

CAN TREATMENT RESPONSE AND LENGTH OF HOSPITAL STAY BE PREDICTED USING STAGING METHODS IN TREATMENT-RESISTANT DEPRESSION?

Nilgün Oktar Erdoğan¹, Kezban Burcu Avanoğlu², Esen Ağaoğlu³, Koray Başar⁴

¹*Pamukkale University Faculty of Medicine, Department of Psychiatry, Denizli, Türkiye*

²*Yalova Training and State Hospital, Psychiatry Clinic, Yalova, Türkiye*

³*Medipol Hospital, Psychiatry Clinic, İstanbul, Türkiye*

⁴*Hacettepe University Faculty of Medicine, Department of Psychiatry, Ankara, Türkiye*

BACKGROUND AND AIM: Treatment-resistant depression (TRD) is defined by inadequate response to antidepressants (AD), yet its criteria vary, requiring standardized staging models for treatment planning. This study investigates the predictive validity of five TRD staging methods in determining initial treatment response and length of hospital stay (LOS) in psychiatric inpatients.

METHODS: A retrospective analysis was conducted on psychiatric inpatients diagnosed with major depression at Hacettepe University (2012-2014). TRD status before admission and response to initial inpatient treatment were determined through chart review and researchers' consensus. Patients were staged using five models: Thase & Rush (T&R) (five levels based on AD failure, including tricyclics, MAOIs, and ECT), European Staging Method (ESM) (staging by number of AD trials, duration, and augmentation), Maudsley Staging Method (MSM) (severity scoring based on AD failures, augmentation, ECT/TMS, symptom severity, and illness duration), MGH-S (cumulative points for failed AD trials, augmentation, optimization, and ECT), and Conway Staging Method (STAR-D-based staging by

failed AD/psychotherapy trials). The Institutional Review Board approved the study (GO 20/771, 01.09.2020).

RESULTS: Among 49 patients, 77.6% (n=38) responded to treatment, with a mean LOS of 48.95(±21.10) days. Patients were classified as treatment-resistant by 18.8% based on ESM, 14.6% based on MGH-S, 98% on MSM, 65.3% on T&R, and 22.9% on Conway. Logistic regression showed no staging method predicted treatment response when age and gender were included. However, ECT as the initial AD trial was significantly associated with response (p <0.05). Linear regression showed T&R explained 18.7% of LOS (p=0.002), with higher scores linked to longer hospitalization (B = 10.59). Similar patterns were observed for MGH-S, ESM, and Conway, where higher scores predicted longer hospitalization (p <0.05).

CONCLUSION: While none of the staging models predicted treatment response, T&R, MGH-S, ESM, and Conway significantly predicted hospital LOS, suggesting their relevance in clinical decision-making.

Keywords: Severity of illness, treatment-resistant, depression, antidepressants