Conclusion: The spatiotemporal distribution of high frequency discharges may add to discussion regarding spatiodynamic mechanisms for seizure initiation and propagation.

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211. In hindsight – deja view....a case of palinopsia masquerading as dyslexia

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Introduction: We describe the case of a young woman with an unusual, and somewhat delayed, explanation for her reading difficulty.

Case: In her late teen years, a young woman presented with sensory seizures and was found to have a right parietal focus for these. She had reading difficulty all her life, which had been diagnosed in childhood as dyslexia. On detailed consideration of the history, the young woman described palinopsia dating from childhood. This particularly affected reading where intermittently, words and letters from previous view would superimpose on the immediate visual attention. This symptom, along with the reading difficulties, responded to anticonvulsant treatment.

Discussion: Palinopsia is a rare but dramatic symptom which may be responsible for many otherwordly experiences described over the ages. Mechanisms for palinopsia are reviewed in relation to the case described. Seizure disorders often contribute to learning and language difficulties if seizure control is not attained.

Conclusion: Palinopsia very rarely, but importantly, can be mistaken for dyslexia. Its inclusion in the differential diagnosis for reading difficulty could prevent both delays in provision of appropriate anticonvulsant treatment, and missed academic potential.

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212. A case of headache and hemiparesis in a woman with a port-wine stain

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A 22 year old woman with a right sided port-wine stain developed a severe headache, followed by left arm weakness which developed after 4 hours. 4 days later she presented to our institution with a dense left hemiparesis. A CT head was initially reported as showing a right sided arteriovenous malformation (AVM) with subtle oedema of the right cerebral hemisphere. An MRI subsequently demonstrated pial angiomatosis with abnormal collateral cerebral veins commonly seen in Sturge-Weber Syndrome (SWS) rather than a true AVM. Her headache and neurological deficit gradually improved until the 5th day of her admission when she developed complex partial seizures. A repeat MRI showed a subtle increase in the degree of midline shift and evidence of ischemia of the right cerebral hemisphere which was not apparent on the previous study. Digital subtraction angiography was performed but no evidence of thrombosis was found. A PET scan showed a mild reduction in FDG uptake in the right cerebral hemisphere. Recurrent thrombosis with infarction is postulated to be the cause of stroke like episodes in SWS, however no thrombosis was found despite extensive imaging. This patient developed seizures much later in life than would be expected. These seizures were most likely triggered by ischemia, with corresponding ischaemic changes on MRI.

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213. Progress Report: Australian Register Of Pregnancies 1999–2007

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Since 1999 the Australian Pregnancy Register, affiliated with EURAP, has pioneered the use of untreated controls, prospective and retrospective data, AED dose-relationships to malformation risks and drug efficacy.

Under Ethics Committee supervision, informed consenting treated and untreated WWE and those receiving AEDs for other conditions are enrolled. Four telephone interviews are conducted. Factors related to medical, family, epilepsy and drug related histories are recorded. Outcomes are based on the Victorian Birth Register Classification of defects. Analyses are carried out by statistical methods.

To December 2006, the Register contained data on 1002 pregnancies, 992 with known outcomes, 83 not exposed to AEDs in first trimester, and 30 not prescribed AEDs for epilepsy. Statistically significant findings in WWE included more frequent folate supplementation, decreased alcohol intake during pregnancy, a dose-related increased risk of foetal malformation associated with valproate therapy, and a tendency towards lower birth weights in live-born malformed offspring.

Pregnancy had little influence on AED-treated epileptic disorders. Seizures during pregnancy occurred in 49.7% of 841 AED-treated pregnancies in WWE. Epilepsies active before pregnancy, and seizures in pregnancy predisposed to intra-partum and post-partum seizures. The risk of seizures during pregnancy was 50-70% less if the pre-pregnancy year was seizure free. The risk of seizures during labour was small.

Discussion. After one year's seizure freedom there seemed little advantage in deferring pregnancy to avoid seizures returning whilst pregnant. Collaborative Registers are essential to establish a database for studying drugs in monotherapy, for future studies on birth defects, cognitive outcomes and for pharmacogenetic advances.

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214. A retrospective study to compare the tolerability of switching from levodopa/carbidopa or levodopa/benserazide to stalevo

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Objectives: End of dose deterioration and motor fluctuations are a major complication in the treatment in Parkinsons disease. Although the efficacy of Stalevo in the management of this problem

has been previously demonstrated there has been little published regarding the safety and tolerability. Previous studies have looked at either a Stalevo arm or levodopa/carbidopa arm without crossover and there have been no studies comparing Stalevo to levodopa/benserazide. The aim of this study was to assess the side-effect profile of Stalevo in comparison to immediate release levodopa and determine whether patients will remain on this preparation or choose to go back to their previous regime.

Methods: A retrospective analysis was made of 55 consecutive patients with idiopathic Parkinsons disease who were switched form Madopar or Sinemet to Stalevo (M32,F23). Assessments included tolerability measures, adverse events profile and patient global clinical assessments.

Results: 25% of patients experienced side-effects which included dizziness, nausea, vomiting, fatigue, diarrhoea, depression and mood changes, confusion and 22% had new onset dyskinesia. 18 patients (33%) ceased taking Stalevo on the basis of side-effects and perceived lack of efficacy.

This open label study suggests a higher rate of side-effects from Stalevo than previously reported and a 33% dropout rate compared to 8% previously reported. This is an important finding in view of the potential for Stalevo to reduce time to the onset of motor fluctuations and improve on time. Measures to reduce drop-out rate will be discussed.

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215. Pathogenic effects of novel mutations in ATP13A2 (PARK9) Causing Kufor-Rakeb Syndrome, an Autosomal Recessive Form of Early-onset Parkinsonism

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Objective: Recently, loss-of-function mutations in a lysosomal type 5 P-type ATPase, ATP13A2 (or PARK9) were reported to cause Kufor-Rakeb syndrome (KFS), an autosomal recessive form of early-onset parkinsonism. Pathogenic effects of this gene are currently unknown. The aim of this study was to assess the changes in expression of relevant genes in individuals with KFS using semi-quantitative RT-PCR.

Methods: We synthesised cDNA using total RNA extracted from the whole blood of affected and unaffected individuals within a family who had been identified with novel mutations (3176T>G and 3253delC) in the ATP13A2 gene. We then performed semi-quantitative RT-PCR followed by densitometry to compare the expression level of ATP13A2, lysosomal membrane-associated protein 2 (LAMP2) and alpha-synuclein (SNCA).

Results: LAMP2 expression was significantly increased in the affected (compound heterozygotes; 3176T>G/3253delC, $p < 0.05$) compared to wild type controls. In contrast, no change in the expression level of ATP13A2 or SNCA was observed.

Conclusions: LAMP2 expression is increased in our patients with compound heterozygous mutations in ATP13A2. ATP13A2 and SNCA expression remained unchanged when compared to controls. Given that LAMP2 is localised in the lysosome, our findings indicate a compensatory increase in lysosomal function in affected individuals. Further investigations to assess lysosomal function in patients with KFS are warranted.

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216. The impact of an individualised medication information session on medication knowledge and quality of life of people with parkinson's disease

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Objectives: To compare knowledge about prescribed Parkinson's medications and quality of life of people with Parkinson's Disease (PD) before and after a nurse-led, individualised medication information session.

Materials & **Methods:** Participants were their own controls in this pretest, posttest nonexperimental design study. During the pretest phase, participants completed the PDQ-39 and were interviewed about PD medications by the research pharmacist using the Knowledge of Medication Subtest (KMS). The intervention (phase 2) was then conducted by the PD nurse researcher where all participants (n = 22) took part in an information session focused on their individual medication regime, expected therapeutic benefits, side effects and drug action. This information session was guided by printed medication information collected from product information; educational materials complied by the researchers into printed material for each prescribed PD medication. Phase 3 of the study involved participants returning to complete the PDQ-39 and follow up interview with the research pharmacist to complete the KMS to evaluate changes to baseline medication knowledge and quality of life scores.

Results: The most commonly prescribed medications were cabergoline, prescribed and used by 45.5% of participants (10/22) and levodopa containing compounds 72.8% (16/22). KMS scores improved significantly after the information session for patients prescribed cabergoline ($p = 0.005$) and levodopa ($p = 0.001$). Quality of life PDQ-39 scores demonstrated improvement with 72.7% (16/22) reporting a reduced PDQ-39 score ($p = 0.002$).

Conclusion: Medication information provided by experienced nurses working with people with PD can improve medication knowledge and demonstrated a positive impact on quality of life in this clinic setting.

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217. Huntington disease: ethical challenges in management

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Objectives: Review Huntington (HD) patients to identify ethical challenges complicating management.

Methods: Retrospective review of HD cases managed by Huntington Disease Services based in 2 cities.

Results: HD commonly presents ethical challenges in management.

A. Conflicts between rights to privacy and duty to disclose to others:

a) Unwillingness to disclose to at risk relatives, a partner even when contemplating pregnancy, non paternity to adult children.
b) Posthumous testing; how to disclose.
c) Implications of testing one identical twin or child of untested parent.