

Dispersible herbal tablet along with herbal Moisturizing spray for the treatment of psoriasis

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ABSTRACT: Psoriasis is a dangerous condition of skin disorder with about more than 10 million cases per annum in Bharat (India). It causes skin cells to multiply up to ten times quicker than usual. This causes the skin cells to build up into bumpy red patches coated with white scales. These skin patches can grow anywhere on the body however most typically seen on the scalp, elbows, knees, and lower back of the body. It is caused due to imbalance within the immune system, the immune cells start affecting the healthy cells which conjointly results in inflammation and pain.

Scientists have come up with lotions and medications that contain corticosteroids which are harmful for the health fused for a prolong duration of time. This brings us to develop a corticosteroid free spray and mainly herbal Dispersible tablets for the treatment of psoriasis.

The use of phytochemicals has been a validating and a supportive practice for our immune system against infectious since centuries as these naturally occurring drug substance enhance or suppress the immune response suitably according to the need. There are abundant plants which possess immunosuppressive and Anti-inflammatory activities. According to research herbal products are proven to be safe and with least side effects if used for a longer duration of time. The immunosuppressive and Anti-inflammatory activities of various substances existing in herbal sources can be used in making dispersal tablets to suppress immunity against diseases like psoriasis which is caused due to excessive immunity activity. These studies have been determined in this article through literature view. Various techniques are also determined through which segregation, identification and dissolution of such substances could be performed and how the tablets can be prepared and evaluated. Making use of moisturizing herbal ingredients for getting rid of the scaly patches and eliminating irritation caused due to it, by formulation of a spray is also being determined.

I. INTRODUCTION:

Tablet

Tablet is defined as a **pharmaceutical** oral dosage formulation (can be oral solid dosage form) or solid unit dosage formulation. It contains a mixture of active ingredients and other excipients, mostly in powder form, compacted to form a solid dosage formulation. **Tablets** are formulated generally by the method of molding or by compression it.

Spray

A **spray** is a dynamic collection of water droplets which are dispersed in air or a gas. The process of formulation of a spray is called as atomization.

According to research combination of internal and external medication for psoriasis will help reduce the symptoms faster with faster relief. Phytochemicals being very less harmful will be the best choice for the formulation of the medications.

Spray to be used contains:

Active ingredients in spray: chamomile, calendula, aloe, neem,

Chamomile:



chamomile is the general naming for various daisy-like plants belonging to the family Asteraceae. Among all the species that, two are commonly used to prepare herbal infusions for traditional medication, and there are few evidences that say chamomile has a positive effect on health of humans.

Morphology

This is an herbaceous plant and is annual and it becomes 1-2' tall, it branches from occasionally to frequently. The color of stems is light green or purplish green, or only purple and it has fine longitudinal veins; and they are glabrous as well as terete (round incross-section).

Uses of chamomile oil for psoriasis:

Reduces conditions like rashes

Has wound healing property

Anti-inflammatory action

Reduces pain

It Promotes sleep

Calendula:

Calendula genus has about 15–20 different species of annual herbs and perennial herbaceous plants belonging to the family Asteraceae that are most of the times referred to as marigolds. These plants are native to the region of southwestern Asia, and western Europe, and Macaronesia, as well as the Mediterranean



Morphology

This plant lives short life and is aromatic and herbaceous as well as perennial, grows up to 80 cm (31 in) tall, and has sparsely branched lax or sometimes erect stems. The leaves of these plants are oblong-lanceolate, 5–17 cm (2–7 in) in length, have hair on both the sides, has margins entirely or occasionally waved or sometimes is weakly toothed.

Uses of calendula oil for psoriasis:

Anti-inflammatory action

Soothes rashes

Antifungal action

Anti-bacterial action

Aloe:



Aloe vera is a plant that belongs to the succulent species and of the genus Aloe. It is an evergreen and perennial plant, it grows wild in tropical and semi-tropical, and arid climatic regions across the world. Its cultivation is for agricultural purpose and for medicinal uses.

Morphology

Aloe vera is a plant which is very short-stemmed or is a stemless **plant** and it grows up to 60–100 cm (24–39 in) tall, it spreads by offsets. The leaves of these plants are thick and are fleshy, their color ranges from green to grey-green, with few varieties having white flecks on their upper part of the stem and lower stem surfaces. The leaves have serrated margin and has small white teeth

Uses of aloe oil for psoriasis:

Reduces redness

Reduces swelling

Soothes area

Lubricant

Neem:



Neem is commonly known as *Azadirachta indica*, , nimtree or neem Or Indian lilac, is a tree belonging to the mahogany family Meliaceae. It belongs in the genus *Azadirachta*, and is from the

Indian subcontinent. It is specifically grown in tropica regions and semi-tropica too.

Morphology:

Neem is a tree of medium size and it reaches upto 15 to 30 m in height, and has large rounded crown up to 10-20 m in diameter. **Neem** consists of a taproot which is deep and belongs to mycorrhizal-dependent species of plant. Has grey bark, which becomes fissured and obtains flakes in trees that are old.

Uses of neem oil for psoriasis:

Wound healing properties

Antioxidant action

Antimicrobial property

Soothing property

Excipients: Water, aromatic oil

Tablet to be used contains:

Active ingredients for tablet:
Boswellia, curcumin, Aloe vera, Acanthus mollis, Turmeric

Boswellia curcumin



Boswellia is also called as Indian frankincense, it is a herbal extract that is obtained from the Boswellia serrata tree.

Resin prepared from Boswellia herbal extract has been consumed and used for centuries in African and Asian folk medications. It's believed to be used in treatment of chronic inflammatory diseases and in a number of different other health disorders.

Boswellia is combined with curcumin to increase its potency.

Morphology:

It is plant of about medium to large-size, it is deciduous, and a balsamiferous tree, which grows up to 18 m height and 2.4m in width (normally 1.5 m) and is grown and found in dry forests

Uses of Boswellia for psoriasis:

Anti-inflammatory action

Pain relief

Aloevera



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Morphology

Aloe vera is a plant which is very short-stemmed or is a stemless plant and it grows up to 60–100 cm (24–39 in) tall, it spreads by offsets. The leaves of these plants are thick and are fleshy, their color ranges from green to grey-green, with few varieties having white flecks on their upper part of the stem and lower stem surfaces. The leaves have serrated margin and has small white teeth.

Uses of aloe oil for psoriasis:

Uses of aloevera for psoriasis:

It contains all the vitamins and vitamin D is the best vitamin for treatment of psoriasis.

Acanthus mollis:



Acanthus mollis is commonly called as

bear's breeches or sea dock or bear's foot plant or sea holly or oyster plant, it is from the species of plant belonging to the family Acanthaceae.

Morphology

It is an Unbranched, and elongated plant and has inflorescence and sessile flowers. The flower has spiny toothed bract, and have 4 sepals (1 lower, 3 upper) and one labiate white petal with 3 lobes. The plant has large upper sepal with hood shaped and purple colour. It has large tube structure.

Uses of Acanthus mollis for psoriasis:

Anti-inflammatory action
 Reduces pain
 Reduces scalds

Turmeric:

Flowering plant turmeric Or *Curcuma longa* belongs to the family of ginger, Zingiberaceae, and the roots of this plant are used in cooking.

Morphology



Turmeric plants have height of 1 meter (3.3 feet) and they bear long and simple leaves which have long petioles. The leaves originate from the branched rhizomes that lie just below the soil surface. Older rhizomes are somewhat scaly and brown in colour, while young rhizomes are pale yellow to brown-orange.

Uses of turmeric for psoriasis:

Anti-inflammatory action
 Excipients: starch (glidant), chitin and curcragum (natural fast dissolving polymer), Lactose (diluent)

Usage:

We need to use both the spray and the tablet simultaneously.

Tablet will help suppress immunity and inflammatory actions and spray will soothe, moisten and eliminate irritation and pain.

NOTE: According to research Psoriasis cannot be reduced only by topical application. Herbal alkaloid products if used in excess amount can be adverse effect so accurate dosing is needed. (hence tablet dosage form is most accurate).

Manufacturing process of tablet	Manufacturing method of spray:
1. Wet and dry granulation 2. Tablet compressing 3. Tablet coating 4. Evaluation tests (hardness, content uniformity, weight variation test). 5. Packaging 6. Clinical trials	1) Pour the ingredients in the mixing tank. Add little perfume oil (if necessary). 2) Dissolve perfume oil and ingredients completely. Maintaining uniformity. 3) Add required amount of water and mix well. Continue stirring till a homogenous effective liquid solution is achieved. 4) Do pre-launch tests. 5) Packaging. 6) Sales and marketing and Process is completed.

Uniqueness:

- Less cost, more product
- Effective internally (tablet) and topically (spray)
- Rapid action (both)
- Less harmful (both)
- Accurate dose (tablet)
- Wide range (spray)
- Patient compliance (both).

II. CONCLUSION:

According to the study herbal plants can be combined to increase the potency of their uses for the formulation of stay and tablet for the treatment of psoriasis condition.

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