Herbal Ointment

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ABSTRACT: The interest in and use of herbal treatments has grown significantly in recent years, even in locations where access to modern medicine is available. Due to the fact that medicinal plants are the most abundant source of bioactive compounds, plant-derived chemicals and herbal medicines have recently received significant interest for their diverse applications. substances used in both traditional and contemporary medicine. The current work is to develop and assess the ointment made from the extracts of turmeric (Curcuma longa) and neem (Azadirachta indica). The extracts from ethanol were prepared using the maceration process. The ointment basis and formulation of the ointment were completed.By using the levigation process to incorporate the extract into the base. Following formulation, it was assessed. for its physical-chemical characteristics, such as colour, aroma, and pH, extrudability, consistency, diffusion, and spreadability study,

Keywords: Maceration, Levigation, Extrudability, Spredability.

INTRODUCTION:

Herbal medicine has been used for millennia and is being studied in some European and Asian nations. Great effort has been done that is beyond the comprehension and ability of the average person. The 21st century's technologically advanced lifestyle has given human misery a variety of titles.The best solution is to use common herbs because they have no adverse effects and work well as treatments.Herbal medicine can be used on people of any age. When a composition contains two or more herbs.The formulations are referred to as polyherbal.Many investigations have been carried out using the Neem leaf extracts (Azadirachta indica Family-Meliaceae) with turmeric rhizome extracts (Curcuma longa Family-Zingiberaceae) along with a variety of other herbal medications. Ointments, a semisolid preparation used topically for a variety of reasons including protectants, antiseptics, emollients, antipruritics, keratolytics, and astringents, are also available as dosage forms for herbal medications.Neem is made up of Azadirachta indica Family-Melicaceae leaves and other aerial elements. Neem foliage Neem oil also offers numerous benefits, including antibacterial, pesticide, antiviral, and antifertility effects. is being tested for its effectiveness in treating AIDS and has certain qualities.The plant known as Curcuma longa provides the dried and fresh rhizomes that make up turmeric. FamilyZingiberaceae. It is employed as an antibacterial, expectorant, seasoning, or condiment. According to study, it is abundant in antioxidants.Studies have shown that turmeric can be used to treat conditions like arthritis, liver disorders, Alzheimer's, and management of depression.

OBJECTIVES:

To achieve the formulation of efficient herbal ointment,following objectives are charted out;

- To reduce side effects of synthetic formulation.
- To reduce the cost of antiseptic products.
- To avoid the cost of synthetic chemicals to the skin.
- To formulate natural ointment formulation.
- To evaluate herbal antiseptic ointment.
- To help treat anything from dry skin to cuts, scrapes, burns, bite, and haemorrhoids.
- To return the body to a state of natural balance so thet it can heal itself.

MATERIAL AND METHOD:

Collection of herbal material-

Leaves of neem were collected from the local areas and dried rhizomes of turmeric were purchased from the local market.

Preparation of NEEM extract -

The plant's leaves were harvested, properly cleaned with distilled water, and then dried in the shade for ten days. Powder was created by grinding dried leaves. 350ml of 90% ethanol were mixed with 100g of powder.For three hours. And added 150ml of 90 percent percolator.Ethanol for maceration for seven days, occasionally stirring. In the end.To obtain blackish green, ethanolic extract was collected and concentrated Residue. The extract was kept in an airtight container in a cool, dark location Place.

Preparation of TURMERIC extract –
Dried rhizomes of turmeric were ground and the powder obtained was followed for extraction same as that for neem leaves extract.

Sr.No.	Name of ingradients	Quantity to be taken
1.	Prepared Neem extract	0.06gm
2.	Prepared Turmeric extract	0.06gm
3	Ointment base q.s.	10gm

The extractwith crimson red colour was obtained and stored at cool and dark placein air tight container.

Preparation of ointment –
Table 1: Formulation of ointment base

Sr. No.	Name of ingradients	Quantity to be taken
1.	Wool fat	0.5gm
2.	Cetostearyl alcohol	0.5gm
3.	Hard paraffin	0.5gm
4.	Yellow Soft paraffin	8.5gm

Table 2: Formulation of Herbal ointment

Procedure for preparation of herbal ointment:

a) The initial preparation of the ointment base involved precise weighing.Hard paraffin that had been grated and set in an evaporating dish on water bath.Hard paraffin that was once melted is still present.Ingredients were added and gently stirred to aid in melting.Cooling of the ointment base after homogeneous mixing.
b) By carefully weighing out the ingredients, herbal ointment was created. Extracts of neem and turmeric are added by levigation to the ointment base. A technique for making a smooth paste that is two or three times its weight Until to form, of base, adding base gradually until to do so.Homogeneous cream was eventually transferred into a suitable container.

Evaluation:
Colour and odour –
Visual examination was done on physical characteristics like color and smell.
Solubility –
Soluble in boiling water, miscible with alcohol, ether, chloroform.
pH -
An electronic PH meter was used to measure the PH of the prepared herbal ointment.100ml of distilled water was used to prepare the ointment solution, which was then left to sit for two hours. The solution's PH was measured three times, with the average value being computed.

Consistency –
Smooth and no greediness is observed.
Washability –
Formulation was applied on the skin and then ease extend of washing with water was checked.
Non irritancy Test -
Herbal ointment prepared was applied to the skin of human being and observed for the effect.Stability study Physical stability test of the herbal ointment was carried out for four weeks at various temperature conditions like 2oC, 25oC and 37oC. The herbal ointment was found to be physically stable at different temperature i.e. 2oC, 25oC, 37oC within four weeks.
Spreadability -
The spreadability was determined by placing excess of sample in between two slides which was compressed to uniform thickness by placing a definite weight for definite time. The time required to separate the two slides was measured as spreadability. Lesser the time taken for separation of two slides results better spreadability.
Spreadability was calculated by following formula
$S=M\times L/T$
Where,
S= Spreadability
M= Weight tide to the upper slide
L= Length of glass slide
T= Time taken to separate the slides

RESULT AND DISCUSSION:
The goal of the current study was to formulate and assess the herbal ointment. To achieve this, simple maceration was used to prepare the herbal extracts. Process to produce a good yield of extract and there was no harm to.The activity of the chemical elements.The ointment was made using the levigation method to ensure uniformity.The base of the ointment and the herbal extract were mixed together.Remained stable throughout storage.
The physicochemical properties were investigated, and the results are satisfactory.Findings for loss on spreadability, extrudability, washability, and solubility, drying and other things.A stability study of the formulation was also conducted at various locations within four weeks, temperatures as low as 0°C, as high as 25°C, and as high as 37°C.Spreading capacity and diffusion study as a whole showed no changes, also have an irritating effect.

Physicochemical evaluation of formulated ointment:

Table 3: Physicochemical evaluation of formulated ointment

Physiochemical properties	Observation
Colour	Yellow
Odour	Characteristics
Consistency	Smooth
pH	5.4
Spreadability (seconds)	7
Solubility	Soluble in boiling water, miscible in alcohol,ether,chloroform.
Washability	Good
Non irritancy	Non Irritant
Stability study	Stable

Conclusion:
Neem and turmeric have long been used for a variety of purposes such as antibacterial, antifungal, anti-inflammatory, and other medicinal properties.As a result, this ointment might be used as a medium to use these medicinal properties simply and effectively.

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