

Antidepressant Usage in Haemodialysis Patients: Evidence of Limited Efficacy and Inadequate Practices

Introduction: Depression is common in patients on haemodialysis (HD). Many take antidepressant medications though there is little evidence of efficacy in this setting. We wished to examine the clinical course depression symptoms in patients on HD who were taking antidepressants.

Methods: As part of the screening phase of the ASSertID (A Study of Sertraline In Dialysis) we identified patients on HD in four UK centres who were also taking antidepressants. A number of these patients agreed to be followed up around 12 months later. Initial screening included a brief clinical and psychiatric history, routine laboratory investigations, and the Beck Depression Inventory-II (BDI-II). These were repeated on follow-up, along with a record of intervening clinical events, and psychiatric assessment The Mini International Neuropsychiatric Interview (MINI).

Results: 41 patients on HD and taking antidepressant medications were studied. 10 agents were being taken - the most common being citalopram (39%). The primary prescribers were as follows; GP 68%, Nephrologist 22% and Psychiatrics 10%. 30 patients had a BDI-II score ≥ 16 indicating high depressive symptoms. Of these, 22 remained with high depressive symptoms at follow-up whilst 8 improved (BDI-II < 16 at follow up). Those who improved had lower BDI-II scores (23 ± 5 v 32 ± 8 : $p = 0.007$) at baseline, lower dialysis vintage (2.4 ± 1.5 v 5.6 ± 3.7 years: $p=0.041$), and fewer were anuric (13 v 55%: $p = 0.04$). Age, gender, ethnicity, marital status, comorbidity, haematological and biochemical profile and clinical events during follow up did not differ. Of the 11 with BDI-II < 16 at baseline, 5 had increased their BDI-II score ≥ 16 at follow up. These tended to be younger, to have higher dialysis vintage and higher baseline BDI-II. No differences in comorbid load were apparent. However baseline serum albumin tended to be lower in those who deteriorated (32.6 ± 5.1 v 38.8 ± 1.6 : $p = 0.051$) and more patients in this group experienced clinical events during follow-up (80% v 17%: $p = 0.036$). Although 27 of 41 patients (66%) either deteriorated or failed to improve during follow-up, only 11 changes in antidepressant prescription (27%) were made during that time. Diagnostic evaluation (MINI) at follow up showed that 15 patients (37%) were suffering current or recurrent major depressive episode (MDE), 20 (48%) had evidence of past MDE, and 6 (15%) displayed no evidence past or present of MDE. All 15 patients with current or recurrent MDE at follow-up were among the 27 who's BDI-II score deteriorated or did not improve (56%). A change of prescription during follow up occurred in only 4 patients (27%) with current or recurrent MDE.

Conclusions: Two thirds of HD patients who were taking antidepressants had persistently high or deteriorating depressive symptom scores after around 12 months follow-up. A high proportion of these (56%) had clinical depression. Only a minority had any amendment of their antidepressant prescription during follow-up. Antidepressant medication in HD patients has limited efficacy perhaps related to ineffective prescribing and monitoring.