FC58: Comparison of Clinical Outcomes with Electroconvulsive Therapy when using Methohexital vs Propofol for Treatment-resistant Depression

Authors: Adrian I. Espiritu, Yousief Fahd, Sruthi Nunna, Mervin Blair, Jonathan Santo, Lili Meng, Melissa Quaye, Iouri Rybak, Richard O'Reilly, Amer M. Burha

Objectives: Evidence is limited on the comparative impact of specific anesthetic agents used in electroconvulsive therapy (ECT) on outcomes in treatment-resistant depression (TRD). Our study aimed to compare the efficacy of methohexital vs propofol by examining the number of treatment sessions needed to transition from acute to maintenance ECT (NTS) (i.e., change from minimum of two to one or fewer treatments per week), missed treatment sessions, and seizure durations.

Methods: We conducted a retrospective cohort study via chart review of patients with TRD receiving ECT from October 2017 to October 2019. We included adult patients (³ 18 years) diagnosed with TRD who received at least six ECT sessions. We analyzed our data using multilevel structural equation modeling (MSEM).

Results: We included 149 patients (36.9% or 55/149 were 3 65 years): 54 were methohexital-treated (mean age 59 ± 17 years; 41% male) and 95 were propofol-treated (mean age 55 ± 17 years; 36% male). No significant differences between methohexital vs propofol groups were found in NTS (mean ± SD: 12.6 ± 6.6 vs 11.5 ± 6.1; p = 0.3) and missed treatment sessions (0.63 ± 1.2 vs 0.69 ± 1.2; p = 0.75). Patients receiving methohexital manifested longer motor (25.5 ± 10.6s vs 19.9 ± 8.4s; p < .001) and electroencephalographic (EEG) seizure durations (42 ± 17.5s vs 31.9 ± 13.1s; p < .001) vs propofol. MSEM revealed that (1) methohexital was associated with longer first-session seizure durations (motor seizure: b = 6.28, p < 0.05; EEG seizure: b = 8.03, p < 0.05) and more rapid decline in motor seizure duration across sessions (b = -.38, p < .05) over propofol, while accounting for relevant covariates; (2) regardless of anesthesia used, faster reductions in seizure durations across sessions predicted fewer NTS; and (3) methohexital was associated with fewer NTS adjusted for covariates which were driven by two indirect effects: (a) sharper decline in motor duration across sessions with fewer missed treatments. The outcomes were not influenced by age, indicating that the findings are relevant to older adults.

Conclusions: Our findings suggest that methoxexital had fewer NTS and longer seizure durations than propofol, indicating better ECT outcomes using methohexital for TRD. Further research is warranted to verify methohexital's effects on cognitive and additional recovery outcomes within clinical practice.

FC59: The role of community pharmacists in improving help seeking for dementia among Black African and Caribbean people in the UK

Authors: Oma Iyoko, Dr Alys Griffiths, Dr Sarah Jane Smith, Prof Claire Surr

Background: Black, Asian and Minority Ethnic (BAME) people continue to present later to specialist care centres and services for memory problems. This poses significant concerns due to implications for poorer treatment outcomes and higher treatment cost among this population. While diverse interventions to support improved help seeking for dementia have been proffered for other BAME communities, there is a paucity of research involving the Black African and Caribbean community. Furthermore, whilst community health professionals like the doctors and community nurses have been involved in such interventions, no previous research has considered the role of the community pharmacist. This research explored opportunities for community pharmacists to support improved help seeking for dementia among the Black African and Caribbean population.

Methods: This research was a multi-stage project involving surveys and interviews with community pharmacists and Black Africans and Caribbeans as participants.

Results: Knowledge, attitude and beliefs around dementia and it's causes appeared to be major barriers to help seeking among the Black African and Caribbean population. For example, beliefs that dementia is caused by 'the spirits' and dementia is a repercussion for past wrongdoing and therefore not amenable to medical intervention. The community pharmacists believe they are well positioned to spot initial signs of dementia among their clients and are therefore willing to offer help seeking support to this population.

Conclusions: To offer intervention for timely help-seeking for dementia, a culturally tailored dementia education for the Black African and Caribbean population should be considered. In addition, training on the impact of cultural beliefs on help seeking for dementia should be considered for the community pharmacists.

FC60: Restless legs syndrome and ferritin levels in older people with dementia: a cross-sectional study

Authors: Madson Alan Maximiano-Barreto^{1,2}; Érica Dayanne Meireles Leite^{1,2}, Letícia Lambert³, Victor Oliveira Wercelens⁴; Alan Luiz Eckeli¹; Marcos Hortes Nisihara Chagas^{1,2}

- Neurociences and Behavioral Sciences Department, University of São Paulo, Ribeirão Preto, SP, Brazil
- 2. Study and Research Group in Mental Health, Cognition and Aging, University of São Paulo, Ribeirão Preto, SP, Brazil
- 3. Bairral Psychiatry Institute, Itapira, SP, Brazil
- 4. Hospital São Silvestre, Aparecida de Goiânia GO, Brazil

Objectives: To evaluate the relationship between Willis-Ekbom Disease/Restless Legs Syndrome and iron deficiency anemia in older people with dementia.

Methods: A cross-sectional study was conducted with 70 older people diagnosed with dementia and restless leg syndrome in a Psychogeriatric outpatient clinic in a city in the interior of São Paulo, Brazil. The older people filled in instruments of sociodemographic characterization, measures to evaluate the Restless Legs Syndrome, neuropsychiatric symptoms, sleep quality, sleepiness and cognition. Blood data were also collected levels of creatinine, ferritin, red blood cells, hemoglobin and hematocrit, the latter collected in the patients' medical records.

Results: The sample consists mostly of older people with mixed dementia (i.e., Alzheimer's disease + Vascular Dementia), with 39% of female patients and mean age of 77.80 years (9.36). This study identified a frequency of 15.7% of Restless Legs Syndrome. Patients with the syndrome present more frequency of neuropsychiatric symptoms, worse sleep quality, higher index of body mass and lower levels of ferritin (p < .05).

Conclusions: A frequency of 15.7% was identified for restless leg syndrome among patients with dementia. In addition, patients with the syndrome have ferritin deficiency.

Keywords: dementia, aging, ferritin, restless legs syndrome; Willis-Ekbom disease