

Nabilone appears to improve appetite in lung cancer patients, according to study

As reported in
Supportive Care in Cancer
2018; 26:3029–3038)

Lung cancer causes lack of appetite (anorexia) in about half of patients, and this effect can increase to 80% in patients with advanced disease. Cannabinoid drugs such as nabilone have shown promise in appetite stimulation, but until recently, clinical trials in lung cancer patients were not available. A new clinical study published in *Supportive Care in Cancer* indicates that nabilone shows promise in the treatment of anorexia associated with lung cancer (Turcot JG, del Rocio Guillen Nunez M, Flores-Estrada D, et al: The effect of nabilone on appetite, nutritional status, and quality of life in lung cancer patients: A randomized, double-blind clinical trial. *Supp Care Cancer* 2018; 26:3029–3038).

“Lung cancer patients suffer from involuntary weight loss throughout their disease, and this is one of the most important determinants of survival and quality of life,” Dr. Oscar Arrieta, lead author and head of the Thoracic Oncology Unit at the National Cancer Institute in Mexico told the *CANADIAN JOURNAL OF MEDICAL CANNABIS*. “The involuntary weight loss is in part motivated by cancer-associated anorexia. Eventually, the weight loss can promote a cachectic state, which in turn produces several impairments including a higher degree of chemotherapy-related toxicity.”

In spite of its impact on the overall health and quality of life of these patients, a gold standard for treating cancer-associated anorexia has not been established. Some medications such as mege-

“The involuntary weight loss is in part motivated by cancer-associated anorexia. Eventually, the weight loss can promote a cachectic state, which in turn produces several impairments including a higher degree of chemotherapy-related toxicity.”

strol are associated with serious side effects. Cannabinoids have been suggested as an option for improving appetite in patients with anorexia.

In this study, Dr. Arrieta and his team conducted the first randomized, double blind, placebo-controlled pilot trial evaluating the effect of the cannabinoid nabilone versus placebo in lung cancer patients diagnosed with anorexia.

Study methods

Sixty-five patients from the outpatient clinic at the National Institute of Cancer (INCan) in Mexico City were assessed for eligibility and 47 were randomized to receive nabilone (0.5 mg for two weeks followed by 1.0 mg for six weeks) or placebo. Participants were evaluated at time of inclusion, and four and eight weeks after randomization.

The presence of anorexia was identified using the Anorexia Cachexia Scale (ACS)-12 section of the Functional Assessment of Anorexia Cachexia Therapy (FAACT) tool. Patient perception of loss of appetite was evaluated using a unidirectional Visual

Analog Scale (VAS).

Biochemical data evaluation included analysis of serum albumin level and complete blood count. NLR was defined as absolute neutrophil count divided by absolute lymphocyte count, whereas PLR was described as absolute platelet count divided by absolute lymphocyte count. $NLR \geq 5$ and $PLR \geq 150$ were considered to indicate systemic inflammatory response.

Results

At the four- and eight-week evaluations, there were no statistically significant differences between the control and experimental groups regarding appetite and anthropometric and biochemical variables. At eight weeks, the appetite increases for each group were close in magnitude and the final change in ACS score was similar in both arms of the trial (ACS change 8 vs. 8.4).

However, there was a statistically significant improvement in VAS for the experimental group ($p=0.006$). Regarding biochemical parameters, the experimental group experienced a statistically significant decrease in PLR at eight weeks compared to baseline.

After eight weeks of treatment, nabilone patients increased their caloric intake (342 kcal) and their intake of carbohydrates was higher (64 g) compared to those receiving placebo.

Discussion

“[The increased] consumption of carbohydrates might not be solely caused by the nabilone,” said Dr. Arrieta. “Carbohydrates are the best accepted by patients, while protein source foods are frequently the most rejected. Reasons behind this preference include differences in taste. Dysgeusia is commonly present in lung cancer patients. Moreover, fat food sources are less tolerated, particularly in patients undergoing treatment. Altogether, this leaves carbohydrates as the main food source, and this is driven by patient satisfaction.”



Dr. Oscar
Arrieta

Although patients with cancer anorexia-cachexia syndrome (CACS) frequently report reduced appetite and food intake, there is an important proportion of patients with anorexia who have not yet fully developed CACS.

“Our focus in terms of nutrition is to identify patients with anorexia, even before the development of cachexia, and then promote adequate food consumption,” said Dr. Arrieta. “Often, we find that nutritional guidance [diet plan, food supplements] is not enough to reverse or halt these alterations. Fortunately, appetite can be pharmacologically increased through the use of drugs such as nabilone, which along with diet can optimize the patient’s nutritional status and thereby improve tolerance to treatment.”

The researchers noted that “An important conclusion supported by this study is the unequivocal need to provide cancer patients with timely and thorough nutritional evaluations and to follow their status throughout disease course. The future of the . . . management of cancer patients must therefore not overlook the important role of nutrition in the quality of life and outcomes of cancer patients.”

—Sherene Chen-See, *CJMC Correspondent*