

we compared the whole group with BA to TD; then we compared children with BA on their native liver to those with a transplant. **Results.** Across the cohort with BA, infants scored significantly lower on the Vineland Summary T-Score compared to age-matched TD control children ($t(82) = -5.05$, $p < .001$) and across all domains of the Vineland. They also scored significantly lower than TD children on the Mullens Development Assessment ($t(66) = -6.52$, $p < .001$), and this was also across all domains. BA children on their native liver scored lower on both instruments than children who had received a liver transplant, however, this difference did not reach significance.

Conclusion. Individuals with Biliary Atresia, regardless of their transplant status, show lower levels of development across all aspects, suggesting a global delay. These findings suggest that all of these young children remain at significant risk for neurodevelopmental difficulties. These findings emphasize that special attention to neurodevelopment needs to be given as part of a holistic approach to care in a serious life-long illness. Work is ongoing to understand the trajectory of brain maturation in these children to ensure neurodevelopmental needs are addressed alongside physical health.

Using Qualitative-Electroencephalogram (Q-EEG) Mapping to Aid the Selection of Suitable Areas to Target Repetitive Transcranial Magnetic Stimulation (rTMS) Treatment in a Case of Depression With Comorbid Obsessive Compulsive Disorder (OCD)

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Aims. We present the case of SN, a 25-year-old woman with diagnosis of anorexia nervosa, OCD, Generalized Anxiety Disorder (GAD) and depression. She has extensive history of contact with mental health services spanning more than 10 years. She has had 1 inpatient stay in an eating disorders unit lasting more than 6 months. Her treatment included various classes of medications, psychological therapy and social prescribing with little or no benefit. She has been referred to rTMS. The aims of the study are to determine the effect of rTMS in treatment of a patient with depression comorbid with OCD, understand the value of q-EEG in rTMS treatment and to treat OCD symptoms using rTMS guided by QEEG.

Methods. SN had a total of 56 rTMS sessions targeting standard depression and anxiety areas; F3 (left sided excitatory) and F4 (right sided inhibitory). Following this her depression and anxiety improved but her OCD worsened. She then underwent a Q-EEG to be able to understand the physiological cause of her symptoms and suggest meaningful further neuromodulation that is tailored to her. This indicated dysregulation within the default mode network. Spindling beta waves were detected over the posterior electrode suggesting a tendency towards ruminations. There was clear hyperactivity in the supplementary motor area. SN had further 30 rTMS sessions targeting the OCD circuit (FC1 and FC2).

Results. Rating scales showed a reduction in Patient Health Questionnaire-9 (PHQ-9) score from 22 to 14 (36%) in second course compared to an increase of PHQ-9 score from 9 to 15 (66.6%) in first course; indicating an overall 102% improvement

in PHQ-9. It also showed reduction of Yale-Brown Obsessive Compulsive Scale (Y-BOCS) in second course from 34 to 8. It was not done in the first course but there was a clinical increase in OCD symptoms following the end of the first course. These results were corroborated clinically.

A repeat q-EEG showed that the areas previously highlighted in red at FC1 and FC2 had now all reverted to green, indicating normal neuronal connectivity.

Conclusion. rTMS can provide timely and adequate response to depression and anxiety especially one that has not responded adequately to medications and psychotherapy. Q-EEG is useful to direct the plan, create a personalized plan and achieve accurate results. The use of q-EEG, whilst useful, should be balanced with other considerations as financial constraints. It should be reserved to patients who have not responded favorably to standard rTMS treatment.

Clinical Audit of Clozapine Prescribing Practice and Monitoring Process in an Australian Community Mental Health Service

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Aims. Clozapine, a well-established treatment of choice for treatment-resistant schizophrenia is known to reduce suicidality, lessen the risk of tardive dyskinesia and reduce relapse risk. It contributes to a higher quality of life by reducing cognitive clouding. Patients taking Clozapine have improved social and work functioning. But Clozapine's significant side effects require regular, intense monitoring to minimize mortality and morbidity. To improve current practice of clozapine prescribing and monitoring, a systematic audit of service practices against guidelines of local hospital / Monash Health Clozapine patient management guidelines and the Royal Australian and New Zealand College of Psychiatrists (RANZCP) clinical practice guidelines will identify any deficits and inform measures to overcome them.

Methods. An audit was conducted to compare the current clozapine prescribing practice and monitoring process compared with local hospital / Monash Health Clozapine patient management guidelines and RANZCP clinical practice guidelines among clozapine prescribed patients in an Australian community mental health service.

Results. Medical records of thirty-three eligible adult patients on clozapine were audited. All the patients were prescribed dosages within the recommended daily clozapine range. Clozapine was used for appropriate indications (treatment of treatment resistant-schizophrenia or schizoaffective disorder). Of the 33 patients, clozapine level was subtherapeutic on 54.5% of patients. 54.5% of patients were on an adjunct psychotropic with clozapine. Aripiprazole and sodium valproate were used by eight patients each, and nine patients were identified using selective serotonin reuptake inhibitors. The most common side effect was hypersalivation (57.6%), followed by weight gain (39.4%), sedation (21.2%) and constipation (12.1%). Monthly weight monitoring, physical examination, medical officer monthly review and full blood examination, at 97% compliance met these standards. However, monitoring of Body Mass Index (BMI) (66.7%) and six-monthly consultant reviews (42.4%) showed poor compliance (<70%) with the standards. Most metabolic blood investigations were in moderate compliance (70–90%) except for relatively high compliance