

Antidepressant Use in Patients with Carcinoid Tumors: Results of A Systematic Review

Elie Isenberg-Grzeda^{1,2}; Meredith MacGregor³; Konstantina Matsoukas³;
Diane Reidy-Lagunes³; Yesne Alici³

¹University of Toronto; ²Sunnybrook Health Sciences Centre; ³Memorial Sloan Kettering Cancer Center

Background: Whether or not antidepressants can be safely prescribed to patients with carcinoid/neuroendocrine tumor (NET) is a controversial topic. Some have argued that antidepressant use precipitates carcinoid syndrome and should be avoided in patients with carcinoid/NET. Others have reported long-term antidepressant use with no adverse outcomes. To our knowledge, no systematic reviews of antidepressant use in carcinoid/NET exist. We aim to address this gap.

Methods: We searched five databases: CENTRAL (Wiley Cochrane Library), CINAHL (EBSCO), EMBASE, PsycINFO (OVID), and PubMed. The search strategy was developed using EMBASE's Emtree controlled vocabulary which includes an extensive list of drug terms as narrower headings of the concept "antidepressant agent". The strategy consisted of synonyms for "antidepressive agents" OR synonyms for "depression", then limited to the concept "carcinoid". Identified articles were independently reviewed. The project was developed according to PRISMA guidelines. Outcome measures included demographics, antidepressant name, dose, duration, and frequency, as well as frequency of adverse outcomes related to the antidepressants.

Results: The initial search identified 679 articles for possible inclusion. After screening by independent reviewers, 16 articles met inclusion criteria. Three cases reported on adverse outcomes while 9 cases reported no adverse outcomes. At least 25 additional cases were reported to be taking antidepressants though details were not provided.

Conclusion: There is insufficient evidence to recommend completely avoiding the use of antidepressants in patients with carcinoid/NET as previous authors have recommended. Given the uncertainty and overall dearth of literature in this area, we expect that our findings will help guide clinicians in better understanding the issues related to safety and tolerability when considering antidepressant use for patients with carcinoid tumors. We hope that our findings will also help guide future research in this understudied area.