# WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.453

Volume 13, Issue 5, 303-312.

**Review Article** 

ISSN 2277-7105

# REVIEW ON POLYHERBAL OINTMENT FOR WOUND HEALING **ACTIVITY**

\*Fatakkar Renuka B., Lamkhade Kanchan S., Gahire Pratiksha D. and Umbarde Rupali P.

Dr. Ithape Institude of B. Pharmacy, Sangamner, Ahmednagar, Maharashtra, 422605, India.

Article Received on 07 January 2024,

Revised on 27 Jan. 2024, Accepted on 17 Feb. 2024 DOI: 10.20959/wjpr20245-31450



\*Corresponding Author Fatakkar Renuka B.

Dr. Ithape Institude of B. Pharmacy, Sangamner, Ahmednagar, Maharashtra, 422605, India.

#### **ABSTRACT**

Historically, shops and factory- grounded ingredients have been considerably used for the treatment and operation of different types of injuries. In the current times, different types of biopolymers are being delved for developing provident, sustainable, stable, and effective delivery system for the treatment of injuries. In this study, ointment were formulated grounded on the crack mending eventuality of herbal excerpts and its evaluation. Herbal shops similar as Azadirachtaindica, Curcumalonga., Lantana camara Linn. and Aloe vera were named. named factory corridor are dried and uprooted using alcohol. Quality evaluation of the product was assessed by using different evaluation styles. The present review composition attempts to Formulation and evaluation of a Traditionally Used Polyherbal ointment for crack Healing Activity. Factory element- grounded crack dressings have also

been bandied totally including patented phrasings reported by different formulators. From the present study it can be concluded that it's possible to develop ointment containing herbal excerpts having crack mending property.

**KEYWORDS:** Herbal shops similar as Azadirachtaindica, Curcumalonga., Lantana camara Linn. and Aloe vera were named. named factory corridor are dried and uprooted using alcohol.

### AIM AND OBJECTIVE

The end of the present study was made to identify the synergistic effect polyherbal ointment for crack Healing with the following objects. Natural products from shops are rich sources used for treating several conditions. utmost of the herbal medicines are a admixture of several factory constituents. Their synergistic effect increases the efficacity of the medicine in curing the conditions. In this ultramodern period, the knowledge and experience of operation of sauces are being blended with advanced expression technology to develop a safe and elegant herbal product, which has wider range of people adequacy. expression of medicinal factory in the form of an ointment will be made by mixing factory excerpts in different proportions and tested for crack mending exertion Methanolic excerpts of shops similar as.

- \* Azadiractaindica(splint),
- \* Curcuma longa(rhizome),
- \* Aloe vera(whole factory),
- \* Lantana camara Linn. (Leaf factory) are used for expression of herbal skin ointment for crack mending. also the formulated skin ointment is estimated for parameters like physical parcels, pH, density and spread capability.

#### **IDEAL OF THE STUDY**

- 1. The purpose of the present disquisition is to formulate and estimate a herbal skin ointment for crack mending exertion.
- 2. To prepare crude excerpts from the herbal factory.
- 3. Herbal shops like Azadiractaindica, Curcuma longa, Aloe vera and Lantana camara Linn. are used for expression of herbal skin ointment for crack mending.
- 4. also the formulated skin is estimated for parameters like physical parcels, pH, density, spread capability and stability of the formulated ointment.
- 5. To formulate natural ointment expression.
- 6. To avoid vexation of synthetic chemicals to the skin.
- 7. To estimate herbal antiseptic ointment.

#### LITERATURE REVIEW

Patents on herbal expression for crack mending.

- \* Phillip Roy etal. 2010 patented that honey could be used in dressings. The dressing consists of an alginate fiber distance with honey fully saturated into the fiber distance. As a result, the dressing has pervious shells and the dressing becomes gel- suchlike when the exudate gets absorbed upon operation to the crack. This patent includes 11 claims describing how honey is saturated into the dressings. It can be used for treating acute as well as habitual injuries.
- \* Suresh Balkrishna etal. 2013 patented a "new herbal composition for the treatment of crack mending." Their invention includes a new, synergistic, herbal composition as a regenerative

drug conforming of a admixture of therapeutically effective amounts of excerpts attained as a base from Curcuma longa, Glycyrrhiza glabara, Hamil tonia suaveolens, Tipha angustifolia, and Azadirachta indica, as well as an voluntary base conforming of Pig fatin Sesamum indicum(Til) oil painting, useful for crack cure care.

- \* The materiamedica of these systems contain a rich heritage of indigenous herbal practices that have helped to sustain the health of utmost pastoral people of India. The ancient textbooks like Rig Veda(4500- 1600 BC) and Atharva Veda mention the use of several shops as drug.
- \* In India, the ayurvedic system has described a large number of similar drugs grounded on shops or factory product and the determination of their morphological and pharmacological or pharmacogenetic characters can give a better understanding of their active principles and mode of action.

#### \* Preface

shops have been considered as implicit agents for forestallment and treatment of diseases in recent times. Herbal products are largely preferred to synthetic medicines due to their wide vacuity as well as the vast empirical and accessible data regarding to their traditional use. still, ultramodern scientific styles should be applied to validate the claims about the remedial goods of the shops, performing in evidence the traditional system of drug. In the developing and developed countries, herbal remedy prevails in traditional drug as well as in indispensable drug. World Health Organization(WHO), as well as India, has been promoting the use of traditional drug because they're less precious, fluently available, strong belief among the community in developing countries, etc. Literature reveals that simple traditional shops similar as.

- \* Lantana camara Linn.
- \* Azadiracta indica.
- \* Curcuma longa.
- \* Aloe vera.
- \* Caesalpinia sappan.
- \* Curcuma longa.
- \* Cyperus rotundus.
- \* Eclipta alba.
- \* Glycyrrhiza glabra.
- \* Piper longum.

- \* Santalum reader.
- \* Zingiber officinale, etc. are salutary in the treatment of several skin- related problems and also for crack mending. The wide interest in the operations of herbal- grounded active excerpts or phytoconstituents falsehoods due to the belief that factory- grounded accoutrements are safe and reliable, along with smaller side goods. In recent practice, several herbal- grounded crack mending phrasings similar as ointments, creams, gels, mixes, dormancies, liquids, sprays, jelly, carbogel, wet dressing, lathers, poultices, lipogels, etc. have been disquisition. There's a growing interest in herbal remedies because of their effectiveness, minimum side goods in clinical experience and fairly low costs. Herbal medicines or their excerpts are specified extensively, indeed when their natural active composites are unknown. Indeed the World Health Organization(WHO) approves the use of factory medicines for different conditions, thus, studies with factory excerpts are useful to know their efficacity and medium of action and safety. Advantage of herbal drugs There are a number advantages associated with using herbal drugs as opposed pharmaceutical products. exemplifications include the following.
- \* Reduced threat of side goods Most herbal drugs are well permitted by the case, with smaller unintended consequences than pharmaceutical medicines.
- \* Sauces generally have smaller side goods than traditional drug, and may be safer to use over time.
- \* Effectives with habitual conditions Herbal drugs tend to be more effective for longstanding health complaints that do not respond well to traditional drug.
- \* Its have lower side goods. similar treatments include salutary changes like adding simple sauces, barring vegetables from the nightshade family and reducing white sugar consumption.
- \* Lower cost Another advantage to herbal drug is cost.
- \* Sauces bring much lower than tradition specifics.
- \* exploration, testing, and marketing add vastly to the cost of tradition Medicines Sauces tend to be affordable compared to medicines.

#### WOUND

Bracket of injuries are generally classified according to the underpinning cause of the development of injuries. Acute injuries In acute injuries, there's towel damage/ injury that generally occurs through an orderly and time-reformative phase that results in the anatomical and functional integrity being restored sustainably. Acute injuries are generally caused by cuts or surgical lacerations. Closed injuries The blood escapes from the circulatory system in unrestricted injuries but stays inside the body. It becomes apparent in the form of bruises.

Open injuries Blood leaks from the body through an open crack and bleeding is easily conspicuous. The open crack may be divided further into orders according to the source causing the crack. Incised injuries This is a crack with no loss of towel and minor damage to towel. It's caused primarily by sharp objects like a scalpel or cutter.

#### **FACTORS AFFECTING**

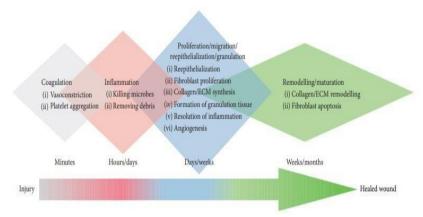


Fig. crack mending process.

- 1. Oxygenation Oxygen is essential for the metabolism of cells, particularly the product of energy through ATP, and is necessary for nearly all crack mending processes. It protects injuries from infection, causes angiogenesis, increases isolation of keratinocytes, migration andre-epithelialization, improves proliferation of fibroblasts and conflation of collagen, and facilitates compression of injuries.
- 2. Infections Micro-organisms that are generally sequestered on the skin face gain access to the underpinning apkins until the skin is wounded. However, colonization, original irruption/critical colonization, If the crack is listed as having inflammation. invasive infection determines the state of infection and replication status of the microorganism.
- 3. Age The senior population(people over 60 times of age) is growing further than any other age group(a significant threat factor for delayed crack mending is the World Health Organization and elevated age). Several cellular and molecular- position clinical and beast studies have explored age- related changes and detainments in crack mending.
- 4. Body type Body form can also impact the mending of injuries. For case, an fat case can witness a concession in crack mending due to low adipose towel blood force. In addition, there's protein malnutrition in some fat cases, which further impedes recovery.

5. habitual conditions A many of the habitual conditions that can compromise crack mending include coronary heart complaint, supplemental vascular complaint, stroke, and diabetes mellitus, exemplifications for crack mending ointments Everybody gets a cut or a skin bruise now and also. Having a soothing cream or ointment on hand is generally enough to treat minor skin injuries. There are multitudinous products available, all made with different constituents. And all are also great for healing further sizable cuts that do not bear aches. Zinc Ointment Zinc ointment is an old-time fave for cuts, scrapes, skin vexations and diaper rash, according to Drugs.com. Zinc ointment is available in tubes-- as a plain, unscented ointment-or mixed in diaper rash creams and other First- Aid creams. Antibiotic Ointments An antibiotic cream or ointment is used for treating cuts and scrapes. Try Neosporin, Polysporin or Ultra Mide, all available in grocery and medicine stores. These ointments are said to cover against bacteria overrunning a crack. They also help to reduce scarring. Vitamin E oil painting Vitamin E oil painting applied directly on a cut aids healing and helps to help scarring, saysEarthClinic.org. Just burrow the tip of the tube with a leg and squeeze to apply. Aloe Vera Gel Aloe vera gel is an excellent remedy, reportsEarthClinic.com. It's used for healing skin problems and is cool and soothing. It can be used on becks and sunburns, as well as open injuries. Buy aloe vera gel at health food stores in bottles or, if you have an aloe vera factory, just break off a piece of the fleshy splint and give it a little squeezed. The present study is to formulate and estimate a herbal skin ointment which will be effective and has better rate of towel rejuvenescence. The herbal ointment that's planned to be formulated for crack mending. order of sauces.

- \* Azadirachtaindica(aanti- fungal, treat skin conditions)(Splint).
- \* Curcuma longa(used in crack mending, and antiseptic)(RHIZOME).
- \* Aloe vera(regenerate towel)(WHOLE Factory).
- \* Lantana camara Linn(anti-inflammatory)(Splint).

## TRADITIONAL USE OF MEDICINAL PLANTS IN WOUNDHEALING:

#### A) Curcuma Longa



Fig. Curcuma longa.

A Curcumin has been used as a remedy and as a food seasoning for numerous times, being an active agent set up in the Curcuma longa root and a member of the gusto lineage. Curcumin is used by conventional Ayurvedic drug interpreters to treat asthma, respiratory conditions, diabetes, and skin injury. Curcumin is a popular remedy in traditional Chinese drug for stomach pain.

#### B) Aloe vera



Fig. Aloe vera.

Aloe vera comprises of numerous natural bioactive composites, including introductory and complex similar as glycosides, polysaccharides, saponins, pyrocatechol, anthraquinones, acemannan, phytol, oleic acid, and water-answerable polysaccharides. Acetone excerpts from Aloe vera leaves show lesser antimicrobial exertion than that of alcohol and waterless excerpts. Acemannan, a large Aloe vera mucopolysaccharide(mesoglican), is an effective stimulator for the operation of macrophages and T cells and induces the recap of proinflammatory mRNAs Mesoglycan halves bind and absorb endogenous mitogenic impediments and species of reactive oxygen, which promote phagocytosis. concurrently, glycans stabilize, dragging their function, the buried cytokines, growth factors, and other bioactive. Topically applied acemannan, acting through cyclin D1 and AKT/ mTOR signaling pathways has been proved to significantly reduce the time for crack check.

### C) Neem(Azadirachta indica)



Fig. Azadirachta indica.

Products made from neem trees have been used in India for two glories for their medicinal parcels. Neem products are believed by siddha and ayurvedic interpreters to be anthelmintic, antifungal, antidiabetic, antibacterial, antiviral, contraceptive, and opiate. It's considered a major element in siddha drug and ayurvedic and unnani drug and is particularly specified for skin conditions. Neem oil painting is also used for healthy hair, to ameliorate liver function, detoxify the blood, and balance blood sugar situations. Neem leaves have also been used to treat skin conditions like eczema, psoriasis, etc. inadequate exploration has been done to assess the purported benefits of neem, still. In grown-ups, short- term use of neem is safe, while- term use may harm the feathers or liver; in small children, neem oil painting is poisonous and can lead to death. Neem may also beget deliveries, gravidity, and low blood sugar.

### D) Lantana Camara



Fig. Lantana camara Linn.

Properties of Lantana camara Linn.

- · Abortificient,
- Antimalarial,
- Anti-inflammatory and
- Crack mending The hydro- alcoholic excerpt and fresh juice of leaves have favoured crack compression. The factory is potentially poisonous and its venom include nephrotoxicity, hepatotoxicity, photosensitization, dermatitis, intestinal hemorrhage, thus, the use of this factory in whole or any part thereof needs to be precisely regulated until the intimidating poisonous principles of the factory are duly linked and removed. shops or chemical realities deduced from shops need to be linked and formulated for treatment and operation of injuries.

#### **CONCLUSION**

In the present study, the present study was made to identify the synergistic effect polyherbal ointment for crack Healing exertion using herbal shops similar as Azadiractaindica, Curcuma longa, lantana camara Linn and Aloe vera. originally, the exploration work started with a wide and thorough literature check. colorful phrasings were studied by varying the quantum of excipient, expression of Herbal Skin ointment for crack mending should successfully developed that met the applicable pharmaceutical characteristics. The set phrasings are also estimated for parameters like physical parcels, pH, density, spread capability and stability of the formulated Ointment. The set phrasings may show good spread capability, no substantiation of phase separation and good thickness during the study period. Stability parameters of the phrasings showed that there was no significant variation during the study period. The set phrasings showed proper pH range that's roughly pH 6; it confirms the comity of the phrasings with skin concealment. From the present study it can be concluded that it's possible to develop herbal ointment containing herbal excerpts and can be used as a hedge to cover skin.

#### REFERENCE

- 1. Yadav Abhishek, and Samanta Krishan; Formulation and evaluation of herbal ointment using Emblica officinalis excerpt, World Journal of Advanced Research and Reviews, 2021; 09(02): 032–037.
- 2. Shaikh SS, Padri V. K. Formulation of herbal ointment for assessment of crack mending exertion from Launaea Sarmentosa leaves. Int J Pharm Chem Anal, 2022; 9(2): 79-86.
- 3. Naveen Kumar Chundran, Ike Rostikawati Husen, Irra Rubianti Effect of Neem Leaves Extract(Azadirachta Indica) on Wound Healing, Althea Medical Journal, 2015; 2(2).
- 4. Aravinda nalla and krishna mohan chinnala, expression and evaluation of herbal ointment for antimicrobial exertion, world journal of medicinal and medical exploration, wipmr, 2017; 3(7): 113-117.
- 5. K.c.haritha yadav, j. Ravi kumar, crack mending exertion of topical operation of aloe vera gel, International Journal of Pharma and Bio lores, April – June 2012; 3(2).
- 6. Shubhangi E. Sawant, Monali D. Tajane, Formulation and evaluation of herbal ointmentcontaining Neem and Turmeric excerpt, Journal of Scientific and Innovative exploration, 2016; 5(4): 149-151.
- 7. RuchiS. Shivhare, Pallavi Awachat, Debarshi Kar Mahapatra, AshwiniR. Ingole, ShilpaS. Borkar(2019). "Development of Wound Healing Ointment Formulation containing Active

- Excerpts of Tridax procumbens, Calendula officinalis, Murraya koenigii, and Aloe barbadensis", International Journal of Pharmaceutical and Phytopharmacological Research, 9(6): 99-104.
- 8. Akshay Sharma, Suryamani Khanna, Gaganjot Kaur and Inderbir Singh, Medicinal shops and their factors for crack mending operations, Future Journal of Pharmaceutical lores, Article number, 53(2021).
- 9. AmrapaliS. Kakade, R.R. Pagore and K. R. Biyani, evaluation of crack mending exertion of polyherbal gel expression, World Journal of Pharmaceutical Research, 6(10): 501-509.
- Parwanto MLE. efficacity of Lantana camara Linn. splint excerpts ointment on dermal crack mending were infected with Staphylococcus epidermidis. Int J Basic Clin Pharmacol, 2017; 650310.
- 11. Sandra Namunana, Stephen Lutoti, Grace Nyamaizi, Formulation, Development and Validation of a Wound Healing Herbal Ointment from Excerpts of Bidens pilosa and Aloe barbadensis. J Pharm Pharmacol Res, 2018; 2: 032-038.