Phase II Trial of Mirtazapine for Cancer-Related Cachexia and Anorexia

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Abstract:
The authors performed an open-label single-institution phase II trial of Mirtazapine (15-30 mg po qdaily), a tetracyclic antidepressant that may lead to weight gain, for 8 weeks in non-depressed patients with cancer-related cachexia/anorexia (CRCA). The primary end point was the proportion of patients who gained >1 kg at week 4. Secondary end points were quality of life and appetite. From June 2006 to July 2007, 17 of 58 eligible patients were enrolled. On intention to treat analysis at week 4, 4 of 17 patients (24%) gained 1 kg or more. 1 patient maintained weight (gain of 400g) and 2 patients lost weight (800g and 1.2kg); 24% and 6% improved appetite and health-related quality of life, respectively. Mirtazapine is a promising agent for the treatment of CRCA.

Strengths:
Used validated screening tool to exclude depression as a cofounder in CRCA;
Looked at important quality of life factors in anorexia/cachexia as secondary outcomes;
Intention-to-treat analysis.

Weaknesses:
Small open label single centre trial with strict inclusion criteria (possible selection bias);
High attrition rate;
Patients were selected from an ambulatory palliative care clinic.

Relevance to Palliative Care:
Anorexia and cachexia is extremely common in cancer, especially as the disease progresses. It can be a significant source of distress for both patients and their families and is associated with decreased quality of life.

This phase II trial demonstrates some promise in the use of Mirtazapine to improve quality of life in cancer patients suffering from CRCA. However, further research with larger sample sizes and RCTs with other commonly used medications for anorexia/cachexia will be required to determine the full effect of this medication on weight, appetite and quality of life in patients suffering from this syndrome.