



An Overview Of Herbal Analgesic Cream

Kumar Sagar^{1*}, Painuly Neelam²

¹Student, B. Pharm., Dev Bhoomi Institute of Pharmacy and Research, Dehradun

²Associate Professor, School of Pharmacy and Research, DBUU, Dehradun

Abstract:

In response to the increasing demand for natural and holistic approach, pain relief, herbal analgesic creams have emerged as a promising alternative. This comprehensive abstract explores the intricate landscape of these creams. Delving into their formulation, mechanism of action, potential benefits, challenges, and the need for further research in terms of formulations. The formulation of herbal analgesic creams involves a rich blend of plant-derived ingredients, drawing from traditional healing knowledge. The study systematically examines these botanical compounds, shedding light on their historical significance and the synergistic interactions that contribute to the creams analgesic properties. Mechanistically, the abstract unravels the ways in which herbal analgesic creams exert their effect. From analgesic actions, the study synthesizes finding from clinical trials and experimental research to provide a nuanced understanding of their pharmacological impact. While emphasizing a holistic approach to pain management, the abstract discusses the potential benefits of reduced reliance on synthetic chemicals. However, also highlights challenges, including variability in responses and the imperative for further research to establish standardized formulation, efficacy, and safety. The abstract concludes by underlining the growing interest in herbal remedies for pain management and the need for evidence-based insights. It advocates for a balanced perspective, recognizing the potential of herbal analgesic creams while acknowledging the necessity for ongoing research to guide both practitioners and individuals seeking natural alternative for pain relief.

Key words: Herbal Analgesic, Pain Relief, Ayurveda, Plant-Based Medicine, Natural Remedies.

INTRODUCTION

Analgesic is a substance or medication that is used to relieve pain with causing a loss of consciousness. Analgesic work by blocking pain signal or by altering the perception of pain in the brain. Analgesic play a pivotal role in providing relief from pain associated with various condition, ranging from mild discomfort to more severe and chronic pain. They can be classified into different types, such as non-opioid analgesic and opioid analgesic [1]

Pain: Pain is a complex sensory and emotional experience typically associated with tissue damage or the perception of potential harm. It serves as a vital protective mechanism, altering the body to potential threat and promoting actions to avoid further injury. While acute pain is often a normal response to injury or illness, chronic pain persists beyond the expected healing time, lasting for an extended period and sometime become a condition in itself. The perception of pain involves intricate interactions between the nervous system and various physiological and psychological factors.

Pain can be classified into two types

- 1. Acute Pain:** Acute pain serves as a vital warning mechanism for the body, signaling present tissue damage or the presence of a disease. This type of pain is often characterized by its rapid onset, sharp intensity, and may be followed by aching sensation. Acute pain is typically short-term and is associated with easily identifiable causes, such as an injury, surgery, or specific medical condition.
- 2. Chronic pain:** Chronic pain indeed extends beyond the expected duration for healing and often persists for an extended period. Unlike acute pain, chronic pain can be constant or intermittent, presenting challenges in treatment, additionally, categorizing pain based on its source and the involved neurons, such as cutaneous, somatic, visceral, and neuropathic pain, helps in understanding the diverse nature of persistent pain and tailoring appropriate approaches for management [2]

Cream: A cream is a semisolid emulsion that typically combines water and oil to deliver a smooth and easily spreadable texture. In the context of pain relief, analgesic creams are topical products designed to be applied to the skin.

Key Points:

- **Topical Application:** Creams are applied directly to the skin, allowing localized delivery of active ingredients to the affected area.
- **Analgesic Properties:** In the case of analgesic creams, the goal is to provide pain relief by targeting pain receptors on the skin [3]

Allopath: Allopath analgesic cream are topical medications derived from conventional western medicine, designed to alleviate localized pain. Typically containing active ingredients such as non-steroidal anti-inflammatory drug, menthol, or local anesthetics like lidocaine, these creams are applied directly to the skin over the painful area. The goal is to provide targeted relief from conditions such as muscle or joint pain. Allopathic analgesic creams offer a localized alternative to systemic medications, and their use is guided by healthcare professionals to ensure proper application and to minimize potential side effects or interactions.

ADR: Redness , Burning , Swelling , Stinging [4]

Ayurvedic: Ayurvedic analgesic creams belong to the realm of traditional ayurvedic medicine, an ancient system of healing originating from India. These creams are formulated with natural ingredients, often derived from herbs and botanicals, known for their pain-relieving properties. Ayurvedic analgesic creams aim to provide localized relief from discomfort, such as muscle or joint pain. [5]

Table: No.1 showing Comparison between Allopathic and Ayurvedic Analgesic Creams.
[6]

Allopathic Analgesic Creams	Ayurvedic Analgesic Cream
Typically contain synthetic compounds or pharmaceutical ingredients like NSAIDs.	Formulated with natural ingredients derived from herbs and botanicals based on ayurvedic principal.
Mechanism involves reducing pain signals, or providing a numbing effect.	Aims to bolan the body's energies (doshas) and may have soothing properties.
Rooted in western medicine with an emphasis on evidence-based practices.	Rooted in ayurveda, an ancient Indian system, focusing on holistic well-being.
Part of a broader approach to managing symptoms through pharmaceutical intervention.	Integrated into a holistic lifestyle, considering diet, and mental well-being.
Generally designed for a broad range of users with standardized formulation.	May be tailored to individual constitutions and specific imbalances.

Herbal Ingredient used as Analgesic Cream:

1. Turmeric:

The compound in turmeric responsible for its analgesic properties is curcumin. Curcumin has pain – relieving properties, making it a common ingredient in herbal analgesic creams.

Synonyms: Curcuma longa , Curcuma , Haldi

Source: Curcuma longa

Family: Zingiberaceae

Chemical constituents: Curcumin , curcuminoid , germacrone

Use: Pain relief , Antioxidant , depression , anticancer , diabetes [7]



Figure.1: Turmeric Powder

2. Arnica:

Arnica contains several active compounds but one of the key chemicals used in herbal analgesic creams is helenalin. Helenalin is a sesquiterpene lacton with pain – relieving properties, contributing to arnica’s potential pain-relieving effects.

Synonyms: Arnica Montana

Source: Arnica comes from the perennial Arnica montana

Family: Asteraceae

Use: Joint pain , Swelling , Muscle aches , inflammation [8]



Figure.2: Arnica plant

3. Ginger:

The compound in ginger that is often used in herbal analgesic creams is gingerol. Gingerol is a bioactive compound found in fresh ginger root and is known for analgesic properties. When incorporated into creams or balms, gingerol contributes to the soothing and pain-relieving effects of the product.

Synonyms: Zingibere , Gingerin , Rhizoma zingiberis , Adrak

Source: dried rhizomes of the zingiber

Family: Zingiberaceae

Use: Pain relieving , anti-inflammatory , topical application nausea relief.[9]



Figure 3: Ginger root

4. Lemon balm:

The compound in lemon balm that is often used in herbal analgesic creams is rosmarinic acid. Rosmarinic acid is a polyphenolic compound found in various plants, including lemon balm. It is known for pain-relieving and anti-inflammatory properties, making it a valuable ingredient in topical formulation aimed at providing relief from pain and inflammation.

Synonym: Neembu balm

Source: *Melissa officinalis*

Family: Lamiaceae (mint)

Use: Ease pain, Reduce stress, promote sleep, reduce anxiety.[10]



Figure.4: Lemon Balm

5. Liquorice:

One of the key compounds in liquorice (*Glycyrrhiza glabra*) commonly used in herbal analgesic cream is glycyrrhizin. It is derived from the roots of the licorice plant and is known for its potential in soothing and calming effects. In analgesic creams, glycyrrhizin contributes to the overall properties aimed at reducing pain and inflammation when applied topically.

Synonyms: Mulaithi and Jothimadh

Source: obtained from a perennial plant

Family: Fabaceae

Use: Pain-relieving and Anti-inflammatory properties, Cough, viral infection.[11]



Figure.5: Liquorice

Allopathic Compare Ayurvedic Analgesic cream :

1. Active Ingredients:

Allopathic: Typically contains synthetic compounds like NSAIDs (Nonsteroidal Anti-Inflammatory Drugs) or topical anesthetics.

Ayurvedic: Comprises natural ingredients such as herbal extracts, essential oils, and ayurvedic herbs known for their analgesic properties.

2. Mode of Action:

Allopathic: Targets specific biochemical pathways to reduce inflammation or bloc pain signals.

Ayurvedic: Aims to restore balance in the body's natural energies (doshas) and alleviate pain through holistic means.

3. Speed of Relief:

Allopathic: Often provides relatively quick relief due to the rapid action of synthetic compounds.

Ayurvedic: May take a bit longer to show effects as it works on addressing the root cause and promoting overall well-being.

4. Side Effects:

Allopathic: Potential side effects include skin irritation, allergic reactions, or systemic effects, especially with prolonged use.

Ayurvedic: Generally considered safer with fewer side effects, through individual sensitivity can vary.

5. Long-Term Use:

Allopathic: Prolonged use of allopathic creams might raise concerns about side effects and dependency.

Ayurvedic: Ayurvedic creams are often considered suitable for long-term use due to their natural composition.

6. Individualized Treatment:

Allopathic: Allopathic creams offer a more standardized approach to pain relief.

Ayurvedic: Ayurvedic cream may be tailored to an individual constitution and specific pain characteristics.

7. Availability:

Allopathic: Allopathic creams are widely available in conventional pharmacies.

Ayurvedic: Ayurvedic creams may be found in specialty stores or ayurvedic centers.

8. Price Range:

Allopathic: Allopathic creams may vary in price but can often be more affordable.

Ayurvedic: Ayurvedic creams might be perceived as more expensive due to the cost of natural ingredients.

9. Formulation Stability:

Allopathic: Allopathic creams typically have a longer shelf life and stable formulations.

Ayurvedic: Ayurvedic creams may have a shorter shelf life due to the use of natural ingredients.

10. Holistic Approach:

Allopathic: Allopathic creams often focus on symptomatic relief.

Ayurvedic: Ayurvedic creams may promote a holistic approach, considering overall health and lifestyle factors.[12]

CONCLUSION :

Herbal analgesic creams offer a distinct approach to pain relief compared to their allopathic counterparts. Their formulation typically incorporates natural ingredients, such as herbal extracts and essential oils, aiming for a holistic approach to alleviate pain. While herbal creams may take slightly longer to show effects and have a potentially shorter shelf life due to natural components, they are generally considered safer with fewer side effects. The emphasis on individualized treatment, cultural acceptance, and the potential for addressing the root cause of pain contribute to the appeal of herbal analgesic creams for those seeking alternative and holistic pain management options. However, users should be mindful of specific storage conditions and variations in quality control practices across different brands.

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