

Review of Herbal Paste for Wound Healing

G. Uma Rani and B.Greeshma Paul

Date of Submission: 05-11-2020

Date of Acceptance:15-11-2020

ABSTRACT: - The main aim and objective of this study is to review the herbal topical paste. These topical paste is considered as novel technique which is used to treat wound healing. Utility of plant based drug delivery systems are begin employed in recent past for the therapeutic effectiveness topical applied drugs. Herbal medicines are beginning used by about 80% of the world population. Guava leaves are traditional anti-inflammatory agent and it has anti-bacterial and anti-oxidant property

Keywords:-Topical paste, Guava leaves extract, Spredability, Skin irritancy, skin penetration, Anti microbial activity.

Herbal paste: - Herbal pastes are known as 'Kalka' in Ayurveda as herbal paste used for both external and internal use. It may contain the herbal ingredients which is dissolved or dispersed in a (fatty base), meant for topical use.

Objective: - It has to assess the effects of guava leaves extract when compared with alternative wound dressings and topical treatments on the healing of wound.

Importance:-

- These pastes are normally localize the action of irritant or staining.
- These are less greasy when compared with ointments.
- The stability of an herbal paste; it depends on type of te base used and as well as the nature of herbal material incorporated.

Reason:-

- Modern medicine is failing to effectively treat most of the common diseases.
- Many natural measures are being shows the better results than drugs or surgery without the side effects.

Advantages:-

- A good paste less time to spread and will have high credibility.

Disadvantages:-

- Possibility of allergic reactions.

• APPLICATIONS:-

- It is applied to the body surface such as skin or mucous membrane to treat aliment includes cream, ointment ,gels, foams ,lotions and pastes.
- Many topical medications such as epicutaneous means directly applied to the skin.

Why is Research on Herbal Medicinal Products Important and How an We Improve Its Quality?

Herbal Medicines As Multi-Target Drugs For Complex

To treat a complex chronic disease it requires covering the multiple targets, and in conventional drug therapy, this leads to polypharmacy. It stresses the herbal medicines, the sake of them being based on plant-derived products, is chemically complex mixtures containing multiple major and minor constituents with multiple potential targets and mechanisms. The European tradition slowly recognizes the new possibilities because of the current ongoing consolidation of the EU legislation concerning well-established and traditional medicines. Some of the other traditional medicines, which are used in Asia, not only provides invaluable knowledge results in new Western drugs and drug . It is also highlights in different approaches are characterized by personalized medicine and the use of complex herbal products. . Accumulating evidence to suggest for using the omic methods, includes genomics, transcriptomics, epigenomics, proteomics, metabolomics, etc., In traditional medicines, it leads to new insights and offers opportunities for the new types of medicine.

Telemedicine Centre Of Korean Medicine For Treating With Covid-19: A Retrospetial Analysis:-

Telemedicine Managment

Telemedicine Center of Korean Medicine used herbal medicine mainly for the relieving COVID-19 symptoms which provides mindfulness meditation for improving mental health of COVID-19 patients.¹² Herbal medicines were prescribed by Korean Medicine doctors according to established protocols made by expert advisory panels and by foreign guidance or data on COVID-19.⁶ In regards to mental health management, the 'Korean Medicine Doctor's Mental Health Introduction Manual' was developed by the Oriental neuropsychiatry specialists group, for patients who reported to suffer from psychological problems such as depression, anxiety, and fear. COVID-19 patients consulted the telemedicine center doctors via telephone and the doctor's prescribed herbal medicine such as Qing-Fei-Pai-Du-Tang, Yin-Qiao-San, and Huo-Xiang-Zhengqi-San.¹¹ When herbal medicine was prescribed to the patient, it was delivered directly to the patient's residence by volunteers of the telemedicine center or through courier services. Follow up calls were made to patients every 3 days to check for changes in symptom. This training consists of various on-site response manuals related to the use of electronic charts during the treatment and prescriptions of available herbal medicine at the telephone treatment center.

Anti- Inflammatory And Wound Healing Activity Curcuma Aromatica Salisb Extract And Its Formulation:-
Arachidonic acid induced topical ear inflammation:-

In the control, group an edema was induced on the right ear by topical application of 2mg/ ear of Arachidonic acid in 20µl of acetone. The left ear acts as control which receives the vehicle acetone. The Control group receives only Arachidonic acid treatment. Group 2 receives phenidone 1mg/ear was used for positive control applies to the right ear simultaneously with AA. Group 3&4 receives extract 0.5 & 1mg/ear dissolves in acetone (20µl), applies on the right ear simultaneously with AA, Group 5&6 receives 1% w/o and 2% w/o cream formulation (0.05g/ear) respectively & simultaneously with AA. The left ear acts as control & receives the equal volume of vehicle, The edema measures initially after 1 hr, The challenges of phlogistic agents to assess to increase in the thickness of the ear.

In-Vitro Anti-Inflammatory & Antioxidant Activies Of An Ayurvedic Formulation Trayodashang Guggulu:-

Trayodashang Guggulu is used in the Ayurvedic system of medicine for the treatment of various inflammatory conditions such as arthritis and associated pain. The present study investigates the invitro anti inflammatory and antioxidant activities of Trayodashang Guggulu. Trayodashang Guggulu is standardized as per standard procedures and the TLC profile was carried as per Ayurvedic pharmacopeia of India. Invitro anti inflammatory activity of its aqueous extract .In-vitro anti-inflammatory activity of its aqueous extract (AqTG) in different concentrations is evaluated by assaying inhibition of albumin denaturation, membrane stabilization (hypotonicity-induced hemolytic), anti-lipoxygenase, and antiproteinase activities. The in-vitro antioxidant effect is evaluated by various in-vitro methods viz. DPPH (1, 1-diphenyl-2-picryl-hydrazyl), and hydroxyl radical scavenging and reducing power assay and total phenolic and flavonoids contents. Trayodashang Guggulu is confirmed as per pharmacopeia standards. It shows mark as a scavenging effect on DPPH and hydroxyl radicals and exhibited strong reducing potential. It also shows the inhibition of membrane stabilizing, protein denaturation inhibitory, anti-lipoxygenase, and anti-proteinase activities. Trayodashang Guggulu exhibited in-vitro anti-inflammatory and antioxidant activities. This preliminary study supports the therapeutic claim of the formulation as an anti-inflammatory drug in the Ayurvedic system of medicine and advocates its use in inflammatory conditions. In view of the in-vitro results, further in-vivo investigations are needed to confirm and strengthen the anti-inflammatory activity of Trayodashang Guggulu in pain, inflammation, and arthritis.

Challenges and guidelines for clinical trial of herbal drugs:-

Clinical Research On Herbal Drugs : Challenges:-

The treatment of herbal medicine is complex consisting of the mixture of the active component and also the specification regarding their administration. In randomized clinical trials (RCT), blinding a gold standard that eliminates bias and isolates placebo effects. But in the case of herbal medicines, it is impossible to maintain double-blinding as herbal; treatment involves a multidimensional treatment approach involving

counseling. Another challenge involved in the RCT of herbal drugs in the selection of controls. Control is selected such that they closely match with the intervention group as comparator similarities evidence of a specific effect of the herbal medicine. Herbal medicines are individualistic in approach and may not be standardized as a treatment for a population.[21] Moreover, the firm faith and belief may likely to influence the outcomes in trials. Baseline assessments of various psychological factors such as personality and mood must be carried out. Another concern is the problem of drop-ins and sample contamination. The investigators should vigilantly monitor their trial subjects whether they seek out herbal products outside the specified protocol. [11]

CONCLUSIONS:- Herbal medicines are widely used throughout the world since the ancient time these are recognized by physicians and patients for the better therapeutics and also have some fewer adverse effects when compared with modern medicines, The Ayurvedic drugs are origin to better enhance the efficacy. Incorporating in modern dosage form the phyto-therapeutics needs a scientific approach to deliver the components in a novel manner to increase patient's compliance to avoid repeated administration. Novel drug delivery not only reduces the administration to overcome the non-compliance but also helps to increase the therapeutic value by reducing toxicity and increases bioavailability. Recently any scientists are shifted their focus to designing a drug delivery system for herbal medicine but there are any challenges to overcome the difficulty of conducting clinical research in herbal drugs.

REFERENCE:-

- [1]. S. I. Abdelrahim, A. Z. Almagboul, M. E. A. Omer, and A. Elegami, "Antimicrobial activity of Psidium Gujava L.," *Fitoterapia*, vol. 73, no. 7-8, pp. 713–715, 2002.
- [2]. S. Begum, S. I. Hassan, S. N. Ali, and B. S. Siddiqui, "Chemical constituents from the leaves of Psidium Gujava," *Natural Product Research*, vol. 18, no. 2, pp. 135–140, 2004.
- [3]. S.T. Chen, J. Dou, R. Temple, R. Agarwal, K.M. Wu, S. Walker **New therapies from old medicines** *Nat Biotechnology*, 26 (2008), pp. 1077-1083 Google scholar.
- [4]. D. Normile Asian medicine. The new face of traditional Chinese medicine *Science*, 299 (2003), pp. 188-190 Google Scholar.
- [5]. T.W. Corson, C.M. Crews **Molecular understanding and modern application of traditional medicines: Triumphs and trials** *Cell*, 130 (2007), pp. 769-774 Google Scholar.
- [6]. J.Vander Greef, R.N. Mc Burney **Rescuing drug discovery:- In-Vivo systems pathology and system pharmacology** ,*Nat Rev Drug Discovery* ,4(2005) .pp 961-967 Google Scholar.
- [7]. H. van Wietmarschen, K. Yuan, C. Lu, P. Gao, J. Wang, C. Xiao, et al. **Systems biology guided by Chinese medicine reveals new markers for sub-typing rheumatoid arthritis patients** *J Clin Rheumatol*, 15 (2009), pp. 330-337 Google Scholar.
- [8]. The Association of Korean medicine COVID -19 Korean medicine clinical guidance (2nd ed.) (2020) Google Scholar.
- [9]. J.L. Ren, A.H. Zhang, X.J. Wang X.J. **Traditional Chinese medicine for COVID -19 treatment** **Google Scholar**.
- [10]. *Pharmacol Ren*, 155 (2020),p, 104743, 10.1016/ jphrs,2020,104743 [published correction appears in *Pharmacol Res* .2020 Mar 25:104768 Google Scholar
- [11]. Kwon CY, Kwak HY, Kim JW. Using Mind-Body Modalities via Telemedicine during the COVID-19 Crisis: Cases in the Republic of Korea
- [12]. AM Mujumdar; AV Misar. *Indian Journal of Pharmaceutical Sciences*, 2003, 65(5), 554- Google scholar