

were contacted via telephone and invited for a blood test. 7 were contacted via text message and advised to take over the counter supplementation. Of those contactable via telephone, 36% were found to have deficiency in either Vitamin D or bone health parameters.

The deficiencies may not be a direct result of the medication, however, it does highlight the importance of screening in these patients, to prevent further aggravation of poor bone health. Education of the risks of the medications and screening being incorporated into epilepsy reviews is recommended.

AN EVALUATION OF MEMORY SERVICES IN WALES – PREPARING FOR DISEASE MODIFYING THERAPIES

Edwards Marc, Shute Cherry. *University Hospital Wales Cardiff*

10.1136/jnnp-2024-ABN.107

The introduction of disease modifying therapies (DMTs) in Alzheimer's disease (AD) will require a dramatic change in memory services across Wales. This study is the first to gather data from all seven health boards on the use of biomarkers. An early and accurate diagnosis is aided by advanced imaging, CSF biomarkers and collaboration between specialties.

Memory services in all seven health boards in Wales were invited to take part in a semi-structured interview. Data was collected on CSF biomarker testing, imaging, access to a neurology opinion and preparedness for DMTs.

Mental health departments managed all services with one exception where the medical department led and only this service had access to a neurology opinion in an MDT. Use of PET imaging was highly variable with one service requesting 60.2% of all FDG-PET scans in the past year. Only one service had a formal pathway for requesting CSF biomarkers of AD.

This study highlights significant differences between memory services in Wales. It should be used to promote greater collaboration between services and help develop pathways for advanced diagnostic imaging and CSF testing. This would help ensure all patients have access to an early and accurate diagnosis and DMTs when available.

DORSAL ROOT GANGLIONOPATHY AS THE INITIAL PRESENTING FEATURE IN POLG-RELATED MITOCHONDRIAL DISEASE

^{1,2}Moe Aye M, ³Fry Charles, ^{1,3}Baker Mark, ^{1,2}Gorman Gráinne, ^{1,2}Ng Yi Shiau. ¹Translational and Clinical Research Institute, Newcastle University, Newcastle-upon-Tyne, NE2 4HH; ²Highly Specialised Service for Rare Mitochondrial Diseases, Newcastle Hospitals NHS Foundation Trust; ³Department of Clinical Neurophysiology, Royal Victoria Infirmary, Newcastle-upon-Tyne, NE1 4LP

10.1136/jnnp-2024-ABN.108

Pathogenic variants in *POLG*, encoding for the catalytic subunit of mitochondrial polymerase gamma, can present with either severe early onset myocerebrohepatopathy spectrum disorder (MCHS) and Alpers-Huttenlocher Syndrome (AHS), or late-onset presentations, which commonly include progressive external ophthalmoplegia, peripheral neuropathy and cerebellar ataxia. Although axonal neuropathy is frequently documented in *POLG* disease, the contribution of dorsal root ganglionopathy to the ataxic symptoms and overall disease burden in

patients remains poorly recognised. Here we report on a case series comprising two female and two male patients with recessive *POLG*-related mitochondrial disease, who presented with progressive balance impairment and a clinical diagnosis of dorsal root ganglionopathy as the first symptom, ranging from late teens to sixties. The average time to reach a diagnosis from the onset of sensory symptoms was 4.7 years. The diagnostic pitfalls, the importance of neurophysiology, and the evolution and pattern of progression of the disease will be highlighted. Given the carrier frequency of common *POLG* variants is estimated at 1-2% of Northern and Western European populations, *POLG* disease should be considered early in the differential diagnosis for patients manifesting with sensory ataxia and dorsal root ganglionopathy.

LOW-GRADE GLIOMA OR POST-ICTAL CHANGE? MR SPECTROSCOPY TO THE RESCUE!

Barrett Amy, Street Duncan, Solanki Sandeep, Dardis Ronan, Kamble Akshaykumar, Samra Amrit-Deep. *UHCW*

10.1136/jnnp-2024-ABN.109

The overlapping radiological features of low-grade glioma (LGG) and post-ictal change can pose significant diagnostic uncertainty amongst clinicians, especially as seizures are the most common presentation of LGG. Quick and accurate differentiation is important to avoid further unnecessary and risky invasive investigations, such as brain biopsy. We report a case of post-ictal frontotemporal changes, mimicking LGG, where MR spectroscopy was pivotal in narrowing the differential diagnosis and guiding further management.

A 52-year-old with a history of generalized tonic-clonic seizures, well managed on lamotrigine, presented acutely with frequent right sided facial motor seizures. MRI at initial presentation demonstrated left-sided T2-FLAIR oedematous hyperintensity, predominantly in the insular cortex and adjacent sylvian fissure. The differential diagnoses considered at this point were LGG, atypical infarction or ischaemia and mitochondrial disease. Repeat imaging 2 weeks later failed to clarify the diagnostic picture. MR Spectroscopy was performed which showed dramatic resolution of the T2 hyperintense gyral expansion and no characteristic metabolic features of LGG. The patient was consequently managed with increased antiepileptic medications and remained seizure free.

This case strongly demonstrates the utility of multimodal MR imaging, particularly when seizures are apparent at presentation, and when signal change is present in atypical locations.

'GET IT ON TIME' – IMPROVING TIME-CRITICAL MEDICATION DELIVERY IN A DISTRICT GENERAL HOSPITAL

¹Brown Steven, ²Huai Ching Lim, ²Stafford Gillian, ²Hamilton Nicola, ²Whitehouse Sarah. ¹South Tees Hospitals NHS Foundation Trust; ²North Tees and Hartlepool NHS Foundation Trust

10.1136/jnnp-2024-ABN.110

Medication for patients with Parkinson's Disease (PD) is time-critical as missed doses can contribute to acute deterioration.