.

- Use of Ocrelizumab
- Treatment considerations in older people with more comorbidities.
- Treatment counselling for treatments in progressive MS

13:30 Lunch

14:15 Symptom management

Dr Peter Brex, Consultant Neurologist, King's College Hospital NHS Trust - **virtual**

Cases to cover:

A 57 year old man with MS is complaining of increasingly frequent pain, stiffness and spasms of his legs. What would your approach be to help him?

- Clinical assessment of spasticity.
- Drug treatments, effectiveness, patient counselling and monitoring
- Non pharmacological management

A 37 year old lady with MS on Natalizumab is complaining of a burning pain experienced in the left arm and leg. How would you be able to help her?

- Assessment of neuropathic pain.
- Drug treatments including effectiveness, patient counselling and monitoring.
- Non pharmacological treatments and role of pain management services.

A 27 year old lady was diagnosed with MS 2 year ago. She had no further relapses and feels that she has made a full physical recovery since starting Cladribine, but is suffering with very intrusive fatigue and is having difficulty with cognitive symptoms at work. How could you help her?

- Assessment of fatigue
- Assessment of cognitive symptoms
- Non pharmacological treatments
- Pharmacological treatments for fatigue
- Assessment of depression and treatments

A 54 year old lady with secondary progressive MS is having more problems with urinary urgency, and bowel and bladder continence. How would you be able to help her?

- Assessment of bladder and bowel symptoms.
- Pharmacological treatment.
- Non pharmacological treatment.

15:15 **Supportive care**

Ruth Stross & Dr Eli Silber, Consultant Neurologist, King's College Hospital NHS Foundation Trust - **virtual**

A 60yr old lady with progressive MS is deteriorating in a nursing home, increasing pain which is poorly managed, worsening cognition and depression. The nursing home contact the Neurology/MS team (Prevention of hospital admission, when to involve/refer palliative care)

- How big is the problem of unscheduled hospital admissions?
- Does MS ever become a terminal illness
- When is it the most appropriate time to discuss advance directives?
- Referral guidelines for palliative care
- Do we discharge to palliative care or joint care?

16:15 **Mentorship & project**

Dr Kate Petheram

17:00 **Final remarks and depart**

Dr Kate Petheram