

Interactive Virtual Reality (IVR) allows trainees to not only be immersed in a simulation but take control, choosing the direction of questioning for example. It also allows the training to be easily repeated and scaled to any number of students, anytime and anywhere there is an internet connection.

Method. Following successful funding from the RCPsych General Adult Faculty we chose three common scenarios that a new started in Psychiatry would face. These included acute agitation/rapid tranquilisation, a patient wishing to leave/section 5(2) and a patient with tachycardia following clozapine initiation. Using established guidelines and literature, in conjunction with feedback from subject matter experts and practicing clinicians, scenarios were written. We then researched the best hardware and software to make this possible, ensuring that the resources required were realistic to allow accessibility to as many trainees as possible.

Result. Creating IVR is challenging but an engaging medium. Achieving consensus on the training material is time consuming yet paramount to a good training session. Producing high quality videos is extremely resource intensive requiring large amounts of computing power and storage. However, the outcome is an engaging and practical alternative to face to face training.

Conclusion. The possibilities for IVR for are vast. For example, trainees can practice different methods of asking questions (e.g. open vs closed) and how this affects the outcome. Training could be produced centrally and then shared, allowing best practice to be disseminated. It could improve and standardise induction, especially considering the expanding workforce. It could also improve recruitment, allowing an immersive experience of Psychiatry to those who would otherwise be unable to obtain shadowing. It also has a role in patient safety – demonstrating common scenarios that the trainee may face allowing them to practice in a safe environment.

Patterns of antipsychotic prescribing in first episode psychosis – differences between acute and early intervention services

James Fallon^{1*}, Sophie McBrien² and Keegan Curlewis²

¹Sussex Partnership NHS Trust and ²Brighton and Sussex Medical School

*Corresponding author.

doi: 10.1192/bjo.2021.116

Aims. This study aimed to evaluate the patterns of antipsychotic prescribing in patients with first episode psychosis (FEP) at the time of their initial treatment and over the first year with the Early Intervention Service (EIS). It was hypothesised that different care teams would have a preference for certain antipsychotic medications and that initial medication choice would be continued through the first year.

Background. Research indicates that with the exception of clozapine, all antipsychotics are equally as effective. However, anecdotally it has been observed that inpatient and crisis teams and EIS have differing initial medication choices.

Method. An analysis of the North West Sussex EIS caseload (n = 67) was conducted. The first antipsychotic prescribed and initiating team was recorded. Prescribed medication for those that had completed 12 months (n = 43) with EIS after initial prescription was recorded. An analysis was performed of prescribing choice by initial care team (acute vs EIS vs other community

services) with the frequency with which medication was changed during treatment.

Result. 97% (n = 65) of patients were started on an antipsychotic. Initial medication choice was olanzapine (44.8%, n = 30), aripiprazole (22.4%, n = 15), risperidone (20.9%, n = 14), quetiapine (6%, n = 4) and zuclopenthixol were least common (1.5%, n = 2). At the 12 month point 51.2% (n = 22 of 43) had switched and 16.3% (n = 7 of 43) had discontinued.

The most common medication started by acute services was olanzapine (56.0%, n = 28 of 50), though of those who completed 12 months this had been switched in 53% of cases (n = 9 of 17). EIS most commonly initiated aripiprazole or risperidone (37.5% each n = 4). At 6 and 12 month follow-up by EIS, the most commonly prescribed antipsychotic was aripiprazole (24 patients 40.7%, and 14 patients 32.6% respectively).

Conclusion. There was a clear preference for olanzapine as initial treatment of First Episode of Psychosis in the region. On breakdown it was apparent that there was a split in prescribing choices between more sedating medication in acute services and less sedating medication in EIS. Given that most patients changed to less sedating and less metabolic active medications over their first year it is not clear why alternative options are not used at the start of treatment. Future research will focus on clinician's rationale for initial prescribing choice. This will look for any underlying bias toward specific medications.

Eating disorders and psychosis: a case report and review of the literature

Defne Flora Goy*, Erdem Efe, Özge Şahmelikoğlu and Ümit Haluk Yeşilkaya

Bakirkoy Research & Training Hospital for Psychiatry, Neurology and Neurosurgery

*Corresponding author.

doi: 10.1192/bjo.2021.117

Aims. Despite evidence from case series, the comorbidity of eating disorders (ED) with psychosis is a challenging field to which little attention has been paid. There is no consistent sequence in the co-occurrence of the two conditions-eating disorders sometimes precede, and sometimes follow the onset of psychosis. In this case report, we present a 25-year-old female patient suffering from recurrent episodes of binge eating and inappropriate compensatory purging behaviours with psychotic components to discuss the co-occurrence of these conditions in the light of the literature.

Method. Our patient suffered from sleep disturbances, homicidal thoughts, self-induced vomiting worsened in one year. Psychiatric examination revealed psychotic symptoms such as blunted affect, persecutory delusions, and delusions of appeal and justification. In our inpatient psychiatry clinic, she was treated with olanzapine 20 milligrams(mg) and quetiapine 500 mg per day.

Result. Psychotic episodes occur in 10–15% of eating disorder patients. The prevalence of primary psychotic diseases like schizophrenia and schizoaffective disorders in eating disorder patients appears to be comparable to that in the general population. An ED can be the early sign of an impending psychosis, or psychotic symptoms can signal the beginning of an ED. The advent of the psychosis, and sometimes the treatment of the psychosis can cure the eating disorder, but it can sometimes aggravate it. The case presented illustrates the difficulties in managing a patient with a comorbid eating disorder and psychosis. To ensure a rigorous assessment of both psychotic and

eating disorder symptoms, the focus should be on the pattern of appearance or emergence of symptoms, their phenomenology, clinical and family background of the patient, and clinical status on follow-up.

Conclusion. The comorbidity between eating disorders and psychosis is infrequent and raises several conceptual and methodological questions. Epidemiological and family studies show that there is no more significant association between psychosis and ED, although these results are somehow limited by the lack of rigorous data regarding ED.

Effectiveness of repetitive transcranial magnetic stimulation (rTMS) for the treatment of obsessive-compulsive disorder (OCD): a meta-analysis

Kabir Garg^{1*}, Naomi Fineberg², Luca Pellegrini², Arun Enara³ and Eduardo Cinosi⁴

¹Oxleas NHS Foundation Trust; ²Hertfordshire Partnership University NHS Foundation Trust, University of Hertfordshire;

³Hertfordshire Partnership University NHS Foundation Trust and

⁴Hertfordshire Partnership University NHS Foundation Trust

*Corresponding author.

doi: 10.1192/bjo.2021.118

Aims. OCD is a chronic and debilitating psychiatric illness. Current first-line treatments include serotonin reuptake inhibitors and cognitive behavioural therapy, but a substantial minority of patients fail to respond adequately, requiring further forms of intervention usually provided in a sequenced algorithm. Repetitive Transcranial Magnetic Stimulation (rTMS) uses magnetic pulses passed through a coil placed on the scalp to stimulate the underlying brain region. Clinical trials of r-TMS in OCD have produced conflicting results, possibly related to the variability in the site of stimulation, protocols used, and variability in the selection of patients. We perform an updated systematic review and meta-analysis of the effectiveness of rTMS for the treatment of OCD aimed to determine whether certain rTMS parameters (i.e. site, duration, protocol etc.) or patients' characteristics (i.e age, duration of illness, illness severity, treatment resistance etc), are associated with effectiveness. Our overarching aim is to determine the place of rTMS in the sequenced OCD care-pathway.

Method. The meta-analysis is pre-registered in PROSPERO (ID: 241381). Potentially relevant studies will be retrieved using the MEDLINE, PsycINFO, and Cochrane Library databases using the parameters ['obsessive compulsive disorder' or 'OCD' or 'obsessions' or 'compulsions'] AND ['transcranial magnetic stimulation' or 'TMS']. The reference lists of retained articles will also be scrutinized for additional relevant publications. Only full text English language articles will be included in the review. The methodological quality of the studies will be assessed using CONSORT criteria. A summary of the study's quality as a randomized clinical trial will be produced.

Result. Our preliminary analysis shows some efficacy for r-TMS in non-treatment resistant OCD than treatment resistant OCD. Detailed results will be presented in the poster at the event. Effect measure will be either categorical (e.g. relative risk (RR) or odds ratio (OR) or continuous (mean difference or standardized mean difference - Hedge's *g* or Cohen's *d* - when taking into consideration the severity of the disorder as a dimension). These outcomes will be measured through validated instruments, in the form of both self- rated scales and observer rated scales including semi-structured interviews.

Conclusion. This meta-analysis will identify the patient, illness and protocol parameters that determine clinical outcomes, as guide to optimizing the role of rTMS in the care of patients with OCD.

A neuropsychological study of chromatin disorders

Benjamin Geers^{1*}, Siddhartha Banka² and Daniel Weisburg²

¹University of Manchester and ²Manchester University NHS Foundation Trust

*Corresponding author.

doi: 10.1192/bjo.2021.119

Aims. Analyse neuropsychological assessment data collected from a chromatin disorder clinic to determine the neuropsychological profile associated with chromatin disorders. Assess for differences in neuropsychological profile by diagnostic group and gender. Hypothesis: A systematic neuropsychological review of chromatin disorders will reveal previously unknown patterns.

Background. Chromatin disorders (CD) are a group of genetic conditions that result in developmental delay and intellectual disability. Thus far the neuropsychological profile of CDs has been poorly studied.

Method. Cognitive functioning, adaptive behaviour, psychosocial difficulties and perceived impact on the family were systematically assessed in a cohort of 42 patients with CDs from November 2016 to February 2019. Cognitive functioning was assessed via Full-Scale Intelligence Quotient (FSIQ), adaptive behaviour was assessed via Vineland's Adaptive Behaviour Scores (VABS), anxiety and depression was assessed via the Revised Children's Anxiety and Depression Scale (RCADS) and communication skills were assessed via the Social Responsiveness Scale-2 (SRS-2). Family Impact Scale was used to assess for the perceived impact on the family. Mean scores for each neuropsychological domain were calculated firstly sorting patients by diagnosis, and then by gender. Unpaired t-tests were run to assess for statistically significant differences in mean scores by diagnosis and gender. Spearman's correlation was used to determine and potential correlations between FSIQ, VABS, RCADS and SRS-2 scores and Family Impact Score.

Result. Patients with CDs were found generally to have mild intellectual disability (mean FSIQ = 64.57) and markedly deficient adaptive behaviour functioning (mean VABS = 50.19). Patients had a mean SRS-2 score of 70, indicative of high rates of autism spectrum disorder associated symptoms. RCADS and SRS-2 scores were negatively correlated with Family Impact Score with statistical significance (-0.562 and -0.429 Correlation coefficient for RCADS and SRS-2 respectively). Females had statistically significant average higher RCADS scores than males. CHARGE Syndrome was frequently an outlier having a mean higher FSIQ score, lower adaptive functioning and lower psychosocial impairment; however, these differences were not statistically significant.

Conclusion. Adaptive behaviour functioning of patients with CDs is lower than expected for their FSIQ. Females with chromatin disorders have higher levels of anxiety and depression than males however the reasons for this are unknown. The psychosocial challenges and family's impact should be considered in the clinical management of CDs. Further research with a larger data set is needed to identify the neuropsychological profiles of different CDs and to confirm whether the observed differences in CHARGE Syndrome are significant.