

## **EFFECTIVENESS OF HOLISTIC APPROACH IN THE CASES OF PLAQUE PSORIASIS WITH THE AID OF SYNTHESIS REPERTORY**

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**Keywords:** *N SAIDS : Non-Steroidal Anti-Inflammatory Drugs; PASI: Psoriasis Area & Severity Index; PDI : Psoriasis Disability Index; P/H: Past History; P.P. : Plaque Psoriasis; Pt. : Patient; PUVA: Psoralen and Ultraviolet A; RADAR: Rapid Aid to Drug Aimed Research; Rx: Treatment; S. Q: Status Quo; t calc.: t calculated; t tab.: t tabulated; TNF: Tissue Nectrotizing Factor*



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**Introduction:** Psoriasis, is a chronic disease of the skin marked by red patches covered with white scales. The plaque type of psoriasis is the most common. It is becoming more frequent with the trend of westernization. The disease is more common in men than in women. There are two main peaks of incidence, the first of which is in the second half of the second decade of life.

Psoriasis is associated with several comorbidities, including Psoriatic arthritis, metabolic syndrome and cardiovascular disease, Gastrointestinal and Liver disease, Malignancy and Depression.

Psoriasis is a key disease in the cluster of Psycho-cutaneous disorders, due to the intimate interplay between psychosocial factors and psoriasis therefore this study is directed to see the efficacy of a General Repertory i.e Synthesis Repertory, which is based on general to particular concept to approach towards patients suffering from psoriasis, in which not only psoriasis is to be treated but the patient as a whole is also taken into consideration.

This is a hospital based study where 30 randomly patients were selected from the outpatient department and then by following principles of homoeopathy treatment was provided using Synthesis Repertory from RADAR 9.0 with proper management.

Assessment of the selected patients was done by using PASI, PDI and VAS to assess not only the clinical symptoms but also its psychological parameters which according to homoeopathy is important to treat the patient as a whole, at every follow-up.

Study was conducted at O.P.D./I.P.D. of Dr. Madan Pratap Khunteta Homoeopathic Medical College, Hospital & Research Centre, Station Road, Jaipur & O.P.D. at Homeopathy University, Saipura, Sanganer, Jaipur.

**Aims and Objectives:**

AIMS: To study the outcome of holistic approach in the patients of Plaque Psoriasis.

OBJECTIVES: 1. To observe the effectiveness of Synthesis Repertory from RADAR 9.0 in patient of Plaque Psoriasis. 2. To observe changes in Psoriasis Area & Severity Index (PASI) 3. To evaluate quality of life of patients using Psoriasis Disability Index (PDI) 4. To study the extent of itching in the cases of Plaque Psoriasis using Visual Analogue Scale (VAS)

**Materials and Methods:**

Tools:

1. Case Taking Proforma
2. Patient Information Sheet & Patient Consent Form
3. Synthesis Repertory from RADAR 9.0
4. PASI, PDI & VAS

Duration of Study: 1 year; all cases were registered within 12 months of study with effect from 24/06/2014 to 23/06/2015.

Detailed case taking & clinical examination was carried out to clinch the diagnosis. Effectiveness of the Homoeopathic treatment was assessed according to statistical principles on the basis of change in the score taken before and after treatment with Homoeopathic medicines as well as subjective feeling of improvement.

Inclusion Criteria:

1. Patient belonging to age group more than 5 years & sex with good mental health.
2. New cases of Plaque psoriasis having plaque size greater than 1 × 1 cm (measuring by using a mathematical scale), one or multiple over body (apart from other types of psoriasis which will not be included).
3. Older cases of Plaque psoriasis showing relapse after 4 weeks of stopping the previous homoeopathic or other modes of treatment.
4. Patients who have left the previous treatment for the same with their consent for 4 weeks or more.

5. Patient with their independent consent for this research and agrees for regular follow-ups.
6. Exclusion Criteria:
7. Cases not fulfilling the inclusion criteria.
8. The cases requiring emergency treatment involving any other system of body.
9. The cases that did not gave their consent for research.
10. The cases without proper follow-up.
11. The cases that showed poor compliance.
12. Pregnant & Lactating mothers not included.

### **Study design**

1. Allocation : Non-Randomized
2. Type of Study : Interventional, Non-Controlled, Prospective
3. Endpoint Classification: Efficacy Study

**Result Criteria:** Following parameters would be fixed according to the type of the response obtained after the treatment –

- Cure - > 90% improvement in PSAI, PDI & VAS score for a period of 3 months along with feeling of mental & physical well-being & no relapse of symptoms upto 6 months or more. Change in the PASI & PDI was the primary outcome. Change in the VAS was the secondary outcome.
- Improved –
  1. Mild improvement: 0 - <30% improvement in PSAI, PDI & VAS scores.
  2. Moderate improvement: 30 - <60% improvement in PSAI, PDI & VAS scores.
  3. Marked improvement: 60 - <90% improvement in PSAI, PDI & VAS scores.
- Status quo - When there was no change in the condition of the patient.
- Worse - When there was no improvement in condition of the patient and instead his/her condition got worse in respect to PSAI, PDI & VAS scores. This was assessed in view of homoeopathic aggravation, disease and medicinal aggravation. Counseling of patient was done accordingly; if aggravation was continued for more than 30 days, was considered as “Worse”.
- Dropped out – When patient discontinued the treatment during the course of study or showed poor compliance. Patient could willfully withdraw from the study anytime; was considered as dropped out.

**Benefits of the Study:**

1. Study will provide strong evidence of efficacy of Homoeopathic interventions.
2. Allows standardization of study maneuver and outcome assessment.

**Discussions and Summary:**

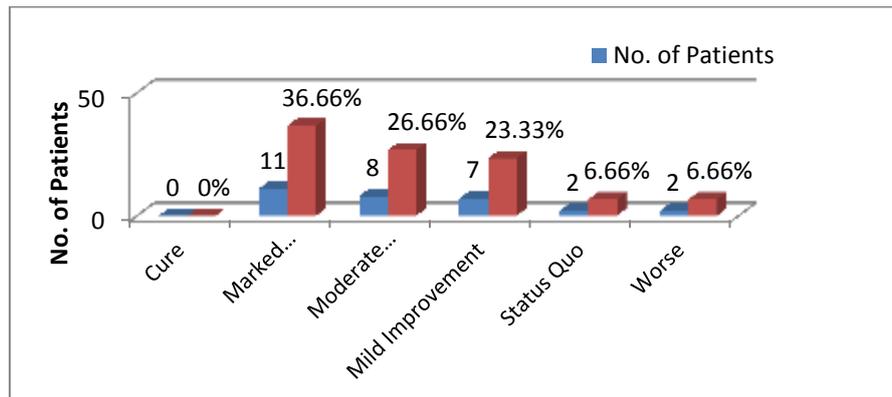
Maximum incidence of Plaque Psoriasis was observed in the age group 21-30 years i.e. 10 cases (33.33%) whereas minimum incidence was in age group 51 years and above.

Maximum cases of Plaque Psoriasis were observed in Male Patients i.e. 20 cases (66.66%) in comparison to female patients i.e. 10 cases(33.33%).

It had been observed that maximum number of cases i.e. 20 cases (66.66%) had a family history of Hypertension and Diabetes mellitus followed by 12 cases (40%) of Skin affections and 9 cases (30%) with Respiratory affections in family history, followed by 8 cases (26.66%) with family history of Cardiovascular disorders. So, no specific family history makes a patient prone to P.P; confirming the irregular autosomal transmission.

In this study, Sulphur was prescribed in maximum number of cases i.e. 14 (46.66%) followed by Lycopodium in 6 cases (20%), Natrium muriaticum in 5 cases (16.66%). Whereas, 2 cases (6.66%) each were prescribed with other cases Nux vomica, Arsenicum album, Mercurius solubilis & Sepia succus. Natrium carbonicum, Lachesis mutus, Petroleum, Argentum nitricum, Calcarea phosporicum, Phosphorus, Pulsatilla, Natrum sulphuricum, Phosphorus, Kalium arsenicum, Graphites & Berberis aquifolium, were prescribed in 1 case (3.33%) each. The variability of selection of medicine is according to individuality of the patient.

According to this study 200 C potency is more indicated potency based on susceptibility of the patient in the treatment of the cases of P.P., followed by higher potencies.



### Result:

This study showed no cured case probably due to less study duration due to which we were not able to prescribe higher potencies on the other hand over-drugging of cases from conventional treatment which makes cases difficult to cure. Frequent repetitions were difficult with Centesimal potency, 50- Millesimal potencies can be used to reduce the aggravation time and speedy improvement.

### Paired t-test of First and Final Scores of PSAI, PDI & VAS

	Mean	Standard Deviation (S.D)	t	d.f.	p - value
PSAI Scores	7.9000	6.50962	3.654*	29	.001
	4.4133	4.62495			
PDI Scores	15.8667	7.51887	6.671*	29	.000
	8.7000	6.25961			
VAS	4.2667	1.68018	-.333 <sup>NS</sup>	29	.742
	4.4000	1.58875			

\*- Singnificant at 1% level of significance. NS- Not significant.

### Correlation

Correlation is a measure to find the degree of linear relationship between two variables. In this study, correlations between PASI & PDI and PASI & VAS are calculated using

following formula:

$$r = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_{i=1}^n (x_i - \bar{x})^2} \sqrt{\sum_{i=1}^n (y_i - \bar{y})^2}}$$

Where,  $x_i$ = Difference of PSAI scores of first and final follow-up of  $i^{\text{th}}$  patient,

$y_i$  = Difference of PDI/VAS scores of first and final follow-up of  $i^{\text{th}}$  patient,

$n$  = sample size.

For testing of significance of correlation coefficient, we perform t-test given below.

**Null hypothesis  $H_0$ :** There is no correlation between increment of PSAI and PDI/VAS

**Alternative hypothesis  $H_1$ :** There is significant correlation between increment of PSAI and

PDI/VAS scores.  $t = \frac{r\sqrt{n-2}}{1-r^2} \sim t_{n-2}$

We reject the null hypothesis at  $\alpha\%$  level of significance if calculated value of  $t$  is greater than tabulated value of  $t$  with  $(n-2)$  degrees of freedom (d.f.) at the same level of significance or the p-value corresponding to the test is less than  $\alpha\%$ .

The  $t_{\text{calc}}$  for PSAI score first and final was 3.654 where  $t_{\text{tab}}$  is 3.038. the  $t_{\text{calc}}$  for PDI first and final score was 6.671 with  $t_{\text{tab}}$  to be 3.038, showing significant results in the primary outcome if the study; at 5 % level of significance.

The VAS findings were  $t_{\text{calc}} = -0.333$  &  $t_{\text{tab}} = 3.038$ ; at 5 % level of significance which concludes that no significant change has come out in itching levels of cases.

Frequency distribution of VAS shows scores at first follow-up showed mild to moderate itching level i.e. 20 cases. The final scores of VAS showed increased levels of itching i.e. from moderate to severe itching showing in 16 cases.

**Conclusion:** We propose that plaque psoriasis can be treated following holistic approach i.e. considering patient as a whole and not mere symptomatology of the affected part; and the routine use of therapeutic prescriptions can be avoided.

However, more studies of longer duration are required to establish the above proposal.

200 Centesimal potency was found safe to start the treatment with least aggravation followed by higher dilutions as the individual case indicates.

Pruritus was found inevitable even when the PASI was improved more than 70%; itching assessed using VAS was not improved. As Psoriasis is sub-inflammatory in nature, itching is due to mechanical separation of cuticle due to enhanced turn over of epidermal cells which could be simply allayed by use of emollients topically like Coconut oil which we suggested to our patients who had less relief in itching by Homoeopathic intervention.

**Limitation of study:**

The study period was short and for conforming the conclusions using centesimal scale potency long term studies are essential. More studies using 50- Millesimal potency can be conducted to have minimum aggravation and speedy recovery.

More studies are needed, to investigate the root cause behind Plaque Psoriasis and to find solution to the itching experienced before & after homoeopathic treatment following holistic approach.

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