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UNVEILING THERAPEUTIC EFFICACY OF VIJAYA: A COMPREHENSIVE OVERVIEW

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ABSTRACT

Vijaya- Cannabis Sativa, grouped as ***Divyoushadi*** and ***Upavisha***[1] is a potent drug used in multitude of ailments. It has been used for centuries in traditional medicine for its diverse therapeutic properties. *Vijaya* contains a wide range of bioactive compounds, including cannabinoids, terpenes, and flavonoids, which contribute to its therapeutic effects. It possesses analgesic, anti-inflammatory, anxiolytic, and anticonvulsant properties, making it a potential treatment option for various medical conditions including chronic pain, anxiety disorders, epilepsy, insomnia. However, its use is also associated with potential side effects and risks, particularly related to its psychoactive effects. *Vijaya* comes under Schedule E of D & C act, and proper assessment has to be done while fixing the dosage. This article is intended to explore the usage of *Vijaya*, summarize the current state of knowledge on the pharmacological and clinical applications of *Vijaya.*

KEYWORDS: Vijaya, Cannabis, Cannabinoids, Endocannabinoid System.

INTRODUCTION

Vijaya has been utilized for medicinal purposes for thousands of years, dating back to ancient civilizations in India, China and Egypt. In recent decades, there has been a resurgence of

interest in cannabis as a therapeutic agent, fuelled by changing legal landscapes, increased public awareness, and a growing body of scientific research. *Vijaya* is used in treating a plethora of ailments[2] like *Ruja, Anidra, Twak roga, Aruchi, Agnimandya, Grahani, Atisara, Udararoga, Udvega* etc. This article explores the therapeutic efficacy of Vijaya, examining its active compounds, potential benefits, and the challenges associated with its use in medicine.

Vijaya possess *Tikta Rasa, Ushna Virya, Laghu, Tikshna Guna, Katu Vipaka* therby pacifying *Vata Kapha Dosas*, increasing It exhibits *Karmas* like *Deepana, Pachana, Ruchya, Madakari, Vyavayi, Grahi, Medhya, Rasayana, Yogavahi Guna*[3] and hence used in treating various ailment. It contains many Cannabinoids like CBD (Cannabidiol) THC (Tetrahydrocannabional) etc. CBD acts on the receptors present in the Endocannabinoid system which plays a role in signaling bodily functions like pain, sleep, immune response. CBD acts on receptors CB1, CB2, TRPV of the ECS and helps in management of the ailment.

MATERIALS AND METHODS

Description of Vijaya

Botanical Name: *Cannabis sativa* Linn.

Family: Cannabaceae

Rasa: *Tikta, Katu*

Guna: *Laghu, Tikshna, Vyavayi*

Virya: *Ushna*

Vipaka: *Katu*

Doshagnata: *Vata hara, Kapha hara, Pittakara*

Karma: *Grahi, Pachana, Deepana, Nidrajanaka, Medhya, Yogavahi, Rasayana, Madakrat, Vak vardhan*a

Parts Used: *Patra, Beeja, Patra satva*, Fibers

Matra: 2- 4 Ratti

Chemical Constituents: Cannabinol, Tetrahydro cannabinol, Cannabigerol, Cannabionol

Vijaya contains a variety of active compounds that interact with the body in complex ways. Pharmacology of *Vijaya* can be understood based on active constituents, mechanisms of action, therapeutic effects and potential side effects.

Active Constituents: *Vijaya* is rich with cannabinoids, terpenes, and flavonoids. The most studied compounds include:

1. **Tetrahydrocannabinol (THC)**: The primary psychoactive component of *Vijaya*
2. **Cannabidiol (CBD)**: A non-psychoactive cannabinoid that has gained attention for its therapeutic potential, including anti-inflammatory, anxiolytic, and anticonvulsant effects.
3. **Other Cannabinoids**: Other cannabinoids such as Cannabigerol (CBG), Cannabinol (CBN), Cannabichromene (CBC) also exhibit various pharmacological effects, although they are less studied.
4. **Terpenes**: Terpenes like Myrcene, Limonene, Pinene, Linalool, Caryophyllene exhibit anti-inflammatory, anxiolytic, antimicrobial properties. These are aromatic compounds and contribute to its scent

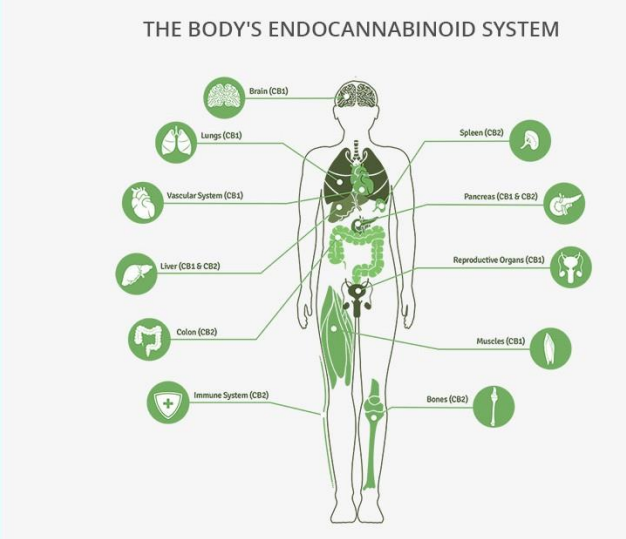
Mechanism of Action

The effects of cannabis are primarily mediated through the endocannabinoid system (ECS), which consists of:

- **Cannabinoid Receptors**:
  - **CB1 Receptors**: Predominantly found in the brain and central nervous system, influencing mood, memory, pain perception, and appetite.
  - **CB2 Receptors**: Primarily located in the immune system and peripheral tissues, playing a role in inflammation and immune response.

- **Endocannabinoid System**[4]

The Endocannabinoid System is a biological system in the body which helps regulate and balance important functions of body. It is active and complex cell signalling network which involves a combination of ***endocannabinoids, enzymes, and receptors***. Of the many Cannabinoids like CBD (Cannabidiol) THC (Tetrahydrocannabinol) CBG etc. ***CBD – Cannabidiol*** is the main component acting as analgesic, anti-inflammatory. CBD acts on the receptors **CB1, CB2, TRPV** present in the ECS which helps in signaling bodily functions like pain, sleep, immune response and helps reduce pain and inflammation.



- **Enzymes**: Responsible for the synthesis and degradation of endocannabinoids, thereby regulating their availability and effects.

Probable Mode of Action: When THC binds to CB1 receptors, it leads to various psychoactive effects, including euphoria, altered perception, and relaxation. CBD on the other hand, has a more complex interaction with the ECS, often modulating the effects of THC and providing therapeutic benefits.

In conditions like arthritis, fibromyalgia, neuromuscular pains, CBD interacts with receptors of endocannabinoid system and modulate pain signalling pathways exhibiting anti-inflammatory effects thereby reducing pain.

In conditions like IBD, IBS, GERD CBD modulates gut motility, improves metabolism, reduces inflammation, reduced oxidative stress thereby reduce the symptoms.

In Anxiety, depression etc. conditions CBD interacts with receptors and affect serotonin signals, which is a neurotransmitter that plays an important role in overall mental health. CBD alters or increases serotonin levels thereby managing the symptoms.

DISCUSSION

The pharmacology of *Vijaya* is complex and multifaceted, involving numerous compounds that interact with the body's endocannabinoid system. While it has demonstrated significant therapeutic potential for a variety of conditions, careful consideration of dosage, formulation, and individual patient factors is essential to maximize benefits and minimize risks.

Despite its therapeutic potential, the use of cannabis in medicine presents several challenges:

- **Legal and Regulatory Issues**

The legal status of cannabis varies significantly across countries and regions, affecting research opportunities and patient access. While some areas have legalized medical cannabis, others continue to impose strict regulations, limiting the ability to conduct comprehensive studies.

- **Variability in Products**

The cannabis market is characterized by significant variability in product quality, potency, and composition. Patients may struggle to find reliable and standardized products, which can impact treatment outcomes. This variability highlights the need for regulations and quality control measures in the cannabis industry.

- **Side Effects and Risks**

While many patients benefit from cannabis, it can also cause side effects, including dizziness, fatigue, and impaired cognitive function. THC, in particular, may exacerbate anxiety or lead to dependence in some individuals. It is crucial for healthcare providers to consider these risks when recommending cannabis as a treatment option.

- **Need for More Research**

While the body of evidence supporting the therapeutic efficacy of cannabis is growing, there is still a need for more rigorous clinical trials. Many studies are limited by small sample sizes, lack of control groups, and short durations. More extensive research is necessary to establish standardized dosages, optimal formulations, and long-term effects of cannabis use.

CONCLUSION

Vijaya holds a unique place in Ayurveda, recognized for its diverse therapeutic benefits and applications. While traditional uses have laid the groundwork, ongoing research continues to explore its full potential. As with any medicinal herb, a balanced approach that considers individual needs, quality, and proper usage is essential for harnessing its benefits. Integrating the ancient wisdom of Ayurveda with modern scientific findings can pave the way for a deeper understanding of cannabis as a therapeutic agent. As the stigma surrounding cannabis diminishes and research continues to expand, it is likely that we will see more integrated approaches to utilizing cannabis in medicine. However, challenges such as legal restrictions, product variability, and the need for more research must be addressed to fully realize its

potential and elucidate the therapeutic potential of *Vijaya* and to establish its safety and efficacy as a therapeutic agent.

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