



Effect of Derma New Gel in signs of skin aging

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Abstract:-

Aim of Ayurveda is not only cure the disease but also prevent the disease. In preventive measures 'Jara Chikitsa' is the specialty of Ayurveda which is described in Ashtang Ayurveda and it is mainly concerned to prolong young age i.e. to delayed signs of aging.

Skin is the first body part to show the signs of age. The present study deals with "To Study The effect of Derma-New Gel in signs of skin aging. Three Ayurvedic herbs are used while making Gel Kumari (aloe vera), Taruni (rose) and Kumkuma (saffron). In samhita granthas their tvachya, varnya, kustaghna etc properties are already mentioned. Using these references this clinical trial is done and results obtained are described with proper examination.

Keywords:- Skin aging signs, effect of derma New Gel (Aloe vera svarasa, Rose water, Saffron powder)

Introduction –

Ayurveda is the science of life. In definition of Ayurveda mentioned that,

हिताहितं सुखं दुःखं अयुस्तस्य हितहितं।

मानं च तच्च यत्रोक्तं आयुर्वेद स उच्यते ॥ (च. सु. १/४१)

Science is designated as Ayurveda where advantages and disadvantages as well as happy and unhappy life along with what is good and what is bad for life, is measured and life itself is described. Jara chikitsa is part of Ashtang Ayurveda mainly related to prevent aging .

Skin is the first body part to show the signs of age. Healthy age-related skin changes are inevitable and include thinning, sagging, wrinkling and the appearance of age spots, broken blood vessels and areas of dryness.

Derma New Gel is the gel prepared by using combination of three Ayurvedic herbs which having Tvachya, Varnya, Rasayana Kushtaghna and wound healing property. In this work Kumari svarasa, keshar powder and rose water used in Gel formation. Effect of Derma New Gel in signs of skin aging studied in single case briefly.

Aims – To Study the Effect of Derma – New Gel in signs of skin aging.

Objectives –

1. To study effect of derma new gel in fine lines and wrinkles.
2. To study effect of derma new gel in large pores.
3. To study effect of derma new gel in pigmentation.
4. To study effect of derma new gel in dryness of skin.

Materials and Methods –

Ayurvedic herbs used –

Kumari – Aloe vera

Lattine Name – Aloe Berbadensis

Family – Liliaceae

Part use – Aloe pulp swarasa.

Taruni – Rose

Latine name - Rosa centifolia

Family – Roseceae

Part use – Ark of petals.

Kumkuma – Saffrone

Latin name – Crocus sativus

Family- iridaceae

Part use – punkesar

Material used in formation of Gel –

Carbapol 940, TEP, preservatives (Methyl paraben, Propyl paraben, Sodium benzoate)

Aloe vera pulp, Rose water, Saffron powder, Blebder, Water bath for indirect heat, Standard pH paper, Flask.

Method of Preparation of Gel:

Aloe Vera pulp is extracted from leaves of Aloe Vera excluding green part of it. Aloe vera pulp is crushed in mixture and grinder to make aloe vera juice. The 150 gm juice is taken in flask, 150 gm rose water and 0.5 gm saffron powder added in to it. The mixture is heated indirectly in water bath for 5 to 10 minutes. Carbapol 940 (1 – 5 %) added slowly with a small spoon upto gel like consistency appears and mixed with a blender. About 5 gm Carbapol 940 used for making gel like consistency. pH of gel like form is checked with pH paper (pH 6). TEP (1 – 2 %) added in gel form drop wise and mixed well to make uniform gel. Finally pH of gel checked which is of neutral in nature (pH 7). The all three preservatives like methyl paraben (3 mg), propyl paraben (5 mg) and sodium benzoate (5 mg) are added in aloe vera gel form and stirred well with blender. Gel is allowed to cool down and packed in 75gm packing bottle. Test is done on selected parts of body of volunteer and volunteer is instructed for restrict the use of moisturisers, creams from 1 day before examination to throughout the treatment i.e. for 1 months.

Observations of product used :-

Sr. No	End Product	Observation
1.	Temperature	37 ⁰ C
2.	Colour	Light orange
3.	Consistency	Gel
4.	Appearance	Semitransparent
5.	Reaction	Neutral
6.	Smell	Mild pungent

Description of Final Product:

- Type of formulation obtained: Gel
- *Panchbautik parikshan* –
 - Shabda – Nil.
 - Sparsha – Smooth.
 - Roopa – Light orange semitransparent.
 - Rasa – Nil.
 - Gandha – Mild pungent.
 - Transperency – Semitransparent.
 - pH – 7.0
 - Intial weight – 300 gms.

Final weight obtained – 270 gms

Weight loss – 30gms.



Saffron and Rose water



TEA, Carbapol 940 and pH paper



Reason for weight loss – 1. Heating of aloe vera juice solution.
2. Gel is stuck to container.

Examination of patient

Weight of volunteer is measured by weighing machine.

Temperature is measured with the help of clinical thermometer.

Temperature of axillary region is measured.

Blood pressure of volunteer is measured with the help of Sphygmomanometer.

Pulse is measured by palpation method. Radial pulse is measured for one minute

Tongue is examined by Darshan pariksha.

Questions are asked to volunteer for Mala, Mutra, Kshudha, Diet, Rasabhiruchi, Exercise, addictions.

Special skin examination is done before and after result to be noted.

Test is done on selected parts of body of volunteer and volunteer is instructed for restrict the use of moisturisers, creams from 1 day before examination to throughout the treatment i.e. for 1 months.

Patient is advised to prevent consumption of spicy meal. *Katu, amla, lavan ahar. Ushnaha.*

Avoid stress.

Exercise regularly.

Internal medicine – Paripathadi Kadha 2 tsp twice aday wth ½ cup of water.

Kushmad avleha 1 tsp at rasayan kala.

External use – Derma new Gel application on face and hands twice a day after proper cleaning with water.

Results and Observations:

Case Record form

Name of volunteer: Anjirabai Gopichand Wadile

Address: Utkarsh colony, Sakri road, Dhule.

Age: 63 years

Sex: Female

Case No.: 1

Occupation: Housewife

Date: 15/11/2016

Habitat: Dhule

Addiction – no

Present Complaint If Any:

Wrinkles, fine lines on hands and all over face since 2 years.

General examination -

Nadi- Pittapradhan

Mala - Samyak

Mutra – Samyak

Jivha – Sshad saam

Kshudha – Kshudhamandya

Druk - NAD

Akriti – Madhyam

Diet: Mix

Rasabhiruchi : Amla Lavan Katu abhilashi

Type of Skin - Dry skin

Special Skin Examination:

Skin texture – Rough

Colour – Normal

Acne and sequel – No acne and sequel.

Pigmentation – Black spots

Hypopigmentation – NO

Hirsutism - NO

Oedema – NO

Skin tone – Decreased

Signs of skin aging of face

Sr. No.	Signs	Before treatment	After treatment
1.	Fine lines – around eye, chick, forehead	Severe +++	Moderate ++
2.	Wrinkles – all over the face hands more on forehead	Severe +++	Moderate ++
3.	Pigmentation – blackish pigmentation on cheek	Mild +	Mild
4.	Sagging – present at maxillary region	Moderate ++	Moderate ++
5.	Dryness of skin – all over dry skin. Scratch test +ve and there is no much oil on tissue paper	Severe +++	Mild +
6.	Large pores	Moderate ++	Mild +



Results –

Fine lines, wrinkles, dryness and large pores are decreased significantly while pigmentation reduced slightly and sagging has no effect after use of Derma New gel for 1 month.

Discussions: (Mechanism of action)

Synonyms of aloe vera itself are **Ajara, Amara**. Aloe vera has *mukhyakarma* **Rasayan** karma i.e. has power of Rejuvenation of cells, work in **diseases of Pitta, Rakta and Skin**. It has excellent **wound healing property**.

The gel / mucilage is wound healing agent in its fresh state scientific evidence of aloe wound healing property was first documented in 1935.

Aloe stimulates fibroblast and epithelial cells growth, induces lectin like responses in human cells and promote neuron like cell growth.

According to Ayurveda cause of *vali* i.e. early wrinkles is due to pittapradhan dosha prakriti and aloe is very good *Pittashamak* property and specifically work on *pitta, Rakta, and twacha*.

Taruni Ramtaruni – It has Laghu. Snigdha guna. Main function of it is Varnya, It is blood purifier. Used in Pittavikar and Raktavikar. It pacifies action of all the elevated Tridoshas. Use in skin diseases, all types of leprosy, pacifies Ushna and Tkshna guna of Pitta. Help to improve complexion and glow of skin. It released stress.

Saffron

Karma – It is used in Skin Diseases like Leprosy, pigmentation. It has excellent wound healing property. It increases complexion of skin. It removes pigmentation of all type and maintained homogenous color of skin.

All above references shows that all three ingredients in this Gel are Pittashamak, twachya, all are having Snigdha guna. Aloe and Rose improve moisture content of skin and decrease aging signs i.e. wrinkles, dryness fine lines. Saffron mainly act on pigmentation and improve skin color.

Clinical Indication-

Dry skin, Wrinkles and fine lines, Pigmentation, Melasma, Under eye black circles

Contraindications-

No such contraindications are there.

Problems faced during preparation –

During preparation though expected pH reached. Consistency seems to be more liquid than that of gel but when that cooled down it converts in to gel form. So that observing pH and trial and error method amount of carbapol 940 is decided.

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