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Usefulness of nabilone as an antiemetic in persistent vomiting due to refractory gastrointestinal disorders

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Dear Editor,

Nabilone, a synthetic analogue of delta-9-tetrahydrocannabinol (1), is an agonist of cannabinoid receptors (CB-1 and CB-2) approved to treat chemotherapy-induced vomiting refractory to antiemetics. Its use in patients with refractory vomiting due to gastrointestinal dysmotility (GID) has not been reported (2,3).

This study aimed to assess nabilone usefulness and side-effects in patients with refractory vomiting due to GID. Patients prescribed nabilone at St. Mark's Intestinal Rehabilitation Unit (January 2017 to September 2022) due to GID vomiting were retrospectively reviewed. Descriptive analysis was performed and the variables measured included age, sex, comorbidities, antiemetics/prokinetics, enteral or parenteral nutrition, nabilone prescription, subjective symptom improvement and side-effects.

Seven patients received nabilone, 5/7 (72 %) were females and the median age was 25 years (23-37). Three out of seven (43 %) cases had gastroparesis (1/3 related to postural

orthostatic tachycardia syndrome [POTS]; 1/3 related to Ehlers-Danlos' syndrome, POTS, Crohn's disease and adrenal insufficiency (AI); and 1/3 related to sinus node ablation and AI). Two out of seven (29 %) had gastroparesis and intestinal dysmotility (1/2 related to POTS and 1/2 related to EDS and other connective tissue diseases) and 2/7 (29 %) had intestinal dysmotility (1/2 because of polyglucosan body visceral myopathy and 1/2 due to intestinal surgery). All patients had previously received antiemetics or prokinetics (median of 5 drugs; 2-11); 1/7 (14 %) received enteral supplements, 5/7 (72 %) enteral nutrition through enteral tubes and 4/7 (57 %) parenteral nutrition. Five out of seven (72 %) patients received 1 mg of nabilone bd orally, 1/7 (14 %) 2 mg bd through jejunostomy and 1/7 (14 %) started nabilone at 2 mg bd orally, but were switched to 1 mg bd because of side-effects. The median treatment duration was nine days (7-35). Regarding the efficacy of nabilone, 3/7 (43 %) had symptomatic improvement. In terms of side-effects, 4/7 (57 %) patients reported some incident while under treatment such as headache, light-headedness, drowsiness, dizziness or hallucinations.

Discussion

Patients with refractory GID vomiting despite multiple anti-sickness strategies are difficult to treat. Nabilone improved symptoms in almost half of the patients, although adverse effects appeared in more than 50 %. Doses higher than 1 mg bd po did not show benefit. Although our study has important limitations, nabilone might be a temporary measure in these patients and side-effects should be taken into consideration.

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