Case Report

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Hepatocellular Carcinoma and Cannabis - Case Report

Dottor Tommaso Di Ieso

Pain Center, Clinica Vesuvio, Napoli, ITA

*Corresponding author: Dottor Tommaso Di Ieso, Pain Center, Clinica Vesuvio, Napoli, ITA

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Abstract

Introduction: *Hepatocellular carcinoma (HCC) has seen significant advances in treatment over the past twenty years, resulting in a reduction in mortality. However, timely intervention is not always possible, and pain becomes difficult to manage with opioids alone.*

Clinical Case: *An 84-year-old patient with HCC was discovered by chance and showed a poor response to immunotherapy. Pain management was managed with opioids. The main complaints were pain, hand tremors, nausea, and loss of appetite. It was decided to initiate treatment with cannabis oil (Bedrocan®). As the cannabis dosage increased, the transdermal fentanyl dosage was reduced. The patient resumed eating, and the hand tremors improved.*

Discussion: *Cannabis allowed a four-fold reduction in the transdermal fentanyl dosage, managing the pain to the point of almost complete elimination, and allowed a resumption of eating and a reduction in the hand tremors. Only in the forty-eight hours prior to death was mania and agitation observed, requiring the use of oral morphine.*

Conclusions: *The use of cannabis can allow for good management of both the side effects of opioid therapy and good management of cancer pain by improving patient compliance and mood.*

Keywords: Epatocarcinoma; Cannabis; Dolore.

Introduction

Hepatocellular carcinoma (HCC) is a cancer that affects the liver in either primary or secondary forms. Treatment has made great strides over the last twenty years, resulting in cures in approximately one in five cases.

Current therapies include:

- Liver resection1,2,3
- Liver transplant1,2,3
- Ablation1,2,3
- Chemoembolization1,2,3
- Systemic therapies (immunotherapies) with drugs such as sorafenib, lenvatinib, etc. [1-3]. However, there are still limitations to treatment, especially in primary hepatocellular carcinoma. This latter form, in fact, is often diagnosed when the tumor begins to show secondary symptoms such as pain.

In these cases, intervention can be difficult as the tumor may have already altered the anatomy of the liver. Therefore, systemic therapy is attempted to reduce the area requiring surgical resection. Unfortunately, not all patients respond to cytoreductive therapy and, in these cases, appropriate pain therapy must be provided.

The Clinical Case

In September 2020, Mr. R.M. underwent a series of tests for an inguinal hernioplasty. During routine tests, abnormal liver function tests were observed, prompting him to undergo specific investigations, which revealed hepatocellular carcinoma involving multiple liver segments with multiple locations.

A secondary form was ruled out, and cytoreductive therapy and immunotherapy were initiated.

After approximately three months, the treatment was completely unsuccessful, and the patient was placed on home care with pain management.

From January 2021 to the end of February 2021, the pain was managed with a progressive increase in transdermal fentanyl (Durogesic®) from 25 mcg/h to 100 mcg/h and Ketorolac drops (Toradol®) as needed. At the beginning of March 2021, Mr. R.M., 84 years old, contacted me to try new therapeutic approaches to his constant pain.

His medical history revealed a modest lifestyle, a retired man with a passion for modeling. He suffered from hypertension, hyperuricemia, and atrial fibrillation, treated with bisoprolol (Cardicor®), allopurinol (Zyloric®), and rivaroxaban (Xarelto®), respectively.

As the disease progressed, he began diuretic therapy and albumin administration, as well as periodic infusions of glutathione (TAD®) and ademetionine (SAMYR®). The most significant symptoms reported by both the patient and his family were:
- pain
- nausea
- loss of appetite
- hand tremors

Abdominal examination revealed a distended abdomen with a nearly flat umbilical scar. Venous collateral circulation was well-defined. Pain was palpable with superficial and deep palpation. Percussion revealed a diffuse tympanic sound. Ultrasound revealed a moderate amount of ascites.

Pain management therapy was then initiated, adding cannabis oil (BEDROCAN®) to the treatment, starting with one drop of cannabis in the morning and then increasing the dosage to one drop every eight hours over three weeks. The dosage was subsequently increased to a total of three drops every eight hours.

As the cannabis dosage increased, drowsiness was observed, so the transdermal fentanyl dosage was gradually reduced to 75 mcg/h after the first three weeks of therapy and then to 25 mcg/h after a month and a half of cannabis therapy.

The pain symptoms reportedly continued to diminish. Mr. R.M. had resumed eating regularly and, after about a month of cannabis therapy, had resumed

making some models, having noticed a reduction in hand tremors.

On May 1, 2021, Mr. R.M. began to exhibit signs of restlessness and intolerance, with constant complaints that could not be interpreted as pain. On May 3, 2021, Mr. R.M. died, although he maintained contact with his family until his death.

Discussion

The use of cannabis oil in cancer patients suffering from nausea and vomiting is now widely approved [4]. While the use of cannabis for the management of cancer pain is still debated [5,6].

Similarly, it is known that the use of cannabis allows for a reduction in opioid dosage in the management of cancer pain [5,6].

In this specific case, the use of cannabis reduced pain to the point of reducing the opioid dosage fourfold compared to the starting dose.

Cannabis also reduced hand tremors, allowing our patient to resume manual activity.

Finally, we observed that our patient, in the last forty-eight hours of his life, had experienced a form of uncontrollable agitation and mania. He reported no pain, but rather a sense of intolerance to anything, culminating in a form of agitation that responded to the administration of sublingual morphine. One explanation could be that Cannabis is unable to control pain, but acts by making the patient unable to associate the symptom with pain, probably because, as the dosage of Cannabis increases up to the therapeutic dose, dopamine transmission is also modulated [7-11].

Conclusions

The administration of cannabis for the management of cancer pain, in addition to opioid medications, can reduce opioid dosage, reduce tolerance, and promote better patient compliance.

It also restores appetite and reduces nausea.

Finally, it allows cancer patients to better interact with their families, modulating their mood and maintaining a sense of clarity until the end.

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