therefore brain biopsy is essential for diagnosis. Outcomes are generally favourable if recognised and treated promptly, although late neurological relapse may occur.

2232 SPASTIC PARAPARESIS DUE TO HUMAN T-LYMPHOTROPIC VIRUS 1 (HTLV-1) ASSOCIATED MYELOPATHY

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A 66-year-old female developed progressive gait instability over a 5–10 year period with difficulty climbing stairs. Associated symptoms included bilateral leg cramping and long-standing urinary incontinence requiring multiple bladder surgeries. She had no sensory disturbance in the lower limbs and no involvement of the face or upper limbs. An older sister developed similar symptoms at age 58. The patient was born to non-consanguineous parents in Chile and migrated to Australia aged 40. Examination revealed a spastic gait with impaired tandem walking and positive Romberg's sign. Lower limb examination revealed bilateral spasticity, mild symmetric proximal weakness, global hyperreflexia, extensor plantar responses, and impaired distal vibration sense. Brain and whole spine MRI demonstrated several non-specific supratentorial white matter hyperintensities without cord signal change or atrophy. Somatosensory evoked potentials showed conduction time delay between lumbar and cervical levels from lower but not upper limbs . Routine blood tests including metabolic, autoimmune and infectious screen were negative. A genetic panel for hereditary spastic paraparesis was negative. Cerebrospinal fluid analysis revealed normal protein (0.19g/L), 1x10^6/L mononuclear cell, negative multiplex meningitis PCR, positive oligoclonal bands, and negative NMO/MOG antibody. CSF HTLV-1 DNA by PCR revealed 1,110,531 copies/million peripheral blood mononuclear cells. CSF:serum HTLV-1 antibody ratio was 1.04:1, indicative of intrathecal synthesis. A diagnosis of HTLV-1 associated myelopathy (HAM), also known as tropical spastic paraparesis, was confirmed. At the time of writing, the patient is considering whether to pursue treatment with steroids and mogamulizumab, an anti-CCR4 monoclonal antibody with Phase II evidence of clinical and serological benefit.

2234 PERAMPANEL FOR THE TREATMENT OF PAEDIATRIC PATIENTS IN CLINICAL PRACTICE BY AGE CATEGORY

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Objectives To assess perampanel (PER) in everyday clinical practice in paediatric patients.

Methods Paediatric patients treated with PER were identified from a pooled analysis of 44 global studies. Retention was assessed after 3, 6 and 12 months. Responder rate (≥50% seizure frequency reduction), seizure freedom rate (no seizures since at least prior visit) and adverse events (AEs) were evaluated. Data were analysed by age category.

Results 56 patients were identified (<4 years, n=5; 4–<7 years; n=12; 7–<12 years, n=39). Mean PER doses at baseline and last visit (last observation carried forward) were 1.8 and 2.3 mg/day; 1.8 and 4.1 mg/day; and 2.1 and 4.9 mg/day, in the three respective groups. Retention rates at 3, 6 and 12 months in patients aged <4 years were 50.0% at all timepoints; corresponding rates for patients aged 4–<7 and 7–<12 years were 90.0%, 70.0% and 0%, and 89.7%, 76.9% and 63.6%. At last visit, responder and seizure freedom rates in patients aged <4 years were 66.7% and 33.3%; corresponding rates for patients aged 4–<7 and 7–<12 years were 36.4% and 9.1%, and 58.3% and 27.8%. AEs were reported for 0%, 40.0% and 38.2% in the three groups. Most frequently reported were irritability (<4 years, 0%; 4–<7 years, 10%; 7–<12 years, 14.7%) and dizziness/vertigo (<4 years, 0%; 4–<7 years, 0%; 7–<12 years, 8.8%).

Conclusions PER was effective and generally well tolerated in this small population of paediatric patients treated in clinical practice.

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2237 RESULTS OF THE FEASIBILITY OF INSTITUTING GRADUATED HIGH INTENSITY TRAINING FOR PARKINSON DISEASE (FIGHT-PD) STUDY OF NON-CONTACT BOXING EXERCISE

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Objectives To determine the feasibility, tolerability and safety of a 15 week block periodized, auto regulated, non-contact boxing training program for early PD.

Methods Participants were recruited from an existing data base, then screened for conditions contra-indicating exercise. Boxing training was organised into three, five week training blocks; boxer's technique development, high-intensity boxing, boxer's brain (cognitive load and dual tasking). Each block included a familiarisation phase (week one), training phase (weeks 2–4) and rest phase (week 5).Training sessions were undertaken three times a week for 60 minutes. Physical and cognitive demands were progressively increased. Rates of perceived physical (RPE) and mental (mRPE) exertion, and heart rate were recorded. Pain, fatigue, sleep and adverse events were recorded. The Unified Parkinson Disease Rating (UPDRS) motor component was measured at baseline and completion.

Results From 77 invitees, 11 were recruited; one excluded due to a positive cardiac stress test. Four females, six males, mean age 63, Hoehn and Yahr 1 or 2, mean baseline UPDRS 17.6 (6–32) completed 348/360 (96.7%) workouts; four