



Development and Efficacy Testing of a Herbal Analgesic Balm

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ABSTRACT :

Ultramodern life is stressful, and pressure of headaches are one result of that stress. Cosmetics have great demand since ancient time. Now a days, a focus has been shifted more towards deduced ornamental products. Not only ornamental products, but also to the skin products. 1 Among all dermal medicine delivery products, pain attar expression are rather used so as to get the hastily original effect. Menthol is a naturally being 2 terpene alcohol of factory origin, which has been used of dermatology is ubiquitous, where it's constantly part of topical anti-pruritic, analgesic and cooling property. Despite its wide use, the medium of action of menthol to evoke a cool sensation at a low temperature was illustrated upon with the discovery of the TRPM 8 receptor. Although nearly 5 times have passed since 3 also, multitudinous dermatologists are still ignorant of menthols bolstering target. Pain redolences employ a counterirritant medium to palliate discomfort. Rather than directly addressing the pain source, these semi-solid topical phrasings induce a mild skin vexation, effectively diverting attention from deeper pain sensations. generally containing medicinal ingredients, pain redolences are designed for external operation and specifically formulated to relieve mild to moderate pain. This herbal balm, formulated with organic oils, beeswax, and salutary gravies, is designed for topical pain and stiffness relief

Key words- herbal balm dermatology is ubiquitous eugenol (clove), camphor, cast oil, menthol oil, rose oil, bees wax

INTRODUCTION: The pain attar utilizes a counterirritant effect. rather of directly targeting the source of pain, it works by creating a mild vexation on the skin where it's applied. This superficial vexation helps to distract from or reduce the feeling of deeper pain. Essentially, a attar is a semi-solid substance, generally containing medicinal constituents, that's

designed for external use on the body. Pain redolences are specifically formulated to palliate mild to moderate pain.(1) A common illustration of such a product is a pain attar , intended for operation to ease discomfort ranging from mild to moderate. Pressure headaches are a wide issue, affecting a significant portion of the population, with frequence rates reaching up to 78.(2)

WHAT IS PAIN: It is an unpleasant sensation that is often caused by strong or harmful bumps, such as burning toes, taking schnapps with cuts, and increasing the funny bone. The person will drive the person to withdraw from the situation of damage and secure some of the damage while repairing and identifying future comparison encounters.[7]

TYPE OF PAIN (12)

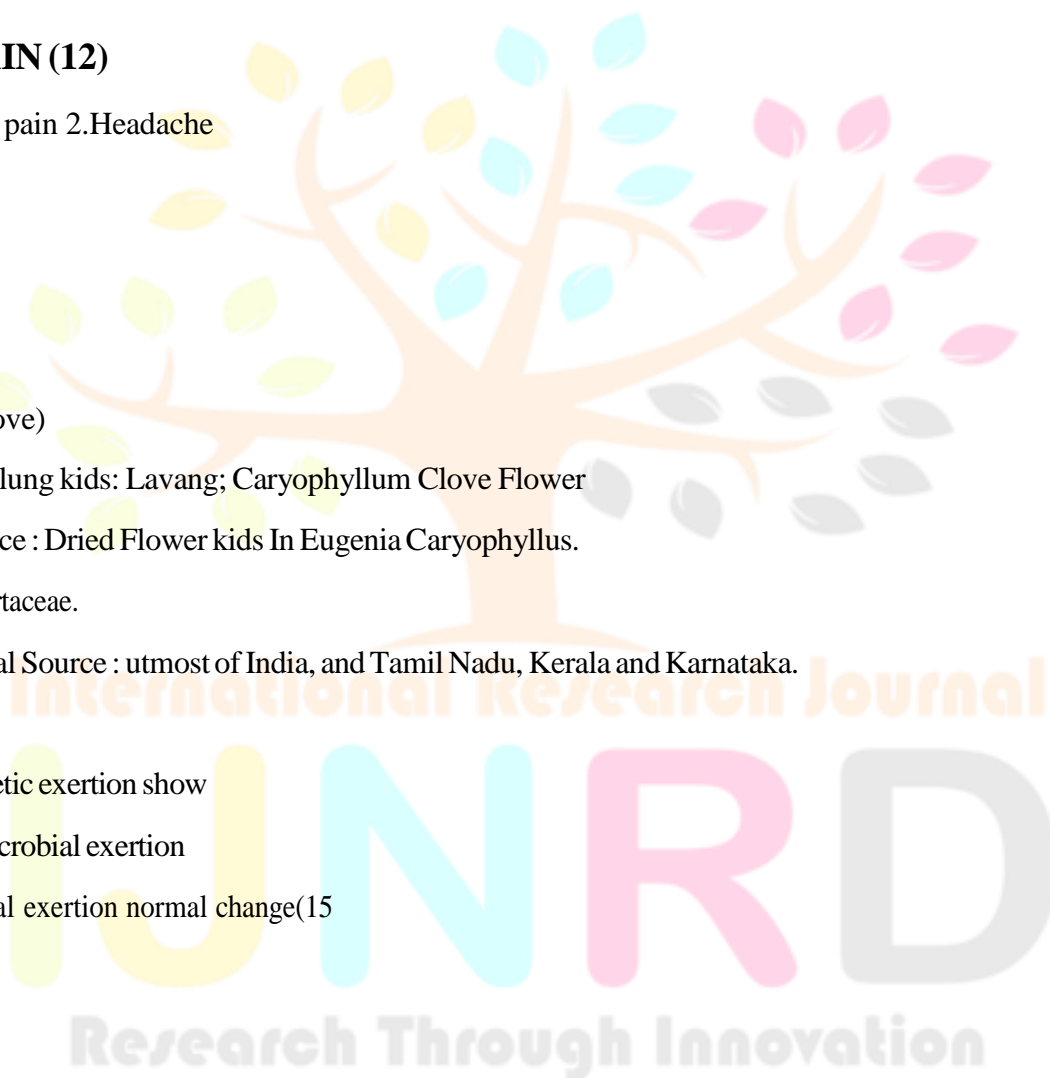
1. Strong buck pain
2. Headache
3. Arit iris pain
4. Pain of neck

Drug profile

1. Eugenol(clove)
 - Antonyms clung kids: Lavang; Caryophyllum Clove Flower
 - natural Source : Dried Flower kids In Eugenia Caryophyllus.
 - Family : Myrtaceae.
 - Geographical Source : utmost of India, and Tamil Nadu, Kerala and Karnataka.

. Used

1. asAnti-diabetic exertion show
2. it is aanti-microbial exertion
3. . Anti- Fungal exertion normal change(15)





2. Menthol

- Menthol Scientific Name : Hexahydrothymol
- Synonym : Peppermint camphor
- Family : Lamiaceae(Mint Family)
- Botanical Source : Menthol is primarily attained from the oil painting of *Mentha piperita*(peppermint), which belongs to the Lamiaceae family(also known as Labiatae).



3. beeswax

- Scientific Name : *Cera alba*
- Reverse : unheroic wax
- Family : Apidae
- Chemical ingredients : Myricyl palmitate(80), free cerotic acid(15), melissic acid, cerolein.

- Uses :

1. high quantum of cholesterol or other fats(lipids) in the bloodHyperlipidemic pain.
2. Beeswax acts as a defensive hedge of skin, while it's the wintergreen.
3. provide a cooling and sensation, making a drop of(9)



4. **caster oil**

- painting Castor Oil
- Scientific Name : *Ricinus communis*
- Synonym : Ricinus oil painting
- Family : Euphorbiaceae(Spurge Family)
- Key Chemical Constituent : Castor oil painting is primarily composed of the triglyceride of ricinoleic acid, making up roughly 80 of its composition.

- Uses :

1. .It's used as laxative
2. caster oil painting it's promote the crack mending
3. caster oil painting it's a Cathartic.(10)



5. Camphar

- Botanical Name : Cinnamomum Camphora
 - Family Name : Lauraceae
 - Common Name : Camphor Tree, Camphorwood
 - Chemical ingredients : Monoterpene Ketone, Borneol(10- 20), Bornyl Acetate(5- 10), Camphene(5- 10), Limonene(2- 5).
- Uses
1. Camphor is aAnti-inflammatory agent.
 2. It'sAnti-spasmodic agent 3. It's as antioxidant exertion and - Arthritic exertion and analgesic.(11 ,8)



6. Roose oil :

- Antonyms : Essential oil painting , Attar of rose
- Family : Rosaceae
- Biological Source : It's uprooted from rose damascene Chemical ingredients : Rose oil painting Contains citronellol, geraniol, nerol linalool, phenyl ethyl Alcohol, pinene limonene and p- cymene.



EQUIPMENT

- 1 . Stainless steel vessel
- 2 . Stirrer
- 3 . Mortar and pester
- 4 . Ph meter
- 5 . Weighing balance
- 6 . Soxhlet apretus

INGREDIANT

- 1 . Eugenol (clove)
- 2 . menthol
- 3 . Beeswax
- 4 . Caster oil
- 5 . camphar
- 6 . Rose oil

Procedure for Herbal Pain-

1. Relieving Balm The essential botanical factors for making a herbal painrelieving attar were precisely counted using a digital balance.
2. Weigh all the constituents and mix menthol, beeswax, castor oil painting, and rose oil painting.
3. Heat this admixture to 80 °C with shifting to melt the constituents. Mix until homogenous.
4. Cool the content to 65 °C with nonstop mixing.
5. Add the camphor at 60 °C and mix well.
6. Add the eugenol to the below admixture with nonstop shifting until invariant mixing.
7. Fill the admixture into the vessel when hot.
8. Allow to cool in the vessel and close it with a tight lid

FORMULA

Ingredients	Quantity Given	Quantity Taken	Use
Eugenol	0.5 gm	1.0 gm	Carminative, anti-inflammatory
Mentha oil	2.5 gm	5.0 gm	Counter irritant
Castor oil	2.7 gm	5.3 gm	Anti-inflammatory
Camphor	0.6 gm	1.3 gm	Antiseptic
Rose oil	0.4 gm	0.7 gm	Soothes dry skin
Bees wax	3.3 gm	6.5 gm	Base

FORMULATION:

Raw material were gathered from home and request. The natural component were exfoliate dried, powered and settled, counted directly and mixed. For the evaluation of colorful parameters, the formulated pain relieving attar was stored in air tight vessel

EVALUATION TEST

Organoleptic Evaluation Color

Odor Appearance Texture

pH dimension

DENSITY DETERMINATION

Phase Separation Thickness Spreadability Solubility

Non-irritancy

Washability

Observation

The physicochemical properties of the balm were evaluated. Specifically, color, odor, appearance, and pH were assessed. The balm presented a desirable appearance, and the measured pH was approximately 7.0, which aligns with the optimal pH range for skin compatibility

Parameter	Observation
Color	Cream yellow
Odor	Characteristic
Appearance	Pain balm formulation
Texture	Smooth
pH	6.2
Viscosity	3256 centipoise (cps)
Phase Stability	No phase separation detected
Consistency	Smooth
Spreadability	7.2 grams per centimeter per second (g cm/s)
Solubility	Soluble in boiling water
Skin Irritation	No observed irritation
Washability	Easily removed with water

Table no-(4) Herbal Balm Tests Observations

14.Result :

"This study focused on formulating a menthol-based pain balm using a selection of excipients. The resulting balm underwent evaluation for key physical characteristics, revealing a satisfactory appearance and texture. It exhibited smooth spreadability upon application, lacking any roughness. The balm retained a characteristic aroma. However, the beetroot-derived natural colorant resulted in a faded color. The formulation demonstrated a desirable density and optimized melting point.

Conventionally, both oral and topical antibiotics are employed in the treatment of skin diseases. There's growing interest

in exploring traditional medicinal and aromatic plants for their bioactive natural organic compounds, which offer potential therapeutic applications. Over the past two decades, significant research efforts have been dedicated to identifying these bioactive compounds and developing plant-derived drugs for various treatments."

Conclusion:

Frequent use of allopathic medicines for acne can cause side effects. Herbal remedies are gaining popularity due to their safety and effectiveness. This study focused on developing and evaluating a menthol-based herbal pain relief attar using the Hot Melt Processing method. The attar showed good physical properties, stability, and compatibility of ingredients without any major changes. Clove oil, known for its pain-relieving properties, was effective in the formulation. Overall, herbal ingredients can be effectively used to make attars with excellent pain-relieving benefits.

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