

Effect of Nimbidin in Psoriasis - A Case Report

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A male aged 60 having psoriatic lesions of 13 years duration with no family history of skin diseases was taken for the clinical trial. 72 days treatment was given with nimbidin. This has provided encouraging response. Though a single case cannot be considered as sufficient to draw viable data, yet it can be taken up as showing a lead of therapeutic usefulness of the drug nimbidin. Research studies on a number of cases is in progress and it will take some time to confirm the results of study.

Introduction

Psoriasis is a chronic, recurrent papulo-squamous dermatosis with silvery gray scaling papules of plaques. It is a commonly occurring condition and constitutes 2-4 percent of all cases of skin

diseases *Melia azadirachta* Linn (*Nimba*), a common drug widely used in various types of skin diseases in Ayurveda. One of the active principles isolated from the oil of *Melia azadirachta* Nimbidin was taken for the present clinical study. Nimbidin is an amorphous bitter principle which on graded hydrolysis gives nimbidinic acid and a tetra nor tri-terpene nimbidin. It is fairly soluble in alcohol and melts at 90-100°C. Preliminary clinical trial with Nimbidin on psoriasis has been reported by Nair *et al* (1978). They reported subsidence of the psoriatic symptoms in 2 to 20 weeks time with Nimbidin.

Materials and method

The isolate Nimbidin was administered as capsules (containing 100mg of the powder) and was administered internally at a dose of one capsule three times daily. 1 gm of Nimbi-

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din was mixed well in 100mg of coconut oil. The suspension so obtained was used for external application.

A male patient aged 60 years with well-defined psoriatic lesions with no complications was taken for clinical trial. A daily intake of about 2400 calories containing of non-vegetarian diet rich in proteins is provided.

Necessary laboratory investigations including routine blood examinations like TC, DC, ESR, Biochemical examinations, L.F.T. skin biopsy were carried out besides having photographs of the case at different stages.

The patient on examination on 18th January, 1979, presented red flat discoid papules and in certain areas they coalesced and they were scars on scalp, chest lumbo-sacral region and lower limbs. The papules soon became covered with whitish silvery-white lamellar scales.

On scraping had a tendency to develop stearin macule symptoms. Itching, erythema were present over the lesions.

These lesions were persisting for a period of 2 years inspite of the various treatments he had all through.

History revealed 13 years duration of psoriatic lesions. Patient gave no family history of skin diseases. Previously he had been hospitalized a number of times. He had taken modern as well as Ayurvedic treatment; but only temporary relief was noted during those periods. The patient was moderately built, not anaemic and had no lymphadenopathy. Pulse 74/minute, regular, all peripheral pulsations were normal, blood pressure was 126/86 m.m. Hg Cardiovascular, respiratory and other systems showed no abnormality.

He was given 72 days treatment. Figures I and I.a. show condition before treatment and II and II. a. after treatment. Table I presents the therapeutic efficacy of nimbidin in psoriasis. Number of days taken for the subsidence of the symptoms are also indicated. Table II represents the routine blood examination results, before and after treatment. Table III shows the pathological report of skin biopsy.



Fig. I (a)
Before treatment



Fig. II
After treatment



Fig. I (b)
Before treatment



Fig. II (b)
After treatment

TABLE I

Symptoms present before treatment.	No. of days taken for subsidence of each symptoms.
i. Red flat discoid	14 days-Again developed after 12 days-Subsided completely again after 15 days.
ii Long existing papules (Coalesced into patches Distribution - scalp, chest, Lumbo-sacral region and lower limbs)	66 days - subsided completely
iii. White lamellar scales	45 days - subsided completely.
iv. Tendency to develop stearin macule symptoms on scraping (Auspitz sign)	38 days - subsided completely.
v. Koebner's phenomenon	42 days.
vi. Itching	47 days - subsided completely.
vii. Erythema	14 days - Again developed after 12 days; subsided completely after 15 days.
viii. Fissures over the lesion	30 days.
ix. Assessment of response	GOOD

TABLE II

Routine blood examination

Before treatment		After treatment	
T.C. 7900/cmm		T.C. 7200 (mm)	
D.C		D.C	
Poly	-52%	Poly	-58%
Lymph	-40%	Lymph	-33%
Eosino	- 7%	Eosino	- 9%
Mono	- 1 %	Mono	- -
Hb	-11.5gm	Hb	-12gm.
VDRL	No reaction	VDRL	No reaction
E.S.R.	- 18mm/hr	E.S.R.	- 8 mm/hr

TABLE III

Report of the Pathologist

Clinical diagnosis - Psoriasis

Nature of specimen - Skin

Macro - Small bit of skin

Micro - Shows reaction from skin with the epithelium showing hyperkeratosis. The retepegs show a tubular form in some areas. Dermis shows small collections of round cells.
Picture is suggestive of Psoriasis.

After 72 days regular administration of nimbidin the patient was found to have recovered from all the symptoms of psoriasis. His general health was improved and body weight increased from 62 kg to 64 kg. No side effects were noted during or after the treatment.

Thus the clinical effect of the drug Nimbidin shows that it helps in clearing the psoriatic lesions completely without any side effects. External application of Nimbidin suspension healed the fissures developed over the lesions and also controlled the itching.

Follow-up study of the case is still continuing for last one month and he was not provided any other medicine. No symptoms of recrudescence were seen.

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सारांश

निम्बिडिन का प्रयोग एक सोरियासिस के रोगी पर किया गया। तेरह वर्षों से पीड़ित इस रोगी को ७२ दिनों की चिकित्सा दी गयी। रोगी को उत्साह-वर्द्धक लाभ मिला। अन्य सोरियासिस रोगियों में इसका अध्ययन अभी चल रहा है।

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