



ISSN 2456-3110

Vol 2 · Issue 2

Mar-Apr 2017

Journal of
**Ayurveda and Integrated
Medical Sciences**

www.jaims.in

JAIMS



Charaka
Publications

Indexed

A study to evaluate the efficacy of *Jalauka Avacharana* in *Vyanga vis-a-vis* Melasma

Amit Hardia,¹ Hemant Pol,² Sharda Pol.³

¹Post Graduate Scholar, ²Reader, Dept. of Samhita Siddhant, ³Reader, Dept. of Agada Tantra, Shubhdeep Ayurved Medical College, Indore, Madhya Pradesh, India.

ABSTRACT

Face the most important and beautiful organ of the body is affected by certain anomaly at the any age of the life. Early physical and psychological precautionary measures are essential in either of the sexes, as any minor ailment may affect from unattractive look to a permanent disfigurement, which may result in inferiority complex or sometimes even isolation. The disease *Vyanga vis-a-vis* Melasma is one of the important disease pertaining to Hyper Pigmentation disorders (which mainly affects the glowing complexion of a person by producing *Shyava Varna* on the face). It is considered under *Kshudra Rogas*, which occurs mainly due to vitiation of *Vata*, *Pitta* and *Rakta*. The study objective is to evaluate efficacy of *Jalauka Avcharan* in *Vyanga vis-a-vis* Melasma. Simple random sampling technique with single group clinical trial is adopted. In the disease *Vyanga* an important sign is the presence of *Niruja*, *Tanu*, *Shyava Varnayukta Mandala* on *Mukhapradesha*. Melasma is an asymptomatic, acquired and chronic condition with hyper pigmented macular lesion, develops slowly and symmetrically over molar area, bridge of the nose, forehead and temples and upper lips, more commonly seen in female than male and is not accompanied by inflammation or any other systemic symptoms. In this condition hyper pigmentation is due to increased melanocytes activity in epidermal and dermal layer. *Brhajaka Pitta* is mainly related to *Varna* of *Twacha*. So vitiated *Pitta* is the main reason behind to cause *Vyanga*. The parameters show highly significant results with *Jalaukavacharana*. Among subjective and objective parameters, the parameter size and color shows better effects than the other parameters. The parameter *Kandu* and *Daha* also have good effect in this study. Largely all the parameters showed improvement after the treatment. Thus it is fair to conclude that the *Jalaukavacharana* is effective in *Vyanga*.

Key words: *Vyanga*, Melasma, *Jalauka Avacharana*, Leech therapy.

INTRODUCTION

The concept of beauty is as old as mankind and civilization. Hyper pigmentation is defined as predominance of *Pitta* in skin or in blood, in the Indian

system of medicine. The various hyper pigmentation conditions are *Vyanga*, *Nilika*, *Nyachha* also known by the names of *Jhai* and *Lachhana* etc. The hyper pigmentation itself is not a disease but a manifestation that creates a condition of concern and stress for the patient. Melasma is a common acquired symmetric hyper melanosis which is characterized by the presence of light brown to dark brown macules^[1] and patches mostly on the sun exposed areas of skin of the face. There are multiple etiologic factors^[2] associated with Melasma (pregnancy, inflammatory, racial, endocrinal, photo toxicity, photo-sensitivity of drugs and food) but one of the primary causes of its exacerbation is exposure to sunlight.^[3] The purpose of this study is to ascertain and assess the efficacy and safety of treatment with leech therapy (*Jalauka Avchra*) in participants with moderate to severe

Address for correspondence:

Dr. Amit Hardia

Post Graduate Scholar, Dept. of Samhita Siddhant, Shubhdeep Ayurved Medical College, Indore, Madhya Pradesh.
E-mail: hardiamitdr@gmail.com

Submission Date : 20/03/2017 Accepted Date: 07/04/2017

Access this article online

Quick Response Code



Website: www.jaims.in

DOI: 10.21760/jaims.v2i2.7699

Melasma. The study design is Randomized, Single blind Controlled Clinical trial. In Ayurveda, treatment is divided in to two category viz. *Shamana* and *Shodhana*.^[4] *Shodhana* is further divided into five: *Vamana*, *Virechana*, *Vasti*, *Nasya* and *Raktamokshana*.^[5] This *Raktamokshana* (Blood letting) is very impotent procedure for *Raktajroga*.^[6] *Siravedha*, *Shringa*, *Alabu* and *Jalaukavacharan* are four methods which are used for bloodletting. Among these methods *Jalaukavacharan* is considered as safest procedure.

Acharya Sushruta has quoted *Vyanga* ^[7] under *Kshudra roga* as; '*Krodhaayas Prakupito Vayuh Pitten Samyuktah, Sahsa Mukhamagatya Mandalam Visrajyatah, Nirujam Tanukam Syavam Mukhe Vyangam Tamadishet*' (Su.Ni.13/47)

In the disease *Vyanga*, an important sign is the presence of *Niruja*, *Tanu*, *Shyava Varnayukta Mandala* on *Mukha Pradesha*.

According to Modern view, the *Mandalas* can be taken under the heading of pigmentation disorders. The disease *Vyanga* can be correlated with hyper pigmentation with special reference to Melasma. In this, the patches of hyper pigmentation are seen especially on cheeks, nose, forehead and chin. Their treatment varies according to the primary cause of the disease.

Here *Vyanga Roga* is considered under *Rakta Vriddhi Lakshana*^[8] and it is characterized by a darkening of an area of skin caused by the over production of pigment or melanin. It is relatively common and harmless, but for cosmetic reasons, it is a nuisance to those who have it.

We also consider this as due to pathological changes in *Pitta Dosha*, *Twak Vaivarnya* are produced in *Vyanga Roga*. On the basis of the *Aashrayaashrayi Bhava* that is '*Pittam Tu Swedraktayo (Sthitam)*'^[9] shows relation between *Rakta Dhatu* and the *Pitta Dosha*. In *Pitta* predominance diseases, we commonly use *Jalaukavacharan*.^[10] Hence considering the *Ayurvedic Dosha* and *Dushya* (pathophysiological factors) analysis for such cases, recommended for leech therapy (*Jalaukavacharana*) at the local site.

MATERIALS AND METHODS

1. Literary material like *Samhitas*, Commentaries, *Ayurvedic* journals, Research papers, Internet providing sites, Manuscripts etc. to collect and compile the data related to this study.
2. Patients suffering from *Vyanga roga*.
3. *Nirvisha Jalauka* from clean water will be procured from reliable source.
4. Standard Accessory items like Cotton, Bandage, Surgical blade, Gloves, Scissors, Antiseptic lotion, Turmeric powder, *Jatyadi Ghritha*, Kidney tray etc.

Method

The study will be conducted as clinical trial on total 30 no. of patients. Patients will be selected from OPD and IPD of all Departments of Shubhdeep Ayurved Medical College and Hospital, Indore on the basis of inclusion and exclusion criteria.

Inclusion Criteria

- Patients having age between 15 to 40 yrs of both sex and all religions.
- Patient for Clinical Trial which suffering from *Vyanga* due to Physical causes, inflammatory causes, Pregnancy related causes.

Exclusion Criteria

- Patients having age less than 15 years and more than 40 years were excluded.
- Patients having *Vyanga* as the symptom of major systemic disease.
- Patients having the chronicity of disease more than six years were excluded.
- Patients having any allergic condition were not selected for the present study.
- Patient having *Vyanga* due to endocrinal causes (except pregnancy related causes), drugs induce causes or Nutritional causes.

Procedure and plan of study

Jalaukavacharan process, which has mentioned in *Shushruta Samhita Sutrasthana* 13th chapter "*Jalaukavachardiyadhaya*".

Quantity

1-4 Leeches (according to severity of signs and symptoms) apply in each sitting once a week over affected area.

Time: Morning empty stomach.

Duration: Minimum 8 weeks.

Total study period: 3 months (follow up between every 15 days)

Selection of Leech: *Yogya Jalauka (Nirvisha Jalaukas)*^[11]

Storage

After collecting the *Jalauka* they should be kept in a wide and new earthen pot. The pure water of tank with lotus should be filled into the pot. On every second or third day the water should be changed and feeding should be dropped inside the pot. After five or seven days the pot should be changed.

Preparation

1. No *Snehana* i.e. oleation should be allowed. However, Mild *Swedana* (half hour before) to the site of blood letting can be given.
2. The desired site is properly washed with cold water. (One should not apply Spirit gauze or turmeric to clean the area in any condition)
3. Leech before the use, is kept in an empty tray and then the Leech is washed in clean water.

Precaution

One should not apply Leeches to major veins like Femoral or Jugular veins and to the delicate parts like Breast, Penis or Eye lids.

Contraindication

- Absolute - hemophilia
- Relative - pregnancy
- Anemia

Scoring pattern

1. Color : The Skin and lesion are graded with the help of Fair and Lovely Color Grading Scale and there are 1-26 grades. The Difference between normal skin and Melasma affected skin has been calculated.

2. Number of Lesions

3. Length of the lesions: Calculated as Total (Sum up) length of all macules in two planes vertically and horizontally.

Grades	Response	Percentile
Grade I	Cured improvement	100-75 %
Grade II	Moderate improvement	75-50 %
Grade III	Mild improvement	50-25 %
Grade IV	Unchanged	< 25 %

The overall effect of the therapy was assessed as follows,

Sr. No	Clinical Observation	Scoring criteria				
		0	1	2	3	
1.	Number	Absence of Maculae	Only One Maculae	Two Maculae	> 2 Maculae	
2.	Color (Diff. b/n lesion color and skin color with the help of Fair & Lovely Fairness meter)	0 to 2	3 to 5	6 to 8	> 8	
3.	Total length of Macules	Vertical	0 to 2 cm	3 to 6 cm	7 to 10 cm	> 10 cm
		Horizontal	0 to 2 cm	3 to 6 cm	7 to 10 cm	> 10 cm

OBSERVATION AND RESULTS

Age: In this study maximum patients were in between the age group of 20 to 40. Gender: In this study Female patients were more (87 %) than male patients.

Religion: Maximum number of patients belongs to Hindu community (93.33%)

Socioeconomic status: More than half of the patients were belonging to middle class about 70 %. Physical aggravating factors- UVL is one of the main aggravating factor as well as one of the causative factors of the disease too. In 67 % patients, lesions were aggravated by sun exposure.

Psychological aggravating factors: Tension (*Chinta*, *Krodha*, *Shoka*) as the aggravating factor were present in about 60 % patients.

Pattern wise (Site): The disease Vyanga was found to occur on in Malar area maximum number (40%) of the patients.

Strotodushti: *Rasavah* and *Raktavah* *Srotodushti* was found in all (100%) the patients.

Overall effect of therapy was found more imperative results in all the parameters. The parameter, color of lesion was shows 86.36 % of improvement and the parameter, like Length shows vertically 79.52 % and horizontally 84.46% improvement after assessment of results. Another parameter, Number of *Mandalas* was significantly reduced and it found 80.37 % of improvement. Hence Length of *Mandalas* and darkness of *Mandalas* are found better results than the other parameters after the use of *Jalaukavacharana* therapy. So, there was statistically highly significant improvement in all parameters.

DISCUSSION

Factors responsible for *Varna Vikruti* are,

- *Mahabhuta - Agni*
- *Dosha - Pitta*
- *Dosha type - Bhrajaka Pitta*
- *Dhatu - Rakta*

All these four Factors are of same characteristics, so they have common line of treatment like *Raktamokshana*, *Virechana*, *Upavas* etc. *Raktamokshana* – Four types (*Shira-Vedhana*, *Shringa*, *Alabu*, *Jalaukavacharan*). Out of four, *Jalaukavachana* is indicated for all *Pitta Pradhana Vikruti*. Hence disease like *Vyanga* having *Pitta Pradhana Vikruti* can be treated with *Jalaukavacharana*.

CONCLUSION

Role of *Jalaukavacharana* in *Vyanga* is clinically established. All the parameters like number of *Mandalas*, Color of *Mandalas*, Length of *Mandalas*, *Kandu* and *Daha* shows statistically significant results.

On the basis of clinical study it can be conclude that the efficacy of *Jalaukavacharan* in *Vyanga* is very much established.

REFERENCES

1. Dorling Kindersley ed. Oxford Dictionary, 80th Edition, Oxford University Press, 2007;p.188.
2. Williams James. Andrew's Diseases of the skin "Clinical dermatology". 11th Edition, Chapter 36,p.855.
3. Pual K Buxton. ABC of Dermatology. 4th Edition, BMJ Publishing Group, 2003;p.76.
4. Vaidya Jadavaji Trikamji Acarya (ed.). Charaka Samhita - Ayurveda Dipika Commentary of Cakrapanidatta. Chaukhamba Sanskrata Sansthana Varanasi; 1st Edition, 2001.
5. Brahmanand Tripathi (ed.). Astanga Hridaya with the 'Nirmala' Hindi Commentary, Chaukhamba Sanskrit Pratishthan, Delhi, 2007;p.165.
6. Anant Ram Sharma (ed.). Sushruta Samhita – 'Sushruta Vimarshini' Hindi Commentary, Vol. I, Seventh Edition, Chaukhamba Surbharati Prakashan, Varanasi, 2002;p.560.
7. Astanga Hridaya with the 'Nirmala' Hindi Commentary, edited by Dr Brahmanand Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2007;p.161.
8. Astanga Hridaya with the 'Nirmala' Hindi Commentary, edited by Dr Brahmanand Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, 2007;p.165.
9. BhavaPrakasha – Written by Bhavamishra, Madhyam Khanda, Edition 7th 2000, Chaukhamba Sanskrit series, Varanasi, 2000;p.124.
10. Susruta Samhita – Prof. K.P. Shrikanth murthi Illustrated Sushurt Samhita Vol. I Varanasi, Chaukhamba Orientalia, 2010;p.82.

How to cite this article: Amit Hardia, Hemant Pol, Sharda Pol. A study to evaluate the efficacy of *Jalauka Avacharana* in *Vyanga* vis-a-vis Melasma. J Ayurveda Integr Med Sci 2017;2:37-40.
<http://dx.doi.org/10.21760/jaims.v2i2.7699>

Source of Support: Nil, **Conflict of Interest:** None declared.
