patient history, investigations (including neuroimaging) and response to treatment.
Results The participant experienced recurrent thunderclap headache one week post onset of SARS-CoV-2 infection without associated neurological deficit. Investigations including CT angiography and lumbar puncture were consistent with a diagnosis of RCVS. The participant responded well to calcium channel blocker therapy.
Conclusions SARS-CoV-2 associated RCVS may present in the subacute period following SARS-CoV-2 infection. Future studies may aim to quantify the association between SARS-CoV-2 infection and RCVS.

2615 PROPOSING A DEFINITION OF PROGRESSION INDEPENDENT OF RELAPSE ACTIVITY IN MULTIPLE SCLEROSIS – OUTCOMES OF A SYSTEMATIC REVIEW

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Objective Progression independent of relapse activity (PIRA) is a disruptive concept in multiple sclerosis (MS) research and practice. To address the significant heterogeneity of studies in this field, we conducted a systematic review to propose a clinically applicable criteria-based definition of PIRA to assist ongoing investigations.
Method This systematic review was conducted and reported in accordance with the PRISMA guidelines. A systematic search was conducted of Embase, Medline, Cochrane Central Register of Controlled Trials, Scopus, Web of Science, ClinicalTrials.gov and Google Scholar.
Results Of 5,812 results, 13 studies fulfilled inclusion criteria. Most studies included only relapsing remitting MS (RRMS), although a number also included patients with secondary progressive MS. PIRA definitions varied considerably between studies. Studies used a tiered system, including up to three tiers, for Expanded Disability Status Scale thresholds that described PIRA. The duration of time prior to relapse that PIRA must have occurred ranged from > 30 days to > 12 months. In the context of these variable definitions, the reported proportion of patients experiencing PIRA varied from 4% to 24%. Similarly, PIRA associations varied; however, low EDSS was among the most consistently described associations. Most studies did not include MRI in the determination of PIRA, which is a significant limitation of existing criteria.
Conclusions The currently available research supports the presence of PIRA in RRMS. Existing studies have used variable definitions of PIRA. Based on review of the existing literature, a clinically based definition of PIRA is proposed to harmonize this phenomenon for future studies.

2616 UNILATERAL POSTERIOR REVERSIBLE ENCEPHALOPATHY SYNDROME: A CASE OF HICKAM'S DICTUM

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Objective To describe a rare and diagnostically challenging case of unilateral posterior reversible encephalopathy syndrome (PRES), contralateral to a chronically occluded right internal carotid artery (ICA), in a patient with multiple sclerosis (MS).
Background PRES is a clinicoradiological diagnosis based on typical clinical features and risk factors, supported by MRI findings. MRI typically shows bilateral cortical and subcortical vasogenic oedema. Cases involving unilateral vasogenic oedema are very rare.
Case Presentation We report the case of a 66-year-old female brought to the emergency department as a code stroke for right-sided hemiplegia preceded by her first ever seizure. She was confused and severely hypertensive on arrival. CT stroke protocol showed a chronically occluded right ICA, delayed cerebral perfusion in the right anterior circulation and no core infarct. MRI findings were consistent with vasogenic oedema in the superior left frontal and parietal lobes. The patient had multiple sclerosis with preexisting periventricular white matter lesions, one of which had enlarged on her most recent surveillance MRI. She had not been taking disease modifying therapy for the past 10 years. CSF studies for infectious aetiologies were negative. A left renal artery occlusion was identified and treated conservatively. The hypertension resolved with medical therapy. The patient recovered and a follow-up MRI showed resolution of vasogenic oedema.
Conclusion This case illustrates a rare presentation of unilateral PRES. An occluded ICA protected the ipsilateral anterior circulation from the significantly elevated perfusion pressures, and subsequent endothelial dysfunction, experienced by the contralateral hemisphere in the setting of severe hypertension.

2618 A PHASE 2 RANDOMISED CONTROLLED TRIAL OF SODIUM SELENATE AS A DISEASE-MODIFYING TREATMENT FOR PROBABLE PROGRESSIVE SUPRANUCLEAR PALSY

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Objectives There are no disease-modifying treatments that arrest or reverse tau hyperphosphorylation in tauopathies. Through its action in upregulating protein phosphatase 2 (PP2A), sodium selenate has been shown to reduce levels of total-tau, phosphorylated-tau and hyperphosphorylated-tau in animal models of disease associated with increases in tau as well as early phase clinical trials. This study is a placebo-controlled, randomised controlled trial of sodium selenate as a treatment for the primary tauopathy, progressive supranuclear palsy (PSP).
Methods 70 patients with probable PSP (Richardson's syndrome) will be recruited, and randomised to treatment with sodium selenate (15 mg tds) or placebo (1:1) over 52 weeks. The study is recruiting at 6 sites across Australia. The primary study outcome will be change in MRI volume composite (frontal lobe+midbrain-3rd ventricle) over 52 weeks of treatment. Secondary outcome measures will include change on the PSP rating scale, clinical global impression of change, and change in midbrain mean diffusivity.
Results Presently, 19 patients have been screened, resulting in 3 screen fails, 15 randomisations and 1 awaiting randomisation. Of the 15 patients randomised, 3 have completed the

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study, 1 withdrew early (due to an adverse event) and 11 remain on treatment. Baseline characteristics of randomised patients are: Age median 64 years (range 47–74), male (n=10) and PSPRS total score: mean 37.4 (range 11–61). To date safety has been good with no serious adverse events related to treatment.

Conclusion Recruitment is ongoing and is expected to complete in March 2024, with last patient last visit in June 2025.

2622 REFINING A HEREDITARY SPASTIC PARAPLEGIA QUALITY OF LIFE (HSPQOL) RATING SCALE USING CONSUMER CONSULTATION

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Background Patients with Hereditary Spastic Paraplegia (HSP), an inherited neurodegenerative condition leading to lower limb weakness and spasticity, have reported lower quality of life (QoL) indices compared to healthy controls, influenced by unique aspects of the condition. To explore this, we aimed to design a QoL survey specific to HSP (*HSPQoL)* by supplementing a widely used generic QoL scale, SF-36, with additional HSP-specific questions. The initial stage of question design involved a literature review and expert consensus using the modified Delphi method.

Objective To further refine the additional HSP-specific QoL questions with consumer consultation.

Method We recruited patients with HSP to participate in cognitive interviews using a think-aloud and verbal probing approach. Interviews were recorded, transcribed, and de-identified. Quotes were analysed according to themes: item comprehension, response options, wording clarity, and item relevance. The ten additional questions developed to date were revised based on patient views.

Results Five patients (F:M 3:2, mean age 61.8 years) with HSP were interviewed to explore ten questions during the sessions. Five questions were modified to improve clarity, item comprehension, response options and item relevance. Modifications included changes to wording and response options, and additional explanations to clarify purpose of question. Two questions were removed due to poor clarity and patient-identified concerns regarding suitability. A total of eight additional questions are to be included in the final HSPQoL.

Conclusions Validity and reliability of the HSPQoL rating scale will now be tested in a larger cohort of patients with HSP.

2623 PREVALENCE OF MOVEMENT DISORDERS IN AUTOIMMUNE ENCEPHALITIS: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Objectives Autoimmune encephalitis (AE) is an uncommon neuroinflammatory disorder requiring prompt diagnosis and treatment to improve patient outcomes. Movement disorders (MDs) occur in AE but their prevalence, classification and prognostic significance in AE is not well defined.

Methods We conducted a systematic review and random-effects meta-analysis to assess the prevalence of MDs as a whole as well as the different types of MDs (such as chorea, dyskinesia, ataxia and faciobrachial dystonic seizure) in AE and its subtypes. We included publications that had 10 or more cases, and focused on adults (18 years or older). We used the following four electronic databases: Medline (Ovid), EMBASE (Ovid), APA Psychinfo and Cochrane library.

Results A total of 1192 titles and abstracts were reviewed. Thirty-seven studies, comprising 2663 unique patients, were included in the final meta-analysis. At least one kind of movement disorder was present in 40% of the entire AE cohort, 53% in anti NMDA, 30% in anti LGI1, 33% in anti CASPR2, and 13% in anti GABAR antibody mediated AE. Dyskinesias were the commonest type of MD in anti NMDA antibody mediated AE and faciobrachial dystonic seizures were most prevalent in anti LGI1 antibody mediated AE. Patients with a movement disorder tended to have higher mortality.

Conclusion Movement disorders are often present in AE. Different AE subtypes have different MD profiles. The presence of MDs appears to have implications for patient outcome. Identifying MDs may assist the early diagnosis and management of AE.

2626 ^{18}F-FDG-PET HYPOMETABOLISM AS A PREDICTOR OF SURGICAL OUTCOME FOR DRUG RESISTANT FOCAL EPILEPSY: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Objectives ^{18}F-FDG-PET is commonly used in the pre-surgical evaluation of patients with drug-resistant epilepsy, however, the prognostic value of the detection of focal hypometabolism is uncertain and previous meta-analyses have been negative. We conducted a systematic review and meta-analysis to examine whether localisation with ^{18}F-FDG-PET hypometabolism predicts favourable outcome in epilepsy surgery.

Methods A systematic literature search of Embase, Medline and Web of Science was undertaken for publications that included evaluation with ^{18}F-FDG-PET prior epilepsy surgery, and which reported surgical outcome at $\geq$12 months. Random effects meta-analysis was used to calculate the proportion of patients achieving a favourable (Engel class I, ILAE class 1–2, or seizure-free) outcome. Sources of heterogeneity were investigated using meta-regression.

Results The database search identified 12917 studies. Of these, 101 studies (4067 patients in total) were included. A favourable outcome was achieved in 77% patients with localising ^{18}F-FDG-PET hypometabolism, compared to 53.5%

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