We will discuss assessing capacity in a patient who lost capacity due to a reversible brain disorder that is now radiologically improved and scores within normal range on brief cognitive testing (92/100 on Addenbrooke's cognitive examination).

#7119 CURRENT NEUROSTIMULATION TARGETS AND TECHNIQUES FOR THE MANAGEMENT OF TREATMENT RESISTANT DEPRESSION

[1]Curtis Osborne, [1]Petya Vicheva, [1,2]Paul Shotbolt. [1]*Department of Psychological Medicine, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK*; [2]*Psychiatry, South London and Maudsley NHS Foundation Trust, London, UK*

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Major depression is a common mental health condition and is associated with significant disease burden. Up to a third of individuals suffer from treatment resistant depression (TRD), which is a failure to demonstrate any significant improvement in response to psychological or pharmacological therapies. These individuals are often referred for neurostimulatory interventions such as electroconvulsive therapy (ECT). The field of neurostimulation however has evolved to include several alternative techniques including transcranial magnetic stimulation (TMS), transcranial direct current stimulation (tDCS) and deep brain stimulation (DBS). Whilst some forms of TMS, such as repetitive TMS (rTMS), are already in clinical use, tDCS could provide a method for non-invasive neurostimulation to be self-administered at home. Research into DBS has identified several brain regions, including the subcallosal gyrus, which show promise as therapeutic targets. Further neurostimulation techniques in development include automated closed loop DBS systems in addition to minimally invasive neurostimulator devices. Thus neurostimulation has great potential in reducing the health burden associated with TRD. At time of writing no review has investigated the efficacy of both invasive and non-invasive neurostimulation techniques specifically in TRD. This presentation (review) explores the efficacy of these neurostimulation techniques with the aim of increasing understanding and promoting evidence based use of neurostimulation in the management of TRD.

Method This systematic review, following PRISMA guidelines, analyzed neurostimulation techniques for treating Treatment-Resistant Depression (TRD) in adults. We identified 178 articles on the use of TMS, tDCS, and DBS for the treatment of treatment-resistant depression (TRD). Of these, 79 studies met the inclusion criteria (TMS N=57; tDCS N=4; DBS N=18).

Results Response rates to Transcranial Magnetic Stimulation (TMS) varied from 22% to 88%, with an average response rate of 52%. Similarly, response rates to transcranial direct current stimulation (tDCS) exhibited a range of 18% to 65%, with an average response rate of 35%. Conversely, response rates to deep brain stimulation (DBS) ranged from 40% to 80%, with an average response rate of 62%. Remission rates varied from up to 73% in TMS, to 50% in tDCS and 67% in DBS.

Conclusion Neurostimulation is a rapidly evolving field with the potential to revolutionize the treatment of neuropsychiatric disorders. Though response and remission rates look promising there is significant work to be done on refining the techniques and on the study of long term outcomes.

#7137 FACTORS ASSOCIATED WITH RESPONSE COMPLETION OF THE HOSPITAL ANXIETY AND DEPRESSION SCALE (HADS) IN PEOPLE WITH SEVERE ACQUIRED BRAIN INJURY: A LOGISTIC REGRESSION ANALYSIS OF ROUTINE OUTCOME DATA

[1,2]Sara da Silva Ramos, [1]Natalia Masztalerz, [1,3,4]Rudi Coetzer. [1]*Brainkind, UK*; [2]*University of Surrey, UK*; [3]*University of Bangor, UK*; [4]*Swansea University*

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Anxiety and depression are common symptoms after acquired brain injury that may influence engagement in rehabilitation and subsequent outcomes. The Hospital Anxiety and Depression Scale (HADS) is frequently used to assess these symptoms. However, to date there has been little investigation into the appropriateness of this scale for people with acquired brain injury, especially for those with more severe impairments. Some studies suggest that language or attention problems may present a barrier for completion of the HADS. Using logistic regression, we analysed routine clinical data from $N = 916$ individuals admitted into specialist neurorehabilitation to investigate the extent to which individual and injury characteristics, as well as clinical presentation on admission (as measured by the Mayo-Portland Adaptability Inventory – MPAI-4), were associated with completion of the HADS over time (i. e. on admission and discharge). Variables that were important factors in independently predicting completion of the HADS included increased verbal communication ability ($OR = 0.87$, $p < 0.01$), lower irritability ($OR = 0.80$, $p < 0.01$), and better initiation ($OR = 0.80$, $p < 0.001$). Older age ($OR = 0.99$, $p < 0.01$) and a stroke diagnosis ($OR = 0.58$, $p < 0.01$) were associated with lower likelihood of fully completing the HADS. These findings are largely congruent with previous research identifying irritability as a barrier to completion of this measure, in conjunction with impaired verbal communication and shorter length of stay, supporting previous studies and expanding on their findings. We found that this constellation of personal and clinical characteristics collectively had significant predictive power, despite small effects (odds ratios) for some individual predictors and explaining a small proportion of the total variance (*Nagelkerke's* $R^2 = 0.15$). Nevertheless, these results suggest a patient profile shared by people with mostly moderate to severe brain injury who are unlikely to fully complete the HADS on admission or discharge from post-acute rehabilitation services. Also, our results offer implications for practice when considering the repeated, valid, and reliable assessment of levels of anxiety and depression in this clinical population.

#7189 IS SERTRALINE EFFECTIVE PROPHYLAXIS AGAINST SECONDARY DEPRESSION IN TBI PATIENTS?

[1,2]Hannah Najabat-Lattif. [1]*Barts Health NHS Trust, London, UK*; [2]*The Victoria Centre, Avon and Wiltshire Mental Health Partnership*

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Background Depression secondary to any traumatic brain injury is the commonest form of psychiatric co-morbidity,