

## Effect of Ayurvedic Yog (formulations) - Herbal Antibiotic, Beautiful Skin and Clear Skin lotion - on established cases of some skin disorders Psoriasis, acne and fungal infections

Syed Sadiq Abbas, S. Shabihe Raza Baqri, Agha Parvez Masih, Afroz Zareen Athar, Syed Faiz Mujtaba and Kumar Gaurav Bajpai  
Deptt. of Zoology, Shia P.G. College, Lucknow

### Abstract

Skin disorders like psoriasis, acne and fungal infections have varied etiological factors in their genesis, immune and hormonal systems appear to take part in the chronic infections with super added infections in the lesions. These make the conditions very less amenable to modern dermatological therapies. Established cases of psoriasis (23), acne simplex (16) and chronic fungal infections (10) were treated for a period of 8 months and assessed clinically for improvement of their lesions, frequency of exacerbations and remissions, compared to pre-treatment period (each case served its own control) and post treatment period of 1-2 to 8 months at regular intervals and further observed till the end of one year for remissions.

The results of our study suggest that almost all cases of skin disorders, which were frustrated with modern therapy after years of treatment improved after treatment from the 2nd month onwards to 8th month and upto one year (4 months of cessation period). In psoriasis, acne fungal infection the recurrence was very low as compared to pre-treatment periods. Skin disorders are multifactorial diseases, skin ectoderm most sensitive to allergic, immune disturbances, super added infection, painful and chronic disabling features. The neem capsules and lotion used in these cases of skin disorders showed encouraging results in preliminary clinical studies. Hence cases of psoriasis, acne and fungal infections were evaluated with a set of treatment procedures at the clinic. This study provides ample proof for a successful treatment of skin disorders and this is a novel approach for such treatment with multiple herbals, which possesses immunomodulatory, hormone balancing, anti-allergic, antibacterial, antifungal and antiviral properties.

**Key words:** herbal treatment, psoriasis, acne, fungal infections, novel approach.

### 1. Introduction

Chronic skin infections play a major role, on psyche of the individual, as they are not easily controllable and treatable skin disorders like Psoriasis, acne and fungal infections have varied etiological factors in their genesis, immune and hormonal systems appear to take part in these chronic infections with super added infections in the lesions. These make the conditions very less amenable to modern dermatological therapies. In most: of the cases the patients suffering is inevitable, affecting social, occupational and relational functions. Neem (*Azadirachta indica*) has been described invariably to be used in many skin disorders (Singh, 1983) and Raktchandani (*Pterocarpus santalinum*) (Kirtikar and Basu 1933), Manjeet (*Rubia cordifolia*) (Hooker, 1982), Haldi (*Curcuma longa*) (Kirtikar and Basu 1933), Tulsi (*Ocimum sanctum*) (Jogeta, 1986), Guruchi (*Tinospora cordifolia*) (Vaidyaratnam, 1996) are described skin friendly in Ayurvedic texts. Hence, a clinical evaluation of the herbs was made in the skin disorders. Preliminary studies with Neem and Beautiful Skin capsules and topical use of clear skin lotion in some cases of common skin disorders was found to show very encouraging results. This prompted us to clinically evaluate the effect of these herbals in cases of psoriasis, acne and fungal infections with a set of treatment procedures at the clinic.

### 2. Materials and Methods

Diagnostically established cases of psoriasis (23), acne simplex (16) and chronic fungal infections (10) consecutively attending clinic were treated for period of 8 months and assessed clinically for improvement of their lesions, frequency of exacerbations and remissions, compared to pre-treatment period (each case served its own control) and post treatment period of 2 to 8 months at regular two months intervals and further observed till the end of one year for remissions. All of these were failure cases of modern and other therapies and reported for herbal treatment on their own or

patient to patient recommendation basis whose conditions were markedly benefited by our treatment. No side or toxic effect was observed in any case during this period of treatment. Same treatment schedule was followed in each group of cases except in some cases female acne, capsule of Shatavari (*Asparagus racemosus*) - 400mg twice daily was also given in addition to this treatment. The treatment consisted of both oral and local applications. Each patients was treated with Herbal Antibiotic (Ayurvedic Yog) containing Neem (*Azadirachta indica*) leaves, flowers and twigs - 325 mg 2 capsules twice daily with meals, Beautiful Skin (Ayurvedic Yog) of - 350 mg 1 capsule twice daily containing Raktchandani (*Pterocarpus santalinum*), Manjeet (*Rubia cordifolia*), Neem (*Azadirachta indica*), Haldi (*Curcuma longa*), Tulsi (*Ocimum sanctum*), Guruchi (*Tinospora cordifolia*) and Clear Skin lotion (Ayurvedic Yog) containing Neem (*Azadirachta indica*) extract, eucalyptus oil and olive oil. These are certified organic herbs free from toxic chemicals and harmful pathogens.

23 cases of chronic plaque psoriasis, which is the commonest form, involving upper and lower limb (n=9), scalp and trunk (n=6), palm and soles (n=5) and whole body >80% of body surface (n=3) were treated and assessment of each group was done from every 2 month till 8 months. All cases were chronic ranging from a period of 5-10 years.

The study of acne simplex was conducted in 16 (10 females + 6 males) consecutive patients with mild and moderate acne as classified by Bershad (2002), non-inflammatory lesions (open and closed comedones), inflammatory lesions (papules and pustules), and nodulocystic lesions, after due consent of volunteers of 16-22 age groups. Duration of disease ranged between 2-3 years and these cases again were failure with modern therapies.

10 cases of severe, fungal infections spreading over the lower part of leg with black swollen spot and thick skin plaques were included in this study.

### 3. Results

The results of our study suggest that almost all cases of skin disorders, which were frustrated with modern therapy after years of treatment improved after our treatment from the 2nd month onwards to 8th month and upto one year (4 months of cessation period). In psoriasis, acne and fungal infection the recurrence was very low as compared to pre-treatment periods. (Table 1,2,3)

The significant improvement in these skins disorders and helped to improve the psychological setbacks with which the patients usually suffered.

The results of treated Psoriasis cases are significant and summarized in Tables 1. Upper and lower limbs showed slow but steady recovery, 81.2% recovered after 8 months treatment while the maximum 82.6% recovery occurred in the cases of scalp and trunk, 76.1% and 74.5% recovery occurred in cases of palms and soles and whole body respectively. In two case recurrences occur in upper and lower limbs cases and one in each in cases of scalp & trunk and whole body after one year. Remissions were reduced during treatment period and upto one year (4 months after cessation of treatment).

The results of acne are summarized in Table 2 and are highly significant. The acne cases were treated for consecutive 8 months and all the symptoms like papules, pustules, nodules, open comedones and closed comedones disappeared slowly in this period. They were analyzed for one year but no relapse was observed. In female patients where acne eruptions were related to menstruation cycle Shatavari capsule was also added to their treatment and the results were better in these hormone related acne eruptions.

The results of fungal infections are summarized in Table 3 and were highly significant all the patients were treated for 8 months during this period 100% recovery occurred in the affected areas. And no relapse was observed even after one year of treatment.

### 4. Discussion and Conclusion

Skin disorders are multifactorial diseases, skin ectoderm is most sensitive to allergic, immune disturbances, super added infection, painful and chronic disabling features. Hence, a multiple focus broad-spectrum treatment is required and this we felt can be covered by our herbals with many natural bioactive, substances.

Psoriasis is a non contagious chronic inflammatory disease characterized by rapid growth of the outer skin layer, resulting in thick, silvery flakes of scale on raised pinkish red skin with well-defined margins. Itching is often experienced in hot humid climates. Chronic plaque psoriasis is the most common form of psoriasis. It is a papulosquamous disease characterised by erythematous plaques with a silvery scale. The diagnosis usually is clinical. Almost 30 percent of affected patients have a first-degree relative with the disease. Psoriasis is a T-cell-mediated autoimmune disease, but certain medications and infections are well-known risk factors. Management of psoriasis includes education about chronicity, realistic expectations, and use of medication. Steroids and vitamin D derivatives (e.g. calcipotriene) are the mainstays of topical therapy. Topical steroids and calcipotriene together may work better than either agent alone. However, all allopathic treatments have little or no effect on the outcome of these diseases and only act as palliative therapy; hence the need of our herbs was obvious to treat them.

Acne is a common skin disorder, which consists of blackheads, white heads, red spots, and sometimes deeper boil like lesions called nodules or cysts.

It afflicts most of the teenagers. The exact cause is unknown. In some cases when hormone levels increase during puberty, the skin of the acne prone person reacts by producing excess sebum (oils). The bacteria on the skin alter these oils to produce substances that cause acne. The hair follicle, the site of acne may get plugged with dead skin cells. Sebum and bacteria may accumulate and cause pimples.

In chronic fungal infections, various germs such as fungi and bacteria live harmlessly on the skin and inside the body. However certain types of fungus, or overgrowths of normally harmless types can cause the symptoms of a fungal infection of the skin. Most fungal skin conditions are not serious and are usually not easily spread from person to person. Infections deeper in the body can be more serious. The symptoms and appearances of a fungal skin infection depend on the type of fungus causing it and the part of the body affected. The rash may have a variety of appearances. Some are red, scaly arid itchy, whereas others can produce a fine scale similar to dry skin. The site of infection may be just one area of the body, or there may be several infected areas. Fungal infections of the scalp or beard can lead to hair loss. Fungal rashes can sometimes be confused with other skin conditions, such as psoriasis and eczema.

Neem (*Azadirachta indica*) has been described invariably to be used in many skin disorders and herbs of Beautiful Skin are described to be skin friendly in Ayurvedic texts, hence, a clinical evaluation of the herbs was made in these skin disorders. The neem capsules and lotion used in these cases of skin disorders showed encouraging results in preliminary clinical studies. Hence cases of psoriasis, acne and fungal infections were evaluated with a set of treatment procedures at the clinic. Our herbs proved superior to modern therapy available today for these skin disorders and provide better hope for chronic sick patients of skin diseases. This is a novel approach for such treatment with multiple herbals, which possesses immunomodulator, hormone balancing, anti-allergic, anti-bacterial, antifungal and antiviral properties.

**Table 1**

**Psoriasis cases and recovery**

Site of involvement	Pre-treatment Mean	Recovery (% ± SE)				Pre-treatment Remission	Post treatment Remission	Reoccurrence in after 1 year**
		0	2	4	6			
Duration of treatment in months	0	2	4	6	8	In one month		No. of cases
Upper & Lower limb	100	20.1±3.2	36.7±4.1*	64.3±6.2*	81.2±7.8*	3 - 5	1 - 2	2
Scalp & Trunk (n=6)	100	23.5±3.4*	41.4±4.5*	69.8±6.6*	82.6±7.9*	1 - 4	0 - 1	1
Palms & Soles (n=5)	100	17.4±2.9	32.3±3.9	61.1±5.9*	76.1±6.8*	1 - 3	0	0
Whole body (n=3)	100	19.2±3.1*	34.1±4.0*	59.2±5.8	74.5±6.7*	1 - 2	0 - 1	1

Value of significance \*p < 0.05

\*\* 4 cases relapsed out of 23 cases in different groups after one year (4 months of cessation period)

**Table 2**

**Mean counts of inflammatory and non-inflammatory acne lesions over the study period of 8 months {n=9 males+7 females (5 cases related to hormonal disturbances\*)} average age 16-22**

Duration (in months)	Papules	Pustules	Nodules	Open Comedones	Closed Comedones
Control	Mean No. (X±SD)				
Pre Treatment	24.21±5.5	4.21±1.5	0.84±0.51	8.64±3.51	14.24±2.51
1	20.11±4.5*	2.11±1.1*	0.84±0.48	6.04±2.46*	10.14±2.15*
2	13.22±3.3*	1.22±0.9*	0.52±0.29*	4.12±2.07*	07.12±1.89*
3	09.12±2.7*	0.72±0.7*	0.37±0.21*	2.87±1.71*	03.87±1.62*
4	4.12±1.5*	0.30±0.4*	0.22±0.17*	1.22±1.10*	1.32±1.11*
5	1.80±0.9*	0.12±0.2*	0.10±0.09*	0.71±0.82*	0.84±0.76*
6	NIL	NIL	NIL	NIL	NIL
7	NIL	NIL	NIL	NIL	NIL
8	NIL	NIL	NIL	NIL	NIL

Value of significance\* p < 0.05

No relapse was observed in these patients even after one year. (4 months after cessation of treatment)

\*In female patients (n=5) where acne eruptions were related to menstruation cycle, 1 capsule (400mg) of Shatavari was also added which proved very effective as a hormonal balancer.

**Table 3**  
**Fungal infections and recovery**

Site of, involvement	Number. of cases	Duration in months	% Area Infected (Mean $\pm$ SE)	% Area Recovered (Mean $\pm$ SE)
Leg & foot Severe fungal infection	10	0	100	Nil
		1	87 $\pm$ 0.3	11 $\pm$ 1.7*
		2	77 $\pm$ 0.7	20 $\pm$ 2.3*
		3	66 $\pm$ 0.3	31 $\pm$ 2.7*
		4	32 $\pm$ 0.2	64 $\pm$ 3.8*
		5	22 $\pm$ 0.9	73 $\pm$ 4.1*
		6	14 $\pm$ 0.8	80 $\pm$ 5.2*
		7	0	All clear
		8	0	No relapse

Value of significance\* $p < 0.05$

No relapse even after one year (4 months of cessation period i.e. without treatment)

## References

1. Kirtikar, K.R. and Basu, B.D. (1933): *Pterocarpus santalinum*, Indian Medicinal Plants 2nd Edition. Pub. Lalit Mohan Basu. M.B. 49, Leader Road, Allahabad, India. 1: pp 826.
2. Hooker, J.D. (1882): *Rubia cordifolia*, Flora of British India. London: L. Reeve & Co., 5, Henrietta Street', Covent Garden. Bishen Singh Mahendra Pal Singh 23-A New Connaught Place Deharadun - 248001, India 1982, Printed in India at Jayyad Press, Ballimaran, Delhi. 3: 202.
3. Singh, R.S. (1983): *Azadirachta indica*, Vanaushadhi Nidarshika (Ayurvedic Pharmacopoeia) Uttar Pradesh Hindi Sansthan (Hindi Samiti Prabhag) Raj shree Purushottamdas Tandon Hindi Bhawan, Mahatma Gandhi Marg, Lucknow. Print. Jeewan Shiksha Mudralaya Pvt. Ltd., Golghar, Varanasi. 2nd Edn, 217.
4. Kirtikar, K.R. and Basu, B.D. (1933): *Curcuma longa*, Indian Medicinal Plants 2nd Edition. Pub. Lalit Mohan Basu. M.B. 49, Leader Road, Allahabad, India. 4: pp 2423.
5. Jogeta, G.C., Devi, U., Singhatgeri, M.K., Singh, N. and Kohli, R.P. (1986): Radiation modifying effects of *Ocimum sanctum* on mouse survival. Proc. of Indian Science Congress, Jaipur. 20.
6. Vaidyaratnam P.S. Varier's Arya Vaidya Sala Kottakkal. (1996): *Tinospora cordifolia*, Indian Medicinal Plants. ,Editors: Warriar, P.K., Nambiar, V.P.K. and Ramankutty, C. Printed in India at Krystal Offset, Chennai. Pub. Orient Longman Limited 160 Anna Salai, Chennai. 5: pp 283.
7. Bershad S, Kranjac, S.C., Parente, J.E., Tan, M.H., Sherer, D. W. Persaud, A.N. (2002): Successful treatment of acne vulgaris using a new method: Results of a randomised vehicle-controlled trial of 'short-contact therapy with 0. 1% tazarotene gel. Arch. Dermatol. 138:481-9.