

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

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**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 ( $\geq 18$  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  $\geq 65$  years): 54 were methohexital-treated (mean age  $59 \pm 17$  years; 41% male) and 95 were propofol-treated (mean age  $55 \pm 17$  years; 36% male). No significant differences between methohexital vs propofol groups were found in NTS (mean  $\pm$  SD:  $12.6 \pm 6.6$  vs  $11.5 \pm 6.1$ ;  $p = 0.3$ ) and missed treatment sessions ( $0.63 \pm 1.2$  vs  $0.69 \pm 1.2$ ;  $p = 0.75$ ). Patients receiving methohexital manifested longer motor ( $25.5 \pm 10.6$ s vs  $19.9 \pm 8.4$ s;  $p < .001$ ) and electroencephalographic (EEG) seizure durations ( $42 \pm 17.5$ s vs  $31.9 \pm 13.1$ s;  $p < .001$ ) 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 ( $b = -0.38$ ,  $p < .05$ ) 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 and (b) the association between 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 methohexital 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**

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**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.