# Effect of Root Heal Therapy (RHT) on Melasma: A Quincy **Experiment** Dr. Kusum Gaur<sup>1</sup>, Dr. Anamika Tomar<sup>2§</sup>, Dr. Saroj Purohit<sup>3</sup>, Dr. Mahesh Sharma<sup>4</sup>,

Dr. Dilip Raj<sup>5</sup>

<sup>1</sup>Senior Professor, Department of Community Medicine, SMS Medical College, Jaipur (Rajasthan) India <sup>2</sup>Junior Resident, Department of Community Medicine, SMS Medical College, Jaipur (Rajasthan) India. <sup>3</sup>Senior Professor, Department of Skin and VD, SMS Medical College, Jaipur (Rajasthan) India <sup>4</sup>Principal Medical Officer, Health Department, Rajasthan State Government, Jaipur (Rajasthan) India <sup>5</sup>Associate Professor, Department of Community Medicine, SMS Medical College, Jaipur (Rajasthan) India <sup>§</sup>Corresponding author's Email: dranny27@gmail.com

Abstract—Melasma is a very common skin disorders which has no fix treatment schedule and is very difficult to treat. This present study was planned to compare the effect of traditional treatment alone and in combination with Root Heal Therapy on Melasma cases. A Quincy experiment was conducted on 60 patients of Melasma, who were taking treatment from a same physician working in Charak Bhawan, a hospital attached to SMS Medical College, Jaipur (Rajasthan). Out of these 67 melasma cases were completed the protocall, out of that 35 were in group who has received traditional treatment, 32 were in group who has received RHT along with traditional treatment. Baseline status of Melasma with its Severity its impact on quality of life was assessed. Severity of Melasma was assessed through MASI scores and quality of life was assessed by Dermatology Life Quality Index (DLQI) scores. These cases were followed for 6 months; again they were assessed as per MASI. Changes in over this period Melasma severity in both the groups were compared with Chi-square test and Unpaired't' test. It was found that significantly more cases were benefited with this RHT in the form of number of severity of Melasma and quality of life was also significantly improved with RHT. Further researches are required for further details.

Key Words: Melasma, MASI scores, Dermatology Life Quality Index (DLQI), Root Heal Therapy (RHT).

#### I. **INTRODUCTION**

The term "melasma" is derived from the Greek word "melas" meaning black. (Zanieri F, 2008).<sup>1</sup> It is a commonly acquired hypermelanosis characterized by irregular brown patches occurring primarily on the forehead, cheeks and chin in a mask-like distribution.<sup>2</sup>

It is a third most commonly cited skin disorders was pigmentary problem diagnosed most often, other two are post-inflammatory hyperpigmentation and vitiligo.<sup>3</sup>

The exact prevalence of Melasma is unknown in most of the countries. The reported prevalence of Melasma ranges from 8.8% among Latino females in the Southern United States to as high as 40% in the South-east Asian population.<sup>4,5</sup> In India it is the most common pigment disorder.<sup>5,6</sup> The exact prevalence in India is also not known although prevalence among paddy field workers in India reached 41%.<sup>5,6</sup>

As aetiology of Melasma is not very clear so the treatment is also not fixed. So treatment of Melasma is very difficult that's why a study was planned to find out the added effect of another treatment therapy i.e. Root Heal Therapy in Melasma.

### II. METHODOLOGY

A randomized control Quincy experimental study was conducted on Melasma cases attending in Skin OPD of Charak Bhawan an attached hospital in SMS Medical College Jaipur. This study was conducted on 60 patients of asthma taking treatment from a single physician.

Every clinically diagnosed case of melasma attending at Skin OPD of Charak Bhawan an attached hospital in SMS Medical College Jaipur, was included in this study excluding patient having systemic or local causes of pigmentation and patients on drugs like minocycline, chlorpromazine, amiodarone, antimalarials etc.

Sampled 70 case (35 in each group) were interrogated as per predesigned semi-structured performa including bio-socio-demographic details along with details of Melasma lesion. After taking details as perfoma, severity of Melasma was assessed by Melasma Severity Score Index (MASI). MASI Score schedule is for recording the data related to the affected area (A), hyper pigmentation/darkness (D) and homogeneity of pigmentation (H) at four regions i.e. forehead (F), right malar region (RM), left malar region (LM) and chin (C).<sup>7</sup>

MASI scores were calculated as follows:-

MASI Score=0.3(DF+HF) AF + 0.3(DMR+HMR) AMR + 0.3(DML+HML) AML + 0.1 (DC+HC) AC

MASI Score for calculating the index of severity of Melasma where total score ranges from 0 to 48. The total score correlates with the highest possible severity of the disease. This MASI tool for assessing the severity of Melasma was reported reliable and valid.<sup>22</sup> Severity grading of Melasma is done as per MASI scores as follows:-

Melasma Grading	MASI Scores
Mild	0-16.9
Moderate	17-32.9
Severe	33-48

Quality of life was assessed by DLQI scores. In DLQI,<sup>8</sup> there are 10 questions, covering the following heads: symptoms, embarrassment, shopping & home care, clothes, social & leisure, sport, work or study, close relationships, sex and treatment. Each question refers to the impact of the skin disease on the patient's life over the previous week.<sup>9</sup> Each question is scored from 0 to 3, giving a possible score range from 0 (meaning no impact of skin disease on quality of life) to 30 (meaning maximum impact on quality of life). Impact of Melasma on quality of life was graded as follows:

Quality of life of Melasma Cases	DLQI Scores
No effect on patient's life	<2
Small effect	2-5
Moderate effect	6-10
Very large effect	11-20
Extremely large effect	21-30

After taking written informed consent from each of patients, these 70 cases were randomized by alternate allocation into two group i.e. Group 'A' who has given only the traditional treatment and Group 'B' were given Root Heal Therapy along with traditional treatment. But after 6 month, out of these 35 completed traditional treatment and 32 patients completed RHT along with traditional treatment. These 67 cases were assessed on the same ground as in starting of study.

**Root Heal Therapy**: Patients assessed for "Chakra Block Test" having 56 questions.<sup>10</sup> By this questionnaire it can be found out that which Chakra is blocked with what emotion. That emotion of that Chakra is further investigated for exact cause of emotion blocking the Chakra. According to root cause found out by this procedure, psychotherapy was given in the form of practicing uposit emotion which has blocked a specific Chakra.

**Statistical Method:** Data thus collected were compiled in MS Excel worksheet 2007 in the form of master chart. Changes over this period in Melasma severity in both the groups were compared with Chi-square test and Unpaired 't' test.

## III. RESULTS

Out of 70 patients, 67 (35 in group 'A' and 32 in group 'B') has completed the study. Mean age in Group 'A' was observed  $33.65 \pm 7.04$  years whereas in a Group 'B' it was  $32.22 \pm 6.8$  years. There was a slight female preponderance in both the groups i.e. M:F ratio being1:1.4 in Group 'A' and 1:1.1. Likewise in both the groups were having about 5 times urban dominance over rural. These both groups were comparable as per studied bio-demographic variables i.e. there was no significant difference in distribution of cases as per age, sex and residence. MASI scores and DLQI scores were also comparable in both the groups. (Table 1)

Dusemie companison of Group 11 una Group D						
S. No.	. Variables		Group A (N=35)	Group B (N=32)	P Value LS	
1	Bio-demographic Variables	Age	$33.65\pm7.04$	$32.22\pm6.8$	>0.05 NS	
		M:F	17:18	14:18	>0.05 NS	
		U:R	28:7	27:5	>0.05 NS	
2	Severity of Melasma	MASI Score	$13.07\pm6.02$	$12.01\pm5.06$	>0.05 NS	
3	Impact on Quality of Life	DLQI Score	$10.08 \pm 4.65$	$10.24\pm5.03$	>0.05 NS	

Table 1 Baseline Comparison of Group "A" and Group "B"

When MASI scores of both group were compared it was significantly more decrease in group received RHT with traditional treatment than who has received only traditional treatment. (Table 2)

Table 2Comparison of Change in MASI Scores in both groups			
riables	Group A (N=35)	Group B (N=32)	Р

Variables	Group A (N=35)	Group B (N=32)	P Value LS
Baseline	$13.07\pm 6.02$	$12.01\pm5.06$	0.440 NS
Endline	$10.65\pm8.32$	$6.16 \pm 4.58$	0.009 S
Mean Change	$2.42\pm7.04$	$6.0\pm4.74$	0.018 S

When number of cases in various grades of severity of Melasma were compared in both the group it was found that there was significant decrease in number of sever grades of melasma cases in patients who has received RHT with traditional treatment than who has received only traditional treatment. (Figure 1)

Figure 1 Comparison of severity grades of Melasma before and after interventions in both groups



Chi-square (Before and After Intervention in Group A) = 0.558 at 2 DF P=0.756 LS=NS Chi-square (Before and After Intervention in Group B) = 8.885 at 2 DF P=0.012 LS=S Chi-square (After Intervention in both group) = 6.093 at 2 DF P=0.048 LS=S

When DLQI scores of both group were compared it was significantly more decrease in patients who received RHT with traditional treatment than who has received only traditional treatment. (Table 3)

Comparison of Change in DLQI Scores in both groups			
Variables	Group A (N=35)	Group B (N=32)	P Value LS
Baseline	$10.08 \pm 4.65$	$10.24\pm5.03$	0.893 NS
Endline	$8.61\pm5.72$	$5.1\pm4.57$	0.006 S
Mean Change	$1.4\pm4.97$	$5.14 \pm 4.86$	0.003 S

Table 3Comparison of Change in DLQI Scores in both groups

When number of cases in as per impact of Melasma were compared in both the group it was found that there was significant decrease in impact of Melasma on quality of life in cases who has received RHT with traditional treatment than who has received only traditional treatment. (Figure 2)





Chi-square (Before and After Intervention in Group A) = 3.333 at 3 DF P=0.464 LS=NS Chi-square (Before and After Intervention in Group B) = 25.197 at 3 DF P<0.001 LS=S Chi-square (After Intervention in both group) = 13.082 at 3 DF P=0.006 LS=S

### **IV. DISCUSSION**

In the present study, mean age in Group 'A' was observed  $33.65 \pm 7.04$  years whereas in a Group 'B' it was  $32.22 \pm 6.8$  years. There was a slight female preponderance in both the groups i.e. M:F ratio being1:1.4 in Group 'A' and 1:1.1. Likewise in both the groups were having about 5 times urban dominance over rural. These both groups were comparable as per studied bio-demographic variables i.e. there was no significant difference in distribution of cases as per age, sex and residence.

Mean MASI scores in group 'A' was  $13.07 \pm 6.02$  and in group 'B' was  $12.01 \pm 5.06$  which was also comparable. Some of authors reported very less MASI score like Yalamanchili R et al, $(2014)^{11}$  and Omar Soliman Safoury et al,(2009).<sup>12</sup> Yalamanchili R et al, $(2014)^{11}$  who conducted a study at JSS Hospital, Mysore and noticed that mean MASI score was 5.7, the minimum was 0.9 and the maximum was 28.

Mean DLQI scores in group 'A' was  $10.08 \pm 4.65$  and in group 'B' was  $10.24 \pm 5.03$  which was also not having significant difference. Rita Pichardoet al,  $(2009)^{13}$  conducted three studies in North Carolina on poultry worker population and observed that presence of Melasma was associated with higher DLQI scores. Raafia et all<sup>14</sup> reported mean DLQI score in their study 17.08±5.22. The findings indicate several areas in which melasma had an impact on individual's QoL, particularly in relation to symptoms and feelings and personal relationships. Yalamanchili R et al,<sup>11</sup> Debabrata Bandyopadhyay et al, $(2009)^{15}$  also reported that Melasma has impact on quality of life.

In present study mean change in MASI scores from baseline to endline was significantly more decreased  $(6.0 \pm 4.74 \text{ v/s } 2.42 \pm 7.04)$  in patients who received RHT with traditional treatment than who has received only traditional treatment. It was also found in this study that significantly more number of cases were converted from more sever grades to less sever grades in patients who has received RHT with traditional treatment than who has received only traditional treatment than who has received only traditional treatment. No study was found to find out the effect of RHT on Melasma cases. A study was found to compare the effect of traditional treatment alone and with RHT on Asthma which was conducted in year 2016, reported a significant better effect of RHT on Asthma.<sup>16</sup>

In present study mean change in DLQI scores from baseline to endline was significantly more decreased  $(1.4 \pm 4.97 \text{ v/s} 5.14 \pm 4.86)$  in patients who received RHT with traditional treatment than who has received only traditional treatment. The Impact of Melasma was decreased in significantly more cases of Melasma in patients who has received RHT with traditional treatment than who has received only traditional treatment. In suprasaid study conducted on Asthma, was also reported improve quality of life with RHT.<sup>16</sup>

#### V. CONCLUSION

It was concluded from this study that vererity of melasma was significantly more decreased in patients with RHT than only on traditional treatment. Impact of Melasma on quality of life was also significantly more decreased in patients with RHT than only on traditional treatment.

So Root Heal therapy should be added with tradition treatment of Melasma for better results. Further studies are invited to in this regards.

#### **CONFLICT OF INTEREST**

None declared till now.

#### REFERENCES

- Zanieri F, Assad GB, Campolmi P, Lotti T. Melasma: Successful treatment with pidobenzone 4% (K5lipogel). Dermatol Ther. 2008;21:S18-19.
- [2] Sachdeva S. Comparative efficacy of 10- 20% trichloroacetic acid and 35-70% glycolic acid peel in 60 cases of melasma, freckles, lentigines and postinflammatory hyperpigmentation. J Pak Assoc Dermatol. 2006;16:74-8.
- [3] Halder RM, Grimes PE, McLaurin CI, Kress MA, Kenney JA., Jr Incidence of common dermatoses in a predominantly black dermatologic practice. Cutis. 1983;32:388–90.
- [4] Werlinger KD, Guevara IL, González CM, Rincón ET, Caetano R, Haley RW, et al. Prevalence of self-diagnosed melasma among premenopausal Latino women in Dallas and Fort Worth, Tex. Arch Dermatol 2007;143:424-5.
- [5] Sivayathorn A. Melasma in orientals. Clin Drug Invest 1995;10:34-40
- [6] Pasricha JS, Khaitan BK, Dash S. Pigmentary disorders in India. DermatolClin 2007;25:343-522
- [7] Ponzio HAS. Contribuição à classificaçãoclínica e histopatológica dos melasmas [dissertação]. Porto Alegre: UFRGS; 1995. p. 157
- [8] Moin A<sup>1</sup>, Jabery Z, FallahN.Prevalence and awareness of melasma during pregnancy.Int J Dermatol. 2006 Mar;45(3):285-8
- [9] Walker SL1, Shah M, Hubbard VG, Pradhan HM, Ghimire M. Skin disease is common in rural Nepal: results of a point prevalence study. J Dermatol. 2008 Feb;158(2):334-8
- [10] http://www.eclecticenergies.com/chakras/chakradotest.php
- [11] RavaliYalamanchili, VeerannaShastry, and JayadevBetkerur.Clinico-epidemiological study and quality of life assessment in Melasma.Indian J Dermatol 2015;60:519
- [12] OmarSolimanSafoury, NaglaMohamedZaki, EmanAhmadElNabarawy, and EmanAbasFarag. A study comparing chemical peeling using modified jessner's solution and 15% trichloroacetic acid versus 15% trichloroacetic acid in the treatment of Melasma.Indian J Dermatol.2009 Jan-Mar; 54(1): 41–45
- [13] Rita Pichardo1, Quirina Vallejos2, Steven R. Feldman1,3, Mark R. Schulz4, Amit Verma4, Sara. Quandt3, and Thomas A. Arcury2. The Prevalence of Melasma and Its Association with Quality of Life among Adult Male Migrant Latino Workers.Int J Dermatol.2009 Jan; 48(1): 22-26
- [14] Raafia Ali, S. A. (2013;23(2):). Quality of life in patients of melasma. *Journal of Pakistan Association of Dermatologists* , 143-148
- [15] DebabrataBandyopadhyay. Topical treatment of Melasma. Indian J Dermatol 2009;54:303-9
- [16] Dr. Kusum Lata Gaur, Dr. Raghav Shah, Dr. V.D. Sharma, Dr. Meenakshi Sharma and Dr. Anuradha Yadav. Effect of Root Heal Therapy (RHT) on Asthma: A Quincy Experiment. IMJH. 2016 July; 2(7): 10-17