A Clinical Study of Nimba Patol Kashaya with Vaman & Virechan in Psoriasis

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Abstract:

Background: Psoriasis is an autoimmune papulosquamous dosorder that represent an inflammation pattern of the skin to various stimuli. It is characterized by sharply demarcated erythematous plaque/patches/papules covered with silvery scaling. Psoriasis is a common dermatological problem affecting up to 2.5% of the world population. While various researches have been made in the field of Medical Science, but still there is no absolute, simple, safe & invariably effective permanent cure of Psoriasis has been attain. In Ayurveda a special treatment advocated for Psoriasis i.e. Vaman & Virechan. Vaman is the process in which waste products i.e. vitiated doshas are eliminated through the upper channels i.e. through the mouth. To expel out the doshas through the adhobhag i.e. gud(anal route) is known as Virechan. The efficacy of Samshaman drugs have been increased when used after Samshodhan. So the effect of Nimba Patol Kashaya have very good results when taken after the process of Vaman & Virechan karm.

Aim: To evaluate the effect of Nimba patol Kashaya with Vaman Karm in Psoriasis.

Method: We had registered 21 patients randomaly for the trial with Nimba patol Kashaya with Vaman Karm in OPD, Department of Kaya Chikitsa, S.A.C. Lucknow. Period of study was March 2007 to May 2008.

Administration of trial Regimen: We have performed 2 courses of Vaman & 2 courses of Virechan .Vaman Karm was performed with decoction of Madanphal(Randia spinosa), Mulethi(Glycerrhiza glabra), Indrayav(Holarrhna antidysentrica), Patol(Trichosanthes diocea), Nimba(Azadirecta indica), Madhu & Saindhav at fortnight interval and Virechan Karm was performed with decoction of Trivrit (Operculina turpethum), Danti (Baliospermum montanum), Haritaki (Terminalia chebula), Amalaki (Embelica officinales), Vibhitaki(Terminalia bellirica) at fortnight interval. The Nimba Patol Kashaya have been given for internal administration in the dosage of 40 ml BD. The internal administration with Nimba Patol Kashaya have been started after the completion of 1st Vaman Karm.

Result: After 4 months of treatment with Nimba patol Kashaya with Vaman & Virechan Karm ,15 patients (71.43%) were relieved, 5 patients (12.8%) were improved & 1 patient (4.76%) was remain unchanged.

Conclusion: The internal intake of Nimba Patol Kashaya with Vaman & Virechan Karm is highly efffective in patients of Psoriasis.

Keywords: Skin, Ayurveda, Psoriasis, Vaman, Virechan, Nimba patol Kashaya

I. Introduction

Skin is the largest organ of the body which protects the body from the outer environment. It is the organ, that reflects many internal disease by changing it's character. Psoriasis is an autoimmune papulosquamous disorder that represent an inflammation pattern of the skin to various stimuli. The classical lesion of Psoriasis is a well demarcated raised red plaque with a white scaly surface. However the color of a psoriatic plaque depends on the thickness of the scale and whether it is adherent or loosely bound. The Aetiology of Psoriasis is still poorly understood. The factors responsible for this disease are: 1-Immune mediated 2-Genes 3-Structural alterations 4-Biochemical alterations. 5-Provocation / Precipitating / Exacerbation / Trigger factors-a) Infections b) Reaction to certain medications c) Skin injury d) Stress e) Weather f) Others. 1

Psoriasis is a common dermatological problem affecting up to 2.5% of the world population. It is more prevalent in the temperate climate & among white races. It is most common in North America, Western Europe, Keneya and Uganda & uncommon in Mongoloid Asians, Negroes of East Africa and Japaneese.In India it has 1% incidence. Psoriasis can affect both male & female. The age group often attack is 15 to 40 year.²

In Ayurveda many skin disease have been described under the umbrella of Kushtha. Kushtha has two major division i.e. Mahakushtha & Kshudrakushtha. Eka-kushtha has been enumerated first in the list of Kshudrakushtha³. The features of Eka-kushtha⁴ as described by Acharyas Charak are Aswedanam (Loss of sweating), Mahavastu (Spread of lesion). Matsyashakalopamam (Silvery scaling). An another feature of Eka-

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kushtha i.e. Krishna-arun varnata⁵ (Blackish red discoloration) has also been described by Acharya Sushruta. All these features of Eka- kushtha resembles the disease Psoriasis in Modern Medicine.

In Ayurveda Psoriasis is best treated by Samshodhan⁶ & Samshaman⁷ Chikitsa.To eliminates the bodily doshas by its root and to stop the recurrence of disease, it is very essential to use the Samshodhan Chikitsa before giving any drug orally or locally(i.e. Samshaman Chikitsa). Vaman & Virechan are the two major procedure of Samshodhan Chikitsa.Vaman is the process in which waste products i.e. vitiated doshas are eliminated through the upper channels i. e. through the mouth. Specially kapha dosha is eliminated through the process of Vaman Karm⁸. The procedure of elimination of doshas through adhobhag (guda- anal route) is known as Virechan⁹.

Acharya Charak has described eight Kashayas (decoctions) for skin diseases in the 7th Chapter of Chikitsa Sthan named Kushtha Chikitsa¹⁰. Out of seven Kashayas,Nimba Patol Kashaya is oneof them,,Nimba Patol Kashaya is the decoction made with boiling cleaned, dried & yavkut [Nimbapatra(Azadirecta indica) & Patolpatra(Trichosanthes diocea)]^{11,12} in 16 times of water till water remaines 1/8th ¹³.

While various researches have been made in the field of Medical Science, but still there is no absolute, simple, safe & invariably effective permanent cure of Psoriasis has been attain. In Psoriasis the drugs are very limited and produces many side effects whenever used. So there is a need of hour to have a drug, which give very good result with minimal recurrence and with less side effects.

So this study planned to see the effect of Nimba Patol Kashaya with following objectives.

II. Aim & Objective

To evaluate the effect of Nimba Patol Kashaya with Vaman & Virechan in Psoriasis.

III. Material & Method

Case selection & Study design

We had registered 21 patients randomly for the trial of Nimba Patol Kashaya with Vaman & Virechan, from OPD, Department of Kaya Chikitsa, S.A.C. Lucknow. Period of study was March 2007 to May 2008. Student paired t test applied for statistical analysis.

Inclusion Criteria

Patients having 50% or more of the following clinical symptomatology were selected for the trial.

- **1.** Aswedanam(loss of sweating)
- 2. Mahavastu(spread of lesions)
- **3.** Matsyashakalopamam(silvery scaling)
- **4.** Krishna-arun varnata(blackish red discoloration)

Exclusion Criteria

- 1. Complicated cases of Psoriasis with superadded infections.
- 2. Cases under high doses of corticosteroids.

Criteria of Diagnosis

Cases of Eka-kushtha(Psoriasis) diagnosed according to clinical features of Eka-kushtha i.e. Aswedanam(loss of sweating), Mahavastu(spread of lesion) & Matsyashakalopamam(silvery scaling) & Krishna arun varnata(Blackish-red discoloration).

Grading of Symptoms

Symptoms are graded according to severity of disease as O (nil), + (mild),++(moderate) & +++ (severe).

1. Aswedanam (loss of sweating)

Nil - O (normal sweating)

Mild - + (little sweating even in hot climate at the site of lesion)

Moderate - ++ (much less sweating even in hot climate at the site of lesion)

Severe - +++(no sweating at all even in hot climate & skin becomes dry)

2. Mahavastu (spread of lesions)

2.A. No of lesions -

Nil - O (Absent of lesion)
Mild - + (1-5 lesions)
Moderate - ++ (6-10 lesions)
Severe - +++ (>10 lesions

2.B. Size of lesions-

Nil - O (Absent of lesion)
Mild - + (<5 cm in size)
Moderate - ++ (5-10 cm in size)
Severe - +++ (>10 cm in size)

1. Matshyashakalopamam (silvery scaling)

Nil - O (absent of symptoms)

Mild - + (scales sometime appear at the site of lesion)

Moderate - ++ (scales does not remove on scraping)
Severe - +++ (scales itself remove on lying)

2. Krishna-arun varnata (Blackish- red discoloration)

Nil - O (absent of symptoms)

Mild - + (Redness at the site of lesion)

Moderate - ++ (Blackness at the site of lesion)

Severe - +++(Reddish blackness at the site of lesion)

Trial Regimen & Dosages

The trial regimen & dosages are given below:

S.N.	CHIKITSA	DRUGS	INTERVAL	DURATION
1	SAMSHODHAN	Vaman Kalp ¹⁴ [Madanphal(Randia spinosa),		
a-	Vaman Karm	Mulethi(Glycerrhiza glabra), Indrayav(Holarrhena	Fortnight	4 month
		antidysentrica), Patol (Trichosanthes diocea),	interval	
		Nimbapatra(Azadirecta indica), Madhu &		
		Saindhav] ^{11,12}		
b-	Virechan Karm	Virechan Kalp ¹⁵	1 month	4 month
		[Trivrit (Operculina turpethum), Danti	Interval	
		(Baliospermum montanum),Haritaki (Terminalia		
		chebula), Amalaki (Embelica officinales),		
		Vibhitaki(Terminalia bellirica) ^{11,12}]		
2-	SAMSHAMAN	[Nimba(Azadirecta indica), Patol(Trichosanthes		
	Nimba Patol	diocea)] ^{11,12}	-	4 month
	Kashaya			

Preparation methods of drugs

1- Preparation method of Vaman Kalp

Ingredients: Madanphal (Randia spinosa), Mulethi (Glycerrhiza glabra), Indrayav(Holarrhena antidysentrica), Patolpatra(Trichosanthes diocea), Nimbapatra(Azadirecta indica).

Method All the contents of Vaman Kalp were cleaned, dried, yavkut & mixed in equal quantity, kept in packing of 100gm each and was used as decoction for the purpose.

2- Preparation method of Virechan Kalp

Ingredients: Trivrit (Operculina turpethum, Danti (Baliospermum montanum, Haritaki (Terminalia chebula), Amalaki (Embelica officinales), Vibhitaki(Terminalia bellirica).

Method: All the contents of Virechan Kalp were cleaned, dried, yavkut & mixed in equal quantity, kept in packing of 100gm each and was used as decoction for the purpose.

3- Preparation method of Nimba Patol Kashaya

Ingredients: Nimbapatra (Azadirecta indica), Patolpatra (Trichosanthes diocea).

Method: Each content of Nimbapatol Kashaya were mixed in equal quantity and packing of 250gm were prepared and placed in air tight container and used as decoction for the purpose of internal administration.

Follow Up

Patients of Psoriasis have been called for 1 month interval for 4 month.

Assessment Criteria

Assessment of clinical improvement was done according to severity of signs & symptoms. To assess the severity symptoms grading scales was used. Difference in scaling before & after treatment and during follow up was tested for significantly bio-statistical methods.

IV. Result

The result was assessed on the basis of improvement in clinical feature in terms of Aarogya (Relieved), Kinchit Aarogya (Improved)& Anaarogya (Unchanged).

- 1. Aarogya (Relieved) more than 70% relief in clinical feature.)
- 2. Kinchit Aarogya (Improved) 50-70% relief in clinical features
- **3.** Unaarogya (Unchanged) less than 50% relief in clinical features.

Table 1: Showing the response of NimbaPatol Kashaya with Vaman & Virechan on Aswedanam (loss of sweating) in Psoriasis

	Severity	Seve.	Mod	Mild	Nil	%age	No of cases Improved	No of cases Relieved	%age Relieved	\mathbf{X}^2	P
	Before Tt	13	6	2	0	0					
	After 1 st month	11	4	4	0+2	9.52					
	After 2 nd month	8	3	5	0+5	23.80	6	15	71.43	55.18	<0.001(s)
n=21	After 3 rd month	0	4	9	0+8	38.09					
	After 4 th month	0	1	5	0+15	71.43					

Table 2A :Showing the response of NimbaPatol Kashaya with Vaman & Virechan on Mahavastu(Number of lesion) in Psoriasis

	Severity	Seve.	Mod	Mild	Nil	%age	No of cases Improved	No of cases Relieved	%age Relieved	X ²	P
	BT	4	14	3	0	0					
	After 1st	3	12	4	0+2	9.52					
	month										
	After	2	9		0+4	19.04					
	2 nd month			6							
	After	0	5		0+8	38.09	_		66.67	43.53	<0.001(s)
n=21	3 rd month			8			7	14			
	After 4 th	0	2	5	0+14	66.67]				
	month										

Table 2B: Showing the response of NimbaPatol Kashaya with Vaman & Virechan on Mahavastu (Size of lesion) in Psoriasis

	Severity	Seve.	Mod	Mild	Nil	%age	No of cases Improved	No of cases Relieved	%age Relieved	\mathbf{X}^2	P
	Before Tt	3	14	4	0	0					
	After 1 st month	2	12	5	0+2	9.52					
	After 2 nd month	1	9	7	0+4	19.04					
n=21	After 3 rd month	0	5	8	0+8	38.09	7	14	66.67	41.10	<0.001(s)
	After 4 th month	0	2	5	0+14	66.67					

Table 3: Showing the response of NimbaPatol Kashaya with Vaman & Virechan on Matshyshakalopamam(Silvery scaling) in Psoriasis

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	Severity	Seve.	Mod	Mild	Nil	%age	No of cases Improved	No of cases Relieved	%age Relieved	\mathbf{X}^2	P
							mproveu	Keneveu	Keneveu	Λ	1
	Before Tt	15	6	0	0	0					
	After 1st	12	3	4	0+2	9.52					
	month										
	After 2 nd	8	3	5	0+4	19.04					
	month										
n=21	After 3 rd	0	4	9	0+8	38.09	6	15	71.43	62.22	<0.001(s)
	month										
	After 4th	0	0	5	0+15	71.43					
	month										

Table 4: Showing the respons of NimbaPatol Kashaya with Vaman & Virechan on Krishnaarunvarnata(Blackish-red discoloration) in Psoriasis

	Severity	Seve.	Mod	Mild	Nil	%age	No of cases Improved	No of cases Relieved	%age Relieved	\mathbf{X}^2	P
	Before Tt	4	11	1	5						
						23.80					
	After 1st	3	8	3	5+2						
	month					9.52					
	After 2 nd	2	6	4	5+4						
n=21	month					19.04	7	14	66.67	24.18	<0.001(s)
	After 3 rd	0	4	6							
	month				5+6	37.80					
	After	0	2	5							
	4 th month				5+9	56.25					

Table 5: Showing the overall improvement after 4 month of treatment

S.N.	Result	No of patients	%age
1.	Aarogya	15	71.43
	(Relieved)		
2.	KinchitAarogya	5	12.8
	(Improved)		
3.	Anaarogya	1	4.76
	(Unchanged)		

V. Discussion

In Ayurvedic Classics all skin diseases have been described under the heading of Kushtha. The word Kushtha denotes 'Kushnati vapu iti kushtham'¹⁶ means the conditions which deforms the skin is called Kushtha. Kushtha is broadly divided in to Mahakushtha & Kshudrakushtha. Eka-kushtha has been enlisted first in the list of Kshudrakushtha, it may be due to its predominance & prevalence in the society.

The clinical features of the Psoriasis are loss of sweating or dryness,erythematous plaques & scaling, and these features mimic the features of Eka- kushtha i. e. Aswedanam(loss of sweating), Mahavastu(spread of lesion) & Matsyashakalopamam(silvery scaling). So it can be correlated with Psoriasis.In some Research Institution, Psoriasis is correlated with Kitibha¹⁷ & Sidhma¹⁸.

Vaman & Virechan are the two major purificatory process of Panchakarma adopted for the present clinical trial. Vaman & Virechan process eliminates toxins from the upper and lower part of the GIT respectively. Thus we can said that bodily dhatus are nourish by metabolites transported from one part to another part of the body through different types of macro and micro channels. Any alteration in the functioning of theses channels leads to maltrasportation of metabolites to different parts when required for nutrition or excretion. This disturbances ultimately leads to genesis of the disease process. Hence Vaman & Virechan process helps to clean and rejuvenate them for ensuring a proper transportation of the metabolites. The effect of Nimba Patol Kashaya have been increased when it is used after Vaman & Virechan. So Nimba Patol Kashaya is highly effective with Vaman & Virechan.

The drugs of Nimba Patol Kashaya i.e. Nimba(Azadirecta indica) &Patol (Trichosanthes diocea) have Kandughna & Kushthaghna properties¹⁹.

We were randomly selected 21 patients of Psoriasis for the clinical trial for a period of 4 months. Nimba Patol Kashaya were given for internal administration in this clinical trial.

The effect of treatment have been observed in 21 patients of Psoriasis. Patients were examined before and after the completion of trial. Before treatment Aswedanam(Loss of sweating) was present in almost all cases of Psoriasis & after treatment it was relieved in 15 patients & 5 patients & 2 patients were shifted to mild & mod grade of severity respectively. Overall percentage of improvement was 71.43% ($x^2 = 55.18$, p< 0.001, S).

Out of 21 patients, 3 patients were of severe grade, 14 patients were of mod. grade & 4 patients were of mild grade of severity of Mahavastu(Size of lesion) & after treatment it was relieved in 14 patients and 5 patients & 2 patients were shifted to mild & mod grade of severity respectively. Overall percentage of improvement was 66.67% ($x^2 = 43.53$, p<0.001, S).

Out of 21 patients 4 patients were of severe grade, 14 patients were of mod grade & 3 patients were of mild grade of severity of Mahavastu(No of lesion) & after treatmentit was relieved in 14 patients and 5 patients & 2 patients shifted to mild & mod grade of severity respectively. Overall improvement was 66.67% ($x^2=41.10$, p<0.001, S).

Out of 21 patients 15 patients were of severe grade & 6 patients were of mod grade of severity of Matsyshakalopamam(Silvery scaling) & after treatment it was relieved in 15 patients and 5 patients & 1 patient shifted to mild & mod grade of severity respectively. Overall improvement was 71.43% ($x^2=62.22$, p<0.001, S).

Out of 21 patients 4 patients were of severe grade, 11 patients were of mod grade & 1 patients were of mild grade of severity of Krishna-arunvarnata (Blackish-red discoloration) & after treatment it was relieved in 5 patients and 2 patients were shifted to mild & mod grade of severity respectively. Overall improvement was 66.67% ($x^2=24.18$, p<0.001,S).

So after 4 months of treatment with Nimba Patol Kashaya with Vaman & Virechan, 15 patients(71.43%) were relieved, 5 patients(12.8%) were improved & 1 patient (4.76%) was remain unchanged.

VI. Conclusion

The following conclusion have been drawn after 4 month of trial with Nimba Patol Kashaya with Vaman & Virechan in patients of Psoriasis :

- 1. After the end of trial the clinical features were subsided as Aswedanam(Loss of sweating) 71.43%, Mahavastu (Size & no of lesion) 66.67% & Matsyashakalopamam (Silvery scaling) 71.43% & Krishna arun varnata (Blackish- red discoloration)66.67%.
- 2. The internal use of Nimba Patol Kashaya has Antibacterial, Antifungal, Carminative, Appetizer and Blood purifying effect.
- 3. No side effects have been observed with the internal use of Nimba Patol Kashaya.
- 4. No major side effects have been observed during the process of Vaman & Virechan but in some cases diarrhea in the process of Vaman & Vomiting in the process of Virechan have been seen.

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