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“Formulation And Evaluation Of Herbal Balm For Pain Relief

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Abstract:

Modern life is stressful, and tension headaches are one result of that stress. Cosmetics have great demand since ancient time, Now a days, a focus has been shifted more towards derived cosmetic products. Not only cosmetic products, but also to the skin products due to their ease of application among all dermal drug delivery products, pain balm formulation are preferably used so as to get the faster local effect. Ehretia oil is an essential oil extracted from the leaves of the Ehretia plant. Ehretia oil contains fatty acids, phenolic acids, flavonoids, cyanogenetic glycosides, and benzoquinones.

Keywords: Balm, Menthol, Camphor, Ehertia leaves, Muscle pain, Antioxidant properties, Herbal medicine, etc .

INTRODUCTION

Herbal drug have been used since ancient times as medicine for the treatment of range of disease . In spite of the great advantages observe in modern medicine in recent decade plant still make an important contribution to health care .

There is great demand of herbal medicine in the developed as well as developing country because of their wide biological activity . Higher safety margin than the synthetic drug and lesser cost .

Since the herbal medicine are prepare from material of plant origine they are prone to contamination , deterioration and variation in composition . Thus give interfeerer variation in composition .

Every herbal formulation must be standardized as per WHO guideline, WHO collaborates and assist health ministers in establishing mechanism for the introduction of traditional plant medicine into primary healthcare programs , in assessing safety and efficacy and ensuring supplies and the quality control of the raw and processed materials .

Raw material can be define as starting material or any intermediate which will be utilized for further processing before finished pharmaceutical dosage form ads produced the identity, purity and quality of raw material as per specification for impurities and other related substances present must be established with use of suitable testing .

Ayurvedic preparation :

Ayurveda is a medical system primarily practiced in India that has been . known for nearly 500 year . it diet and herbal remedies , while emphasizing . the body , mind and in disease prevention and treatment [morgan,2002] . it is based on the belief that health and wellness depend on the delicate balance between the mind ,body and spirit .

Benefits :- there is also medical and layperson acknowledgement of the health benefits of ayurvedic practices, such as yoga, massage, meditations.

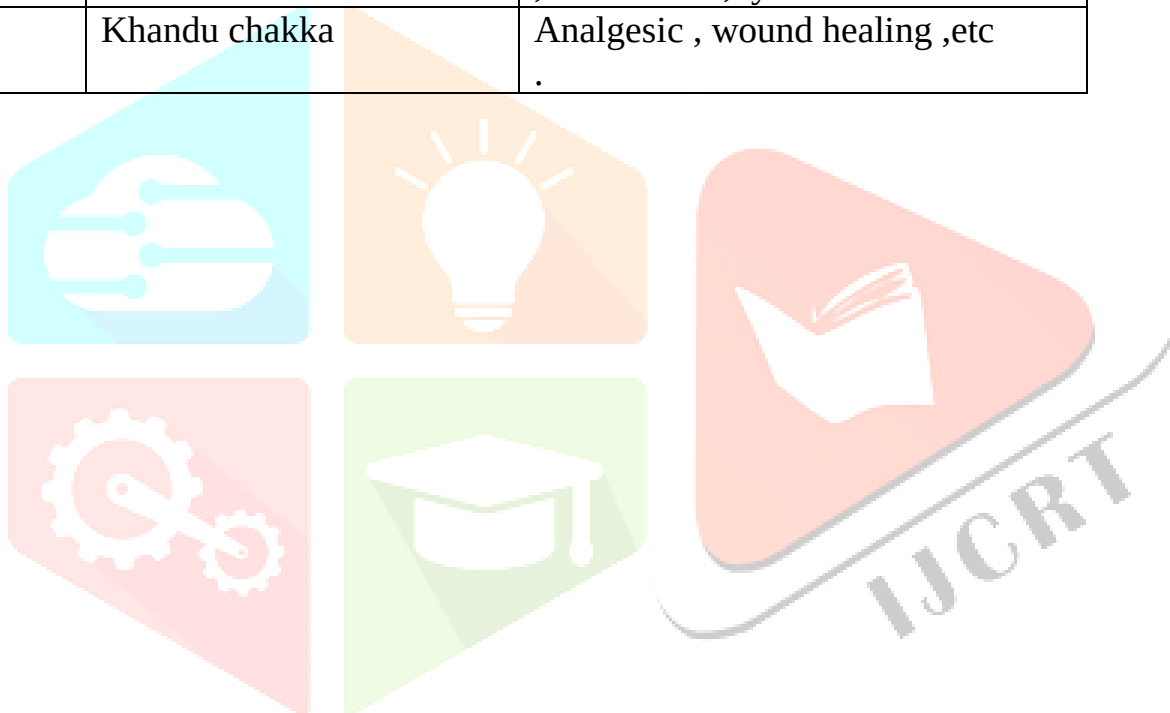
Herbal balm are topical preparation that are applied to the skin to relieve pain and stiffness . they are typically made from a blend of natural ingredients , such as oil , waxes , and butter , and can contain other components like organic essential oil and herbal components .

Analgesic herbal is an ayurvedic formulation of powerfull essential oil for a quick relief for headache , backache , cold and in relieving pain . these balm contains counter irritant chemical compound such as menthol , methyl salicylate , etc.

The way the pain balm function is based on the counter-irritancy principle , which suppresses pain perception by creating irritation to the extent that it prevent pain from being felt .

Table no.1 - Ingredients And It's Use .

Sr no.	Ingredients	Effects
1	Menthol	Counter irritant
2	Beeswax	Base
3	Castor oil	Anti-inflammatory
4	Eucalyptus oil	Analgesic
5	Camphor	Anti-septic
6	Turmeric	Anti-inflammatory, anti-septic ,anti-oxidan ,dye.
7	Khandu chakka	Analgesic , wound healing ,etc .



DRUG AND EXCIPIENTS PROFILE:



Figure no.1 - menthol image

1.MENTHOL

Botanical Name : **Mentha Arvensis(Wild Mint) , Mentha Piperite**

Family Name : **Lamiaceae**

Common Name : Peppermint Oil , Levomenthol ,etc

Chemical Constituents : Volatile Oil N(0.7-1.5%) , Menthyl Acetate , Limonene , Isovalerate , Menthone , Cineol , Inactive Pinene .

Uses : Anti-Inflammatory , Pain Relieving (Joint And Muscle Pain) , Relieve Headache , Nasal Decongestant , etc .



Figure no.2 -beeswax image

2. BEESWAX

Botanical Name : **Cera Alba , Cera Flava**

Family Name : **Apidae**

Common Name : Cera Alba (Besswax)

Chemical Constituents : Ester (70-80%) : Mainly Palmitate ,Palmitoleate And Oleate Ester , Hydrocarbon (10-20%), Free Fatty Acid (5-10%) And Stearic Acid .

Uses : Preparation Of Ointments , Plasters And Polishes , Base ,Preparation Of Lipsticks And Face Creams .



Figure no.3 -castor oil image

3. CASTOR OIL

Botanical Name : **Ricinus Communis L**

Family Name : **Euphorbiaceae**

Common Name : Castor Oil Plant , Castor Bean , Ricin Plant

Chemical Constituents : Ricinoleic Acid (80-90%) , Oleic Acid (4-6%) , Linoleic Acid (2-4%) , Palmitic Acid (1-2%) , Stearic Acid (1-2%) .

Uses : Laxative , Anti Inflammatory , Anti Microbial , Skin Condition (Acne) , Digestive Issues , Menstrual Relief , Anti Aging .



Figure no.4 -eucalyptus image

4. EUCALYPTUS

Botanical Name : **Eucalyptus Globulus**

Family Name : **Myrtaceae**

Common Name : Blue Gum , Blue Mallee , Tasmanian Blue Gum .

Chemical Constituents : Monoterpene , 1,8-Eucalyptol , Limonene , Epiglopulol , Linalool , Cymene , Citronellal , Camphene.

Uses : Anti-Inflammatory , Anti-Oxidant , Analgesic , Expectorant , Cure Ulcer , Dyspepsia , Rheumatoid Arthritis , Skin Infection , Muscular Aches And Pain.



Figure no.5 -camphor image

5. CAMPHOR

Botanical Name : **Cinnamomum Camphora**

Family Name : **Lauraceae**

Common Name : Camphor Tree , Camphorwood

Chemical Constituents : Monoterpene Ketone , Borneol (10-20%) , Bornyl Acetate (5-10%) , Camphene (5-10%) , Limonene (2-5%) .

Uses : Anti-Inflammatory , Anti-Spasmodic , Anti Convulsant , Anti Oxidant , Anti-Arthritic , Analgesic .



Figure no.6 -turmeric image

6. TURMERIC

Botanical Name : **Curcuma Longa**

Family Name : **Zingiberaceae**

Common Name : Turmeric , Yellow Ginger , Indian Saffron , Curcuma

Chemical Constituents : Curcumin (5-7%) , Demethoxycurcumin , Bis Demethoxycurcumin , Termturmerone , Zingiberene , Curcumenoids , Terpinolene , Undecanol , P-Cymene .

Uses : Anti-Inflammatory , Anti-Cancer , Dye Plant , Anti-Oxidant , Cosmatic Ingredient , Anti-Septic , Anti Fungal , Anti Viral ,Anti Allergic ,etc



Figure no.7 -Ehretia leave image

7. KHANDU CHAKKA:

Botanical Name : **Ehretia Leaves**

Family Name : **Boraginaceae**

Common Name : Ehretia , Smooth Ehretia , Tropical Ehretia

Chemical Constituents : Flavonoids (Quercetin, Kaempferol) , Ehretine , Ehretinine , Gallic Acid , Ursolic Acid , Etc .

Uses : Reduce Fever , Respiratory Issues , Skin Toner , Anti-Aging , Anti-Inflammatory , Cough , Joint Pain , Anti-Microbial Agent ,

AIM AND OBJECTIVES :

- Evaluation and formulation of herbal pain balm .
- The objective of this present was to carry out the physicochemical evaluation of the plant material to establish standard parameters for ensuring quality of drug .
- To formulate the herbal balm .
- To develop method of evaluation that should be relevant and reproducible , following standard guidelines

PLAN OF WORK :

- 1) Procurement of raw material (crude drug).
- 2) Morphological screening of raw material .
- 3) Microscopical screening of crude drug .
 - a) Transverse section
 - b) Powder microscopy
- 4) Physicochemical screening
 - a) Moisture content
 - b) Foreign organic matter
 - c) Chromatographic fingerprinting
- 5) Extraction of active constituents .
- 6) Phytochemical screening of various extract .
- 7) TLC for determination of active constituents .
- 8) Formulation of semisolid dosage form (balm).
- 9) Evaluation of balm by various parameters .

EXPECTED OUTCOME:

- The Herbal Balm Should Be Of Standard Quality.
- The Balm Should Be Safer To Use .
- It Should Achieve Patient Compliance .
- The Balm Should Not Have Any Side Effects .

CONCLUSION:

The use of herbal balm is to reduce the pain without any side- effect effect to the skin. Herbal components can be effectively formulated as in the form of balm.

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