

Retrospective Chart Review of Antidepressant Use in Patients with Carcinoid Tumors

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Background: Patients with carcinoid/neuroendocrine tumors (NET) have higher than expected rates of depression and may require treatment with antidepressants. However serotonergic antidepressants (SA) can theoretically worsen carcinoid syndrome (CS). Some have advised against using SAs in carcinoid/NET patients. Data on antidepressant safety in patients with and without CS (CS+ and CS-, respectively) are limited.

Methods: Retrospective chart review of patients with carcinoid tumors at Memorial Sloan Kettering Cancer Center treated with antidepressants from January 1, 2008 through April 1, 2015. Outcome measures included duration of use, reason for starting and stopping antidepressant, dosage range, and whether any instances of serotonin syndrome or carcinoid crisis were documented.

Results: N=92 (16 CS+ and 76 CS-) and 127 antidepressant prescriptions were identified comprised of various categories except monoamine oxidase inhibitors (MAOIs). Median duration of antidepressant treatment was not significantly different between CS+ and CS- groups (11.5 months vs. 14.3 months, $p=.641$). No instances of serotonin syndrome or carcinoid crisis were recorded. Of 76 CS- patients, none developed carcinoid syndrome during the study period. The majority of patients did not discontinue antidepressants during the study period. Among CS+ patients who discontinued antidepressants, carcinoid syndrome was never the reported reason for stopping.

Conclusion: This is the largest study of antidepressant safety in carcinoid/NET. Our findings do not support the conclusion of previous authors that antidepressants should be avoided in carcinoid/NET. Several classes of antidepressants appear safe in patients both with and without carcinoid syndrome. Prospective studies are needed to monitor side effects and confirm safety. Future research should also specifically examine the safety profile of non-SAs versus SAs as well as efficacy of antidepressants in this population.