

Cannabinoids and Treating Breast Cancer

Published on March 28, 2023 ·

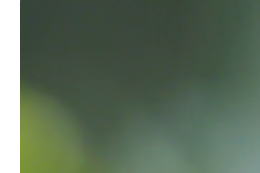


Image by Kitreel via Shutterstock

Breast cancer is a devastating disease that affects millions of women worldwide. Although it can occur at any age, it typically affects middle-aged or older women. Only a small percentage of women are diagnosed with breast cancer before age 45.

Key takeaways:

- A case study of a woman with advanced breast cancer suggests that a combination of standard treatment, plus psychedelics and cannabinoids, may be an effective approach.
- The mechanisms by which these natural therapies affect cancer are not fully understood, but experts theorize that they may work by targeting specific proteins involved in tumor development and growth.
- Cannabinoids also affect hormones that certain cancers use to grow.
- Further clinical trials are needed to confirm the findings of preliminary studies and determine the most effective dosages and treatment regimens.

This form of cancer accounts for [1 in 3 of all new female cancers](#) annually, with almost 45,000 women dying each year of the disease in the United States and [700,000 worldwide](#).

Because of its high incidence and potentially catastrophic consequences, much effort has gone into developing effective therapies for breast cancer. The mainstay of treatment for breast cancer is surgery, typically combined with chemotherapy, radiation therapy, or both.

Although these therapies are often successful, they come with a host of side effects that can be difficult for patients to tolerate. These include fatigue, nausea, vomiting, hair loss, and more. As a result, research is ongoing to find more tolerable and effective treatments for breast cancer.

A recent case study highlights the potential value of cannabinoids and psychedelic therapy as adjuvants, or additions, to standard breast cancer regimens. Continue reading as we explore the promise of plant-based therapies in the fight against this disease.

Findings of the case study

[The case study](#) describes how a 49-year-old woman with advanced breast cancer that had spread successfully used a combination of cannabis oil, psychedelic mushrooms, and chemotherapy to halt the disease.

The woman received a diagnosis of stage 4 breast cancer in August 2018. Soon after, doctors delivered the distressing news that cancer had spread, or metastasized, to her bones, liver, and lymph nodes.

Standard treatments

Doctors prescribed chemotherapy and targeted therapy. Chemotherapy medications target rapidly dividing cells and are effective at killing cancer cells. However, they also kill healthy cells, leading to a host of side effects.

Targeted therapy uses drugs to target specific genes and proteins that help cancer cells survive and grow. Although originally, scientists thought this form of treatment would be less toxic than chemotherapy, it can also cause serious side effects like fatigue, skin rashes, and diarrhea.

Adjunctive treatments

The woman also decided to self-treat with a daily high-dose protocol of cannabis oil. The oil was a rich source of various cannabinoids, including:

- Cannabidiol (CBD).
- Cannabidiolic acid (CBDA).
- [Cannabigerol \(CBG\)](#).
- Cannabigerolic acid (CBGa).
- Cannabichromene (CBC).
- Tetrahydrocannabinol (THC).

Then in November 2018, the patient began four sessions of psychedelic therapy. They involved taking 4 g of Psilocybe cubensis — also known as magic mushrooms — with assisted sensory deprivation and post-treatment sessions with a trained psychotherapist.

Results

Incredibly, imaging studies conducted in January of the following year showed that breast cancer had disappeared, and there was no evidence of disease.

As a result, the patient stopped chemotherapy but continued to take daily doses of cannabis oil alongside 10 to 12 micrograms (mg) microdoses of magic mushrooms. Over the following 2 years, she also attended a further three sessions of high-dose psychedelic therapy.

In September 2019, further scans also showed no evidence of disease. Consequently, the woman reduced the cannabis oil dose by 56% and stopped psychedelic treatments.

However, 9 months later, in June 2020, tests showed that cancer had returned and infiltrated bones. The case study's authors raise the possibility that cancer returned because the woman stopped cannabinoid and psychedelic therapies.

As a result, the patient was re-introduced to the psychedelic regimen and boosted cannabinoid intake. By October 2021, her doctors noted the disease was stabilized, but they provided no details of the severity of the cancer at this point.

How do cannabinoids and psychedelics affect cancer?

The case study's authors couldn't explain the role of these natural therapies in eliminating cancer. Nor do they know if the standard or adjuvant therapies played were responsible for the results.

However, they mention pre-clinical laboratory studies suggesting cannabinoids can work synergistically with certain targeted therapies, such as trastuzumab. They also note that cannabinoids impact the cell-signaling pathways involved in cancer progression.

It seems that compounds in cannabis and psychedelic mushrooms may inhibit a specific protein that helps tumors develop the blood vessels they need for survival and growth.

Another potential anticancer effect of cannabinoids is their [action on hormonal systems](#). These cannabis compounds can suppress gonadal steroids, growth, and thyroid hormones, thereby mirroring the effects of hormone therapy — an adjuvant cancer treatment that lowers hormone levels or blocks their effects. Because certain cancers, including [prostate](#) and breast cancers, reducing or eliminating their access to hormones can help stop tumor progression.

Additionally, cannabinoids appear to activate the hypothalamic-pituitary-adrenal axis. This complex system of neuroendocrine pathways and feedback loops helps the body maintain homeostasis or balance, and cope with stress.

Cannabinoids have also been the focus of research on brain cancer. For example, a 2011 study found that THC and CBD dramatically [inhibit glioma growth](#) in laboratory and animal studies when administered in combination with temozolomide, a chemotherapy agent. Glioma is an aggressive type of brain cancer.

Building on this research, scientists conducted a [Phase I trial](#) with 27 people with glioblastoma, the most common type of brain tumor in adults. The trial tested the safety of Sativex, a 1:1 ratio of THC to CBD delivered as an oral spray and found it was well-tolerated by the trial participants.

Interestingly, although this small-scale study wasn't designed to assess how Sativex affected brain cancer, the researchers noted that 83% of the participants who received Sativex were alive after one year, compared to 44% of those who were given a placebo.

Although no firm conclusions can be drawn from this, it sparked interest in a further Phase II trial. The 3-year trial has been approved, and recruitment of approximately 230 patients has begun across hospitals in the UK.

Cannabinoids and psychedelics have shown potentials as anticancer therapies in pre-clinical and small-scale clinical studies. These natural therapies may help to kill cancer cells and inhibit tumor growth by targeting specific cell-signaling pathways and proteins involved in cancer progression.

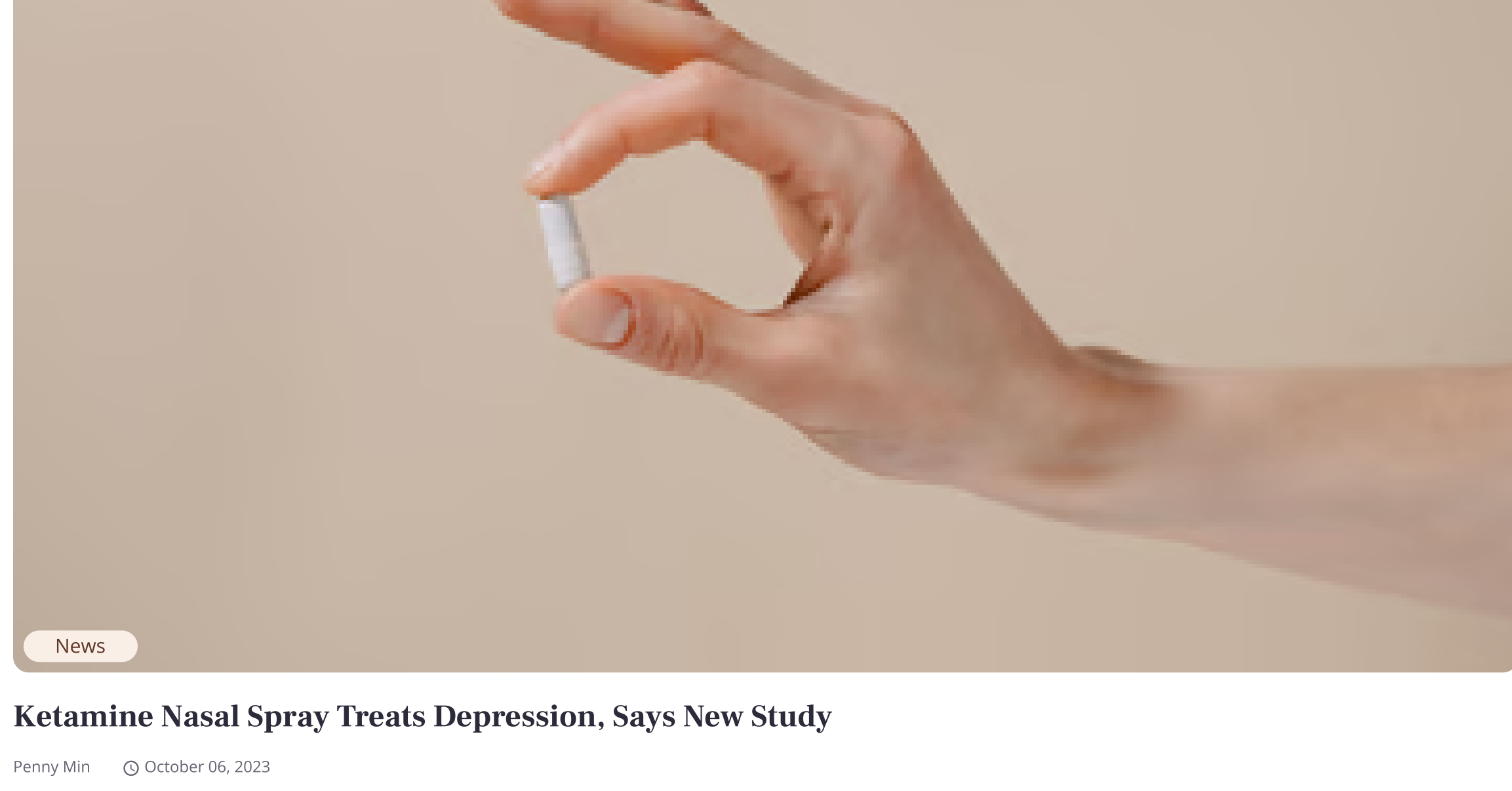
However, large-scale clinical trials with human participants are still needed to determine how valuable these treatments may be in the fight against cancer.

Given the current lack of effective therapies for many types of cancer, this area of research must be given the attention it deserves to improve the prognosis for people affected by this destructive disease.

More from Cancer

- [What Are the Symptoms, Causes, and Treatments for Liver Cancer?](#)
- [Bladder Cancer: 5 Warning Signs You Can't Afford to Ignore](#)
- [Testicular Cancer: Symptoms, Diagnosis, and Treatment](#)
- [Principles and Potential Applications of Therapeutic Cancer Vaccines](#)
- [Can Chemotherapy Cause Herpes?](#)
- [Nine Ways to Reduce Your Risk of Gynecologic Cancer](#)

Latest news



Ketamine Nasal Spray Treats Depression, Says New Study

Penny Min · October 06, 2023

A ketamine-based nasal spray may be superior to conventional medication for adults with treatment-resistant depression, according to recent studies. Per significant clinical research, those who used the spray and other...

[Read more](#) →

- [FDA Is Investigating Fake Ozempic Pens](#)
- [Microdosing Psilocybin for Mental Health Issues Appears Promising](#)
- [High Cholesterol May Increase Dementia Risk, Says New Study](#)
- [COVID-19 Antiviral Drug May Lead to SARS-CoV-2 Mutations](#)

Leave a comment

Your email address will not be published. Required fields are marked *

Comment *

Name *

Email *



I agree to the [Terms & Conditions](#) and [Privacy Policy](#).

Your content does not constitute a medical consultation in any form and is for informational purposes only. See a certified medical professional for medical advice/ diagnosis.

| | |
|--|--|
| WOMEN'S HEALTH <ul style="list-style-type: none">Breast healthVaginal healthSexual healthMenopause | MEN'S HEALTH <ul style="list-style-type: none">Prostate healthSexual health |
| FAMILY HEALTH <ul style="list-style-type: none">Reproductive healthPregnancyChild healthFamily relationsDental and oral healthShow all → | MENTAL HEALTH <ul style="list-style-type: none">Self-care and therapyMeditationAnxiety and depressionEating disorders |
| LONGEVITY <ul style="list-style-type: none">Longevity supplementsBiohackingHealthspan | BEAUTY <ul style="list-style-type: none">Skin careHairNon-surgical proceduresPlastic surgery |
| NUTRITION <ul style="list-style-type: none">Healthy eatingDietsNutrition for conditionsWeight managementVitamins and supplements | FITNESS <ul style="list-style-type: none">Physical healthYogaPilatesRunningInjuries and recovery |
| SLEEP <ul style="list-style-type: none">Sleep disordersSleep hacksSleep science | HEALTH CONDITIONS <ul style="list-style-type: none">DiabetesEndocrine disordersMultiple sclerosisCardiovascular diseasesAlzheimer's and dementiaShow all → |
| HEALTH INSURANCE <ul style="list-style-type: none">Guides | MEDICARE <ul style="list-style-type: none">Coverage |