data collection, LP opening pressure <20cm of water or secondary causes for IIH.

Results 45 cases identified; 30 within the Greater Hobart region, population of 229,088 (June 2016-June 2017). Cumulative incidence was 6.55/100,000 (incidence rate 0.06/1000) with classification based on Neurologist diagnosis and 5.46/100,000 (0.05/1000) with classification according to MDC. 100% of the cohort were female. Mean age was 26.7 (range 17–45) and mean weight was 105.3kg (range 78–170). Headache was the most commonly reported symptom. 8.9% (4/45) of the total cohort were medically refractory (requiring VP/LP shunting). Ophthalmology services initiated 51% (23/45) of the referrals.

Conclusions Our incidence rates are higher than rates in previous studies for population subsets of young women.

081 LYMPHOMA: A GREAT IMITATOR IN NEUROLOGY AND ITS MANY FACES

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Introduction The label 'great imitator' refers to conditions which can cause varied manifestations and mimic diseases. Lymphoma is worthy of this title. We present three cases.

Cases 1: 66-year-old-man with progressive vertical diplopia and unsteady gait over four weeks. MRI brain and spine demonstrated a supratentorial para-falcine soft tissue lesion, mid-thoracic cord enhancement and right axillary mass. Serum ACE was elevated. Serum HIV serology was positive. Right axillary mass core biopsy diagnosed Burkitt lymphoma.

2: 50-year-old man with a 4-week history of constitutional symptoms on a background of ITP and splenomegaly. During admission he developed urinary retention, bilateral lower limb weakness and numbness and confusion. Infectious and vasculitic screens were unremarkable. CT chest, abdomen and pelvis demonstrated splenomegaly. CSF and bone marrow analyses were non-diagnostic. A random skin biopsy diagnosed intravascular lymphoma.

3: 65-year-old man with two weeks of headache and diplopia on a background of previously treated Burkitt lymphoma. CSF analysis showed $45 \times 10^6/L$ white cells and glucose < 0.6 mmol/L. Cytologic analysis was negative for malignancy. Bacterial culture and Cryptococcal antigen were negative. FDG-PET dramatically showed disseminated spinal and cranial leptomeningeal disease. MRI brain showed thin dural thickening correlating to area of increased uptake on PET. He was diagnosed with Burkitt lymphoma relapse and treated with chemotherapy and autologous stem cell transplant.

Conclusion The varied manifestations in our cases demonstrate the ability for lymphoma to mimic infective, inflammatory, granulomatous (including sarcoidosis) and neoplastic aetiologies. When the diagnosis is uncertain, the possibility of this great imitator should be considered.

082 THE GASTROINTESTINAL MICROBIOME IN PARKINSON'S DISEASE: IMPACTS OF MOTOR AND NON-MOTOR FEATURES, MEDICATIONS, LIFESTYLE AND DIET

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Introduction The human gastrointestinal microbiome (GM) has been proposed to be integral in the pathogenesis of Parkinson's disease (PD). Evidence supports a bidirectional interaction between the brain and the gut that is mediated by the GM. Dysbiosis of the GM is believed to negatively influence vital physiological functions in many diseases.

Methods We reviewed the literature on changes in human physiological function associated with gut microbial community states in PD. In particular, we evaluated the literature for effects of GM dysbiosis on motor and non-motor features, dietary and lifestyle factors and medication use in PD.

Results Altered GM profiles in PD have been suggested to disrupt vital signalling pathways within the microbiota-gut-brain axis, integral to regulating physiological digestive function and metabolic homeostasis. Unfavourable variations in the GM have been shown to perturb mood (anxiety/depression), cognition, perception (hallucinations/delusions), gastrointestinal motility, including constipation in PD. Further, varied clinical motor phenotypes, including postural instability and gait disturbance have been attributed to alterations in the GM, in addition to the use of catechol-O-methyltransferase inhibitors, anticholinergics and levodopa. Variations in dietary and lifestyle factors have also been inferred to cause alterations in GM profiles, including caffeine consumption, macronutrient intake, smoking and the effects of ageing and exercise.

Conclusions It is apparent from the mounting evidence that alterations in the GM are intimately involved in PD pathogenesis. However, the GM can also be modulated by dietary, lifestyle and treatment factors that may influence motor and non-motor features as well as disease progression.

083 NOVEL WIRELESS S – PATCH DEVICE MAY EFFICIENTLY DETECT ATRIAL FIBRILLATION IN PATIENTS WITH ISCHAEMIC STROKE

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Introduction Atrial fibrillation (AF) is the most common atrial arrhythmia leading to increased risk of thromboembolic events. Ward telemetry (WT) has a low detection rate for AF in stroke patients and often patients are not appropriately treated with anticoagulation. This study compares conventional 2-day WT versus 4-day wireless S-patch monitoring to detect AF.

Methods Prospective case series.

Results 51 patients admitted for stroke workup were recruited across 2 major tertiary centre's in Sydney to compare WT monitoring for 2 days versus S-patch monitoring for 4 days in the detection of AF. The efficacy to detect AF using both technologies across 76 hours of telemetry was assessed via data extractions and Cardiologist review. A matrix was used to measure nursing/patient satisfaction and setup/resource times were assessed.

84–94% of patients and 75–95% of nursing preferred the S-Patch. Non-parametric tests indicate significant time saving for removal of S-Patch versus WT [2.2 mins vs 5.1 mins ($p=0.00$)]. Efficacy of S-Patch to detect AF following Cardiologist review was greater than WT, with 7 patients identified with AF by S-Patch versus 1 using WT. The S-patch had a false positive rate of 78%.

Conclusion The S-patch had a higher detection rate of AF compared to WT. This allows patients to be anticoagulated appropriately for the prevention of further stroke. Analysis shows patients and staff overwhelmingly prefer the S-Patch. The S-Patch is sensitive in the detection of AF however it showed a high false positive rate. We are confident that further refinement and advances will provide a novel device in the detection of AF.

084 SEPARATING STROKE FROM VESTIBULAR NEURITIS BY VESTIBULAR FUNCTION TEST PARAMETERS

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Introduction Vestibular neuritis (VN) and posterior circulation stroke (PCS) are the commonest causes of acute vestibular syndrome (AVS). We aim to identify discriminators of VN from PCS by testing all five vestibular end-organs in patients presenting with AVS.

Methods Three-dimensional video-head impulse test (v-HIT), cervical and ocular-vestibular evoked myogenic potentials (c- and oVEMP) and subjective visual horizontal (SVH) tests were performed in 22 patients with VN and 22 with PCS. Ipsilesional horizontal, anterior and posterior canal (HC, AC, PC) v-HIT gain and first catch-up saccade characteristics, VEMP amplitude asymmetry-ratios were compared.

Results All VN and 6 PCS patients had positive clinical HIT. Mean time to testing was 4.7 days for VN, 7.0 days for PCS. VN mean ipsilesional HC and AC first saccade amplitude was larger, peak-velocities faster and onset latencies earlier compared to PCS ($p<0.05$). No significant difference between VN and PCS in first saccade characteristics was found in PC. Ipsilesional first saccade amplitude, peak-velocity and duration were significantly different between PCS and controls for all canals ($p<0.05$). A gain <0.68 and first saccade amplitudes $>2.2^\circ$ separated VN from PCS with sensitivities of 95.5% and 86.4% and specificities of 72.7% and 63.6%. First saccade amplitude of $>0.91^\circ$ identified PCS from controls with sensitivity of 68.2% and specificity of 70%. Abnormality rates for AC cVEMP, BC oVEMP and SVH were 42.9%, 50% and 91% for VN and 38.1%, 9% 72% for PCS.

Conclusion v-HIT gain and catch-up saccade metrics are useful separators of VN from PCS. Detailed saccade analysis complements existing vestibular tests.

085 SYNDROME OF TRANSIENT HEADACHE AND NEUROLOGIC DEFICITS WITH CEREBRAL FLUID LYMPHOCYTOSIS (HANDL) AS A MIMIC FOR TRANSIENT ISCHAEMIC ATTACK (TIA)

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Introduction HaNDL is a rare neurological disorder of unknown aetiology that is characterised by headache, neurological deficit and pleocytosis in the cerebrospinal fluid (CSF). It is a benign condition that has spontaneous resolution of symptoms within months.

A 50 year old female presented to Emergency with an acute focal neurological deficit of right sided weakness, dysphasia and dysarthria lasting less than one hour. Over the preceding months she had a new onset of headache. She was worked up for a likely diagnosis of TIA.

Methods Case report.

Results Initial CT Brain(angiography) showed no stroke or other identifiable cause of symptoms.

MRI brain showed excessive nonspecific T2 hyperintensities, requiring further investigation for possible vasculitis. MR angiography was normal and there was no evidence of stroke.

Viral PCR's were negative.

Lumbar puncture (LP) showed pleocytosis (leucocytes $309 \times 10^6/L$), raised intracranial pressure and high protein, raising suspicion for HaNDL. This normalised on subsequent outpatient LP, along with symptoms.

Conclusions

A diagnosis of HaNDL is made as a diagnosis of exclusion, though should be considered as a differential diagnosis for various presentations in which transient acute focal neurology is a presenting complaint.

Due to relatively few reported cases of HaNDL, it is possible that HaNDL is being underdiagnosed due to variability in patient presentation and lack of understanding of the syndrome.

As in this case, when a patient presents with transient acute focal neurology in the absence of headache as a prominent presenting symptom, it is reasonable to consider HaNDL as a differential diagnosis.

086 CLINICAL, INVESTIGATIONAL AND TREATMENT FACTORS DO NOT DETERMINE PROGNOSIS OF PATIENTS WITH INFLAMMATORY NEUROPATHIES

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Introduction Identifying patients who need long-term immunoglobulin (IVIg) treatment in patient with inflammatory