

Formulation and Evaluation of Herbal Anti-Aging Preparation

Amit Kumar, Karan Kumar Singh, Supyar Singh

RKDF College of Pharmacy Bhopal

Sarvepalli Radhakrishnan University, Bhopal.

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Address for Correspondence: Amit Kumar (amitmgs05@gmail.com)

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Abstract

Herbal medicines are often viewed as a balanced and moderate approach to healing. Individuals who use them as home remedies and over-the-counter drugs spend billions of dollars on herbal products. This will strengthen the regulatory process and minimize quality breach. In the last few years facial skin beautification has become one of the most important and time consuming tasks during face image editing. When facial skin is manipulated the edited regions should be selected accurately, Thus Anti-aging preparation will be selected for the study.

KEYWORDS: Herbal, Preparation, Face, Skin.

Introduction

The use of herbs as medicine is the oldest form of healthcare known to humanity and has been used in all cultures throughout history. Early humans recognized their dependence on nature for a healthy life and since that time humanity has depended on the diversity of plant resources for food, clothing, shelter, and medicine to cure myriads of ailments. Herbal medicines are often viewed as a balanced and moderate approach to healing. Individuals who use them as home remedies and over-the-counter drugs spend billions of dollars on herbal products. As such, they represent a substantial proportion of the global drug market. To achieve the desired benefit from herbal preparations, an individual must take the required dose over a certain length of time. [1] Plant materials are used throughout the developed and developing world as home remedies, in over-the-counter drug products, and as raw material for the pharmaceutical industry, and they represent a substantial proportion of the global drug market. Therefore, it is essential to establish internationally recognized guidelines for assessing their quality. Certain herbs have

become popular over the years, but the general public, medical practitioners and the media still have a poor understanding of safe and effective use of herbal medicine. Evidence is emerging on the dangers of indiscriminate use of some of these herbs. The assurance of the safety and efficacy of an herbal drug requires monitoring of the quality of the product from collection through processing to the finished packaged product. It is recommended that various government agencies should follow a more universal approach to herbal quality by adopting the WHO guidelines and also developing monographs using the various quality parameters outlined above. This will strengthen the regulatory process and minimize quality breach. In the last few years facial skin beautification has become one of the most important and time consuming tasks during face image editing. [2] When facial skin is manipulated the edited regions should be selected accurately, Thus Anti-aging preparation will be selected for the study.

EXPERIMENTAL WORK

Collection and preparation of plant drug

The proposed plant drug *Bauhinia Variegata* flowers were collected from the local area of Bhopal and authenticated in department of pharmacognosy, RKDF College of Pharmacy, Bhopal. The collected plant drug was converted into moderately coarse powder for further extraction process.

Preparation of Extract

Powdered plant drug was first defatted with solvent like petroleum ether and extracted out with methanol. The Percentage yield was calculated.

Formulation of herbal anti-aging preparation

The (o/w) emulsion based anti-aging serum was formulated. The oily component consisting of olive oil, sandalwood oil, tween 20 and coconut oil is mixed together for 15 minutes to obtain a uniform solution. At the same time the water phase was prepared by mixing the extracts, glycerine and a small amount of distilled water uniformly. The oil phase is added to the liquid phase drop wise under mechanical vibration at 2500 rpm to obtain o/w based on biphasic emulsion. [3,4]

Table: 1.1 Composition of face serum with herbal extract

Ingredients	Standard formula (100 ml)	Working formula (80 ml)
Plant Extract	50%	20 ml
Olive Oil	8%	3.6 ml
Sandalwood Oil	0.1%	0.04 ml
Coconut oil	3%	0.8 ml
Glycerin	25%	10 ml
Tween 20	1%	0.4 ml
Distilled Water	QS to 100 ml	QS to 80 ml

Evaluation of Anti-aging Preparation [5]

Physical Evaluation

The formulations were characterized for organoleptic properties such as colour, odour. The formulations are visually inspected for its clarity and presence of any foreign particles.

Homogeneity

The formulation was tested for the homogeneity by visual inspection and touch

pH Value

A pH meter was calibrated using a standard buffer solution. Nearly 1 ml of the face serum was properly weighed and dissolve in 50 ml of distilled water and finally its pH was calculated. The skin has an acidic range and the pH of the skin serum should be in the range of 4.1-6.7.

Determination of spread ability

2gm of serum sample was placed on the surface. A slide was attached to a pan to which 20 gram weight was added. The time (s) required to separate the upper slide from surface was taken as a measure of spread ability.

Stability studies

The stability study is conducted by keeping the drug substance in their proposed pack or prototype container in the case of bulk drugs, in sufficient number in room temperature away from light.

RESULTS AND DISCUSSION

Physical Evaluation

The formulated herbal anti-aging preparation was evaluated in terms of colour, odour, taste and texture. The findings were reported in table 5.1

Table 5.1 Physical evaluation of formulated herbal anti-aging preparation

Colour	Light orange
Odour	Characteristic
Taste	Tasteless
Texture	Smooth homogenous

Homogeneity

The formulated herbal anti-aging preparation was evaluated in terms of Homogeneity. Result states that homogeneity of the formulated serum was judged by visual appearance and touch. The appearance and touch of the serum was good.

pH Value

The pH of formulation was found to be 6.4. As the skin having an acidic pH around 4.5-6.5, this range of formulation is suitable for skin.

Determination of spread ability

The spread ability of liquid formulation is capacity of the face serum to spread over the skin and play imperative role in administration of standard dose of medicament formulation on skin. Spread ability of formulated herbal anti-aging preparation was found to be 5 to 6 cm.

Stability studies

The formulation was undertaken stability studies for physical and chemical changes. No considerable variations in properties of the formulation were observed. The findings were reported in table 5.2

Table 5.2 Stability studies of herbal anti-aging preparation

Visual Appearance	Light orange
Phase Separation	NIL
Homogeneity	Good

CONCLUSION

A facial enhancement scheme suggested to beautify face by using adaptive edit propagation technique, which enhance the images using different features detector or called as an operator. Here we use the different features detector which decompose the layers into three parts in an effective manner. The layer which is used to enhance the features it is digital image which edit separate different elements of an image. Formulated herbal anti-aging preparation was evaluated for physical evaluation, pH, homogeneity, spread ability and stability studies. The findings of all evaluation parameters were found in limit. So, this herbal anti-aging preparation can be used treat skin related problem.

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