Methods As part of a comprehensive systematic review of Korsakoff's Psychosis, an audit was performed of 114 Individuals currently requiring long-term care in an approved psychiatric facility during the year of 2018. Medical and psychiatric diagnoses as well as pharmacological histories were examined. Alcoholic and non-alcoholic aetiologies were considered, the latter may be underdiagnosed (Nikolakaras et al, 2018).

Results Thirteen individuals were identified with a formal diagnosis of Korsakoff's syndrome (KS) and all continue to require structured Inpatient care due to their levels of neuro-cognitive impairment and psychiatric presentations. Episodic memory is severely affected, as is the learning of new semantic memories. Patients with Korsakoff's psychosis are capable of new learning in a calm, structured environment with cued new information (Kopelman et al, 2009).

Conclusions Individuals with Korsakoff's psychosis may have comorbid psychiatric symptoms including mood, anxiety, aggression or psychotic disorders that command therapeutic interventions. Specific memory targeting intervention may not be prioritized. Potential therapeutic interventions include Errorless learning (EL) which target levels of competence and independence (Rensen et al, 2017). EL is reported to improve symptoms of psychosis, aggression, apathy or mood disorders. Behavioural Interventions include environmental adaptations and cognitive remediation, which may be combined with pharmacological approaches such as donepezil or memantine to target cognition (Johnson and Fox, 2018). However, these approaches are not identical to those required by Alzheimer's disease or other dementing disorders. Epidemiological and genomic studies could be performed to identify those particularly at risk of developing this potentially life-altering condition.

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42

MULTI-AGENT ALLERGIES AS PREDICTOR OF FUNCTIONAL NEUROLOGICAL DISORDER

¹Angeliki Zarkali, ^{1,2}Mark Edwards, ^{1,2}Mahinda Yogarajah. ¹Department of Neurology, St George's University Hospitals NHS Foundation Trust, London, UK; ²Neurosciences Research Centre, Molecular and Clinical Sciences Research Institute, St George's, University of London, London, UK

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Objectives/Aims Functional neurological disorders (FND) account for 20% of patients in neurology clinics and can lead to functional impairment, multiple re-attendances and significant cost. However, diagnosing FND remains challenging; identifying associated factors could aid earlier diagnosis. We aimed to determine the value of self-reported multi-allergies as predictor for FND.

Methods We retrospectively reviewed records of consecutive patients from two clinics (General Neurology and FND),

St George's Hospital, January 2015–June 2018. A logistic regression model was used in conditional fashion; statistically significant variables in univariate analysis were included.

Results Of 720 patients with definitive diagnosis, 243 (33.8%) had FND and 477 (66.3%) another neurological disorder. Mean age was 43 years (range 16–93), 63.9% (453) were female. 81 patients with FND (33%) had Non-epileptic attack disorder (NEAD).

In multivariate analysis, factors associated with FND were female sex (Odds Ratio [95% Confidence Intervals], OR=0.49 [0.33, 0.73], $p<0.001$), psychiatric comorbidity (OR=4.28 [2.89, 6.35], $p<0.001$), younger age (OR=0.97 [0.96, 0.98], $p<0.001$), coexisting fibromyalgia/chronic fatigue syndrome (OR=4.85 [1.26, 18.73], $p=0.02$) and allergies (OR=2.54 [1.79, 3.62], $p<0.001$). Polypharmacy, medical comorbidities, atopy and hypermobility were not significant.

Increased number of allergies increased the probability of FND: one allergy OR=4.53 [3.08, 6.65, $p<0.001$], two OR=9.09 [3.92, 21.09, $p<0.001$], three OR=16.74 [3.82, 73.43, $p<0.001$] and ≥ 4 allergies OR=42.94 [2.51, 736.02, $p=0.009$].

Conclusions Previous studies highlighted the increased prevalence of allergies in NEAD compared to epilepsy. Our study expands this to all FND, as only 1 in 3 FND patients had NEAD. Presence of allergies, particularly to multiple agents, should raise the suspicion of FND.

43

EFFECT OF DOPAMINERGIC MEDICATION ON RISK PREFERENCE IN PARKINSON'S DISEASE

¹Alekhyia Mandali*, ²Ray Chaudhuri, ²Alexandra Rizos, ¹Valerie Voon. ¹Department of Psychiatry, University of Cambridge; ²Centre of Excellence in Parkinson's and Movement Disorders, Kings College London

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Introduction Dopaminergic medication being the standard therapeutic treatment improves motor symptoms in Parkinson's disease (PD) but also implicated in the occurrence of impulse control disorders. Data driven computational models such as drift diffusion model utilize behavioural measures to explain subtle changes that are not sensitive to traditional analysis. Here, we aim to analyse risk preference in PD subjects in OFF and ON medication and the effect of dopamine on risk.

Methods Sixteen patients PD patients during OFF medication and 14 during ON were tested on the 2 step sequential learning task. We calculated the risk associated with each choice (variance of reward probability) and defined the choice with maximum variance as the risky one, for all 134 trials. With behavioural measures (selected choice- risky vs non-risky and response time) as inputs and risk as an independent factor, we extracted threshold (a), drift rate (v) and response bias (z) parameters using a hierarchical drift diffusion model (HDDM) for both groups during ON and OFF drug condition. Statistical analysis on the parameters was analysed using Bayesian factors.

Results Bayesian Independent sample t-test between the 2 groups (ON vs OFF) showed a strong evidence for differences in drift rate ($BF_{10}=34.28$) and response bias ($BF_{10}=1.5 \times 10^{13}$). We did not observe any evidence for correlation between RL parameters and z for both ON and OFF condition. Behaviourally, with respect to response time, independent sample t-test showed no significance difference

between time taken to make risky ($t(28) = -1.28$, $p = \text{ns}$) and non-risky choices ($t(28) = -1.06$, $p = \text{ns}$). Similarly, no difference was found for change in risky choice selection in presence of the drug ($t(28) = -1.41$, $p = \text{ns}$). No differences were found in the traditional reinforcement learning parameters between the groups.

Conclusions Using a novel computational analysis, we showed that dopaminergic medication increased the preference to select a risky choice by modulating drift rate and response bias which was not captured by the behavioural measures. Critically we observe an effect on response bias highlighting the role of *apriori* information in influencing risky decision making.

44 LIFESPAN OF NEGATIVE EXPERIENCES IN FUNCTIONAL NEUROLOGICAL DISORDER PATIENTS

¹Aneesa Mehmood*, ²Liat Levita, ³Markus Reuber, ²Emily Mayberry. ¹Sheffield Medical School; ²University of Sheffield Psychology Department; ³University of Sheffield Academic Neurology Unit

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Aims Exploration of the relationship between negative life experiences and patients with Functional Neurological Disorder (FND), by analysing patient and non-clinical group responses to a new questionnaire called the Lifespan of Negative Experiences Scale (LiNES). LiNES was designed to examine predisposing vulnerabilities and perpetuating factors in individuals with FND by retrospectively assessing experiences of interpersonal trauma, affect and relationship insecurity at three developmental stages – childhood, adolescence and adulthood.

Methods LiNES, CATS (measure of childhood abuse and trauma), RSQ (measure of relationship insecurity) and PANAS (measure of affect) questionnaires were administered to 71 individuals with FND. Analyses were conducted to assess the reliability of the LiNES, explore correlations between different psychological domains within the FND group and to test whether LiNES scores predicted FND group membership. In addition, FND patients' responses were compared to 270 matched healthy controls.

Results The LiNES subscales had high internal consistency and correlated with CATS, RSQ and PANAS. Levels of interpersonal trauma were higher in FND patients than controls during childhood, adolescence and adulthood. High levels of negative affect were found in FND patients in adulthood compared to controls but no significant differences were found between FND patients and controls in relationship insecurity at any developmental stage. On the RSQ, FND patients had higher anxious and avoidant relationship styles. LiNES trauma scores at each developmental stage predicted FND status with over 80% accuracy. Additionally, FND patients self-reported more symptoms (SDQ-20) and a higher prevalence of comorbid conditions compared to controls.

Conclusions The LiNES is a new brief retrospective measure of negative life experiences. Although psychological factors may not be necessary to the diagnosis of FND, they are substantially more common in FND patients compared to controls. In particular, a history of interpersonal trauma seems to play an important role in those with FND. These factors

therefore are likely to play a pathophysiological role in many patients and their recognition is important for treatment. This study provides new insights into the association between the timing of negative experiences and the subsequent effect on an individual. Furthermore, the results support the use of LiNES as a valid screening tool in the clinical setting in patients presenting with functional symptoms with diagnostic and therapeutic implications.

45 FUNCTIONAL NEUROLOGICAL DISORDER IN GERIATRIC REHABILITATION: INCIDENCE, CLINICAL PRESENTATIONS, AND IMPACT ON DISCHARGE

¹Corrette Maria, ^{1,2}Chun Ho-Yan Yvonne, ¹Roscoe Mhairi, ²Carson Alan. ¹Department of Medicine of the Elderly, St John's Hospital, Livingston, UK; ²Centre for Clinical Brain Sciences, University of Edinburgh

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Background/Aims Functional neurological disorder (FND) may be present amongst elderly people in hospital. FND could hinder patients' rehabilitation progress and impact negatively on discharge outcomes. Little data exist for FND in the elderly. We aimed to report the incidence of FND, clinical presentations, co-morbidities, and impact of FND on discharge in elderly patients receiving inpatient rehabilitation.

Methods In our retrospective case series, a consultant geriatrician reviewed electronic case notes of consecutive discharges from a 28-bed geriatric rehabilitation unit at St John's Hospital, which serves all patients requiring inpatient rehabilitation in West Lothian—a mixed rural and urban area with a population of 180 000 and high levels of deprivation. Data collected: demographics, suspected/definite diagnosis of FND and its presentation, significant co-morbidities and impact on discharge.

Results We reviewed case notes of 100 patients discharged consecutively from 30/3/2018 to 30/10/2018 (age range 41–101, mean 79, SD 11; 55% men). 20% received a diagnosis of suspected or definite FND. FND diagnosis was made by a geriatrician (17%) or a neurologist (3%). Clinical description of FND cases and their co-morbidities will be presented in a summary table. Of the 20 FND cases (mean age 77, SD 14), 9/20 (45%) were men. FND impacted on discharges in 13/20 (8/20 had delayed discharge, 5/20 had increased care needs, 7/20 had no impact on discharge).

Conclusion

Key finding FND was common amongst elderly patients receiving inpatient rehabilitation. FND presentations were varied. Patients with FND also had chronic conditions common in the elderly e.g. Parkinson's disease, stroke, dementia, anxiety or depression.

Weakness and strength of our study Assessor bias might be introduced as diagnosis was made by a geriatrician with an interest in neuropsychiatry. Our data are likely generalisable to the geriatric rehabilitation population as sample was obtained from the only unit that served the entire population of West Lothian.

Implications for future research and practice FND presents a unique challenge in the geriatric population. Geriatricians are not accustomed to assessing and managing FND, sometimes dismissing symptoms as 'behavioural'. This can lead to symptoms remaining unexplained and untreated. Specialist neurology or neuropsychiatry services are not always available.

The identification of FND and its effective treatment during rehabilitation could have potential impact on hospital length of