



ORIGINAL RESEARCH PAPER

Pharmaceutical

FORMULATION AND EVALUATION OF HERBAL CREAM USED IN TREATMENT OF ARTHRITIS A RESEARCH .

KEY WORDS: Herbal cream , Arthritis , Acacia Arabica , Yellow bees wax , Linseed oil

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ABSTRACT
 Herbal cream are the preparations used by human beings in the treatment of various diseases . The aim of the present research was to formulate the herbal cream for the treatment of very painful disease i.e arthritis (Arthritis is a disease generally include joint pain , stiffness , swelling and decreased range of motion of the effected joints) . The present formulation is composed of Acacia Arabica (Kiker) from species Acacia nilotica (linn) , Linseed oil and oil of menthol , camphor and Ajwain (carom seed) . The herbal cream is formulated by two phase system one is oil phase and another is aqueous phase . Herbal cream is formed by using the infusion technique with this technique the formulation was found to be the best one and it gives accurate result . Cream was tested for its consistency and evaluation , with the result it has been found that Acacia Arabica (Kiker) posses anti-inflammatory , analgesic properties. The cream is evaluated for Colour , Foreign particle , Extrudability etc by which the percent of active constituent Acacia Arabica was found to be 98.9 , Colour of cream was found to be pale yellowish , the spreadibility was found to be easily spreadable on skin surface after application , the extrudability was found to be 92 % and passes all the parameters .

Introduction :

Literature review –

- 1- Kumar Kranthi Kotta . et al , (2011) , Formulated and evaluated diacerein cream which are designed to enhance the onset of action . The cream is formed by using the fusion technique. The formulation was found to be a best one which give accurate result.
- 2- Nair S Sujith . et al , (2012) , Formulated and evaluated Herbal cream containing curcuma longa which formulate on the anti – oxidant potential of herbal extracts and its evaluation . Selected plant parts are dried and extracted using 70 % alcohol by maceration . The cream showed good spreadibility and can be used as the provision of a barrier to protect skin .
- 3- Sonalkar Yogesh Manisha . et al , (2016) , Formulated and evaluated Ployherbal cosmetic cream which formulate on the anti – oxidant property of herbal extracts and its evaluation . Cream containing hydro – alcoholic extract of liquorice , neem , papaya leaf . In quality evaluation of formulation (F1 – F6) were done on different parameters like PH , Viscosity , Spreadability and Stability . The cream were found to be stable during stability study .

Significance Study

Significance of this study was to formulate the herbal cream for the treatment of painful disease i.e arthritis . This study is important because 70 % people is suffering from the pain of arthritis in gout and they get the problem in walking also so we have formulate our herbal cream to make relief in their disease .

Objective

This present research work was to formulate and evaluate the herbal cream by infusion method which does not cause any side effects , itching or adverse reactions . The main objective behind this research work to formulate the herbal cream for the treatment of very painful disease i.e arthritis .

Experimental Methods

In the present research , herbal cream was formulated by using infusion method . In this method yellow bees wax was mixed in liquid paraffin , ceto streayl alcohol , linseed oil and menthol , camphor , ajwain (carom seed) oil and then heated on heating mental at 80 degree temperature after that active ingredient Acacia arabica powder weighed on weighing balance and dissolve in water and then boil the mixture for 15 min at 100 degree temperature after that we have removed the beaker from heating mental and let the mixture to be cool till room temperature and

then the infusion was filtered through Whatman filter paper and extract out the active constituent and then the infusion solution again heated upto 70 degree temperature and mixed both aqueous and non aqueous mixture at same temp . mixture was stirred by stirrer , when the temperature decreases the cream ready to formed . The effect of different formulation trials were prepared in table 1 .

Table 1 . Formulation of Herbal cream (F₁ to F₄)

Formulation	Acacia Arabica (gm)	Linseed Oil (gm)	Liquid paraffin (gm)	Bees wax (gm)	Cetostrearyl alcohol (gm)	MCA oil (gm)	Water (Qs)
F1	10	-----	25	10	10	-----	Qs
F2	10	5	20	10	10	-----	Qs
F3	20	20	25	5	10	-----	Qs
F4	20	20	25	10	10	15	Qs

Evaluation of Herbal cream

The Herbal cream was then evaluated for the following physical parameters .

Properties of the cream were studied by Colour , Visual appearance, Foreign particles, Odour, Extrudability and Spreadability .

- **Foreign particles** -- Small amount of herbal cream was taken and spread on a glass slide and was observed against diffused light to check for presence of foreign particles and the cream was found to be free from foreign particles.
- **Colour** -- Colour of cream was observed visually. Cream having Pale yellowish Colour.in our final F4 trail
- **Extrudability** -- Extrudability test is useful empirical test to measure the force which required to extrude the material from a tube and the extrudability of herbal cream was found to be good .
- **Spreadability** -- The spreadibility was found to be easily spreadable on skin surface after application .
- **Odour** -- The Herbal cream was found to be in Pleasant odour .
- **Visual appearance** -- The Herbal cream was found to be smooth and consistent cream did not leave greasy substance on skin surface after application .

Table 2 Evaluation of herbal cream formulation

Parameters	Formulations			
	F ₁	F ₂	F ₃	F ₄

Colour	Off white	Slight white	Pale yellowish	Pale yellowish
Visual appearance	Constancy is slightly hard	Constancy is slightly Hard	Smooth and Consistent cream	Smooth and Consistent cream
Foreign particles	Free from foreign particles	Free from foreign Particles	Free from foreign Particles	Free from foreign particles
Odour	Pleasant odour	Pleasant odour	Pleasant odour	Pleasant odour
Extrudability	Good	Good	Good	Good
Spreadability	Slight hard spreadable	Slight hard spreadable	Easily spreadable	Easily spreadable



Figure 1 – F4 formulation



Figure 2 – Acacia Arabica seed

Results and Discussion

The infusion method was used for the smoothness of cream no solid particle intraptet in it . After observation it was found that cream did not leave greasy substance on skin surface after application In the above formulations trails F4 trial is our best one and our cream pass all the parameters like its colour, visual appearance , Foreign particle, odour, Extrudability and spreadability which were prepared in table 2

Conclusion

It has been concluded that the formulation F4 is best among all four trails and passes al the parameters .

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