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Review Article

### EFFECT OF SHAVASANA ON PSORIASIS: A LITERATURE REVIEW

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#### ABSTRACT

Psoriasis is an autoimmune, non-infective, chronic skin disorder. The aetiology of psoriasis is not fully understood, but it appears to be multifactorial, involving both genetic and environmental influences.

Among these conditions stress and alteration in psychological conditions is considered to play an important role in the onset and exacerbation of psoriasis. Studies report that the proportion of psoriasis patients who are stress-responders ranges from 31 to 78% while stress may be an exacerbating factor, psoriasis itself may contribute to significant adverse psychological sequel. Breaking this stress cycle may be an important part of therapeutic approach.

Boston university school of medicine has discovered that gamma amino butyric acid (GABA) levels are reduced in stress, anxiety, epilepsy. Simultaneously the research team also found that relaxation therapy increases GABA levels after 40 minutes session.

According to Ayurveda “*Shavasana*” is among the best relaxing asana. In *Shavasana* person lies in supine position and gradually commands all body organs, extremities to relax from toe to head. This relaxation will increase GABA level and ultimately reduce stress. Thus stress induced exacerbation of psoriasis will reduce. So, plan to study the effect of *Shavasana* in the management of stress induced psoriasis.

**Keywords:** Anxiety, Exacerbation, GABA, Relaxation, *Shavasana*, Psoriasis Psychological Sequel, Stress.

#### INTRODUCTION

World Health Organisation has decided to celebrate 21 June as *Yoga Day* every year. *Ayurveda* is very ancient science. Prevention is better than cure is the basic principle of *Ayurved*. *Swasthavritta* is the branch of *Ayurved*. In *Swasthavritta* for the prevention of disease Yoga has been elaborated. In yoga various *Asanas* have been mentioned. Out of which *Shavasana* is the most challenging asana. In *shavasana* patient lies in supine position and gradually relaxes all his body parts starting from lower extremity –greater toe to the head by giving them commands. Ideally two to three sessions of 20-30 minutes are required to relax. This is a very simple technique and non-expensive. Generally results are observed after 2 weeks of practice. This *shavasana* is used to relax body and mind The proportion of psoriasis in 1980 was almost 2-3 percentages. Now the proportion has been increasing constantly and rose to 4-5 percentages. Although genetic factors are responsible for the occurrence of the disease our day to day activities influence the disease. Stress, fast food, night culture, soft drinks, alcohol, pollution are some of the important factors.

Out of these stress is the main important factor for the exacerbation of psoriasis. Change of employment, major illness. Financial problems, personality or psychological difficulty, lack of social support are some causes of stress. Stress of any kind is supposed to exacerbate the new lesions in psoriasis and stress cannot be avoided. There is no measure in modern medicine to reduce stress. Medicine such as anti-depressants, anxiolytic are time being remedies and cannot be continued for life time. Hence *Ayurveda* is much important in this respect. As modern medicine has only topical steroids, coal tar applicants, methotrexate like drugs for the treatment the psoriasis, there is no measure to control the stress induced exacerbations of psoriasis. But *Ayurveda* has curative as well as preventive aspects of control of psoriasis. So I want to use preventive aspect of *Ayurveda* mentioned in *swasthavritta*. *Swasthavritta* is the branch of *Ayurved* science which is meant for the prevention of the disease.

As far as the psoriasis is concerned, the disease is related to acute exacerbations of new lesions which can spread all over the body. The disease is related to the stratum corneum layer of the skin. Stress is the main factor which provokes new lesions<sup>1</sup>.

By reducing the main provocation factor that is stress we can control the acute exacerbations of psoriasis. As *shavasana* reduces stress, it will prove helpful to control the new lesions in psoriasis. Yoga Relaxation (*savasana*) decreases cardiac sympathovagal balance in hypertensive patients so by giving two to three sessions each of 40 minutes of *shavasana* we can control acute exacerbations of psoriasis.

#### AIM AND OBJECTIVES

1. To explain the concept of psoriasis in *Ayurvedic* Perspective w. s. r to *Swasthavritta* and *Yoga*.
2. To highlight on relation between psoriasis and stress in front of society through *Ayurveda*.
3. To educate the people regarding the preventive measure of exacerbation of psoriasis by reducing stress.
4. To explain the benefits of *Shavasana* and its good effects on health.

#### MATERIALS AND METHODS

As this is a literature review study, material is collected from various modern medicine books, articles, internet etc. Appropriate information specifically on physiological aspects on stress, effect on nervous system, effects on other system is collected. All Compiled matter is reorganized and critically analysed for the discussion and attempt has been made to draw some fruitful conclusions. *Shavasana* has been mentioned in various *Ayurvedic* literatures especially in *Patanjal Yog-darshan*, *Yog-chintamani*, *Gherand- samhita*, *Yog-vasishta*. So information on shavasana is collected from all these *samhitas*. All the collection is made precise and concise.

#### REVIEW OF LITERATURE

##### Significance of stress

Change of employment, major illness, financial problems, personality or physiological difficulties, lack of social support are some causes of stress. Studies consistently support a relationship between stress and psoriasis<sup>2</sup>.

Furthermore, a majority of patients consider stress to be the main cause for exacerbation of their psoriasis, ranking it above the infections, trauma, medication, diet, weather. SEVILAE shown that, incubation time from specific incidents of stress to psoriasis exacerbation was between two days to one month. Exacerbation was more on emotionally charged body areas such as scalp face neck forearm hand and genital region. Finally stress may not only worsen psoriasis severity but it may also adversely affect treatment outcomes<sup>3</sup>.

1. FORTUNE found that physiological stress impaired the rate of clearance of psoriasis in patients undergoing psoralen ultra violet treatment (PUVA) Patient with high levels of worry cleared with PUVA therapy almost two times slower than those with low levels of worry<sup>4</sup>.

##### PHYSIOLOGICAL EFFECT OF STRESS

The normal physiological response to stress involves activation of the Hypothalamus Pituitary Adrenal Axis (HPA) and sympathetic Adrenal Medullary Axis (SAM), both of which interact with immune functions. Generally in normal individuals, stress elevates stress hormone (increase cortisol level)<sup>5</sup>.

However, according to available studies, exposure to stress in psoriatic patient has been associated with diminished HPA

responses and upgraded SAM responses. More specifically, when psoriasis patients are under such a emotional pressure lower plasma cortisol level and higher epinephrine, nor-epinephrine levels can be induced when compared with controls<sup>6</sup>. This depressed HPA axis and elevated SAM system responses to stress may be crucial in better understanding the inflammatory characteristics of psoriasis, particularly in stress respond for instance decrease secretion of cortisol and increase level of epinephrine, nor -epinephrine may stimulate the release of mast cell, affect skin barrier function and up regulates the pro inflammatory cytokines which exacerbate the psoriasis severity<sup>7</sup>.

#### STRSS AND PSORIASIS –A VICIOUS CYCLE

Psoriasis itself can serve as a stressor for the patient psoriasis is much attach with social stigmata. Patients commonly experience difficulties in social interactions, meeting new individuals, establishing relationship<sup>8</sup>. In general most patient demonstrate adverse psychological consequences including poor self esteem, anxiety, depression even in some cases suicidal tendencies. As psoriasis can cause considerable stress for patients and increased levels off stress are likely to exacerbate psoriasis, the disease process thus becomes a self perpetuating vicious cycle. Hence treatment should integrate methods of stress reduction.

#### SHAVASANA BETER STRESS RELIEVER

In *Swasthavritta* various *asanas* have been mentioned by *Patanjali* in which *shavasana* is the best relaxing asana.

*Shavasana* literally means to lie in supine position like a dead person. Person lies in supine position; gradually he takes deep breath and commands all body organs starting from lower extremity to relax. The session is of minimum 20 – 30 minutes. This asana is indicated after practise of all *asanas* to relax the body and mind. It is use to reduce symptoms of depression, anxiety, confused state of mind.

Ideally, two or three sessions of *shavasana*, having time duration of minimum 40 minutes has to be given for relief of stress per day. *Shavasana* should be continued for at least 12 weeks (minimum 3 months) for better results.

A scientific study conducted by Department of Neuro surgery Harvard University, Boston shown that reduced activity of GABA (Gamma- Amino- Butyric- Acid found in stress, anxiety disorders. They also found that significant increase in whole slab GABA level after 20-30 minutes session *shavasana* as compared to no change in GABA levels in controls after 20-30 minutes reading session. It also decreases cardiac sympathovagal balance in hypertensive patients<sup>9</sup>.

#### DISCUSSION

After 40 minutes session of *shavasana* stress of psoriasis patient is reduced which in turn decreases the level of epinephrine and nor epinephrine. Reduced level of epinephrine and nor epinephrine stabilises mast cells. The release of histamine is reduced from stabilise mast cell. Histamine is one of the best inflammatory mediators thus in turn skin inflammation is reduced which is the important characteristic of psoriasis (chronic skin inflammation) Reduced epinephrine and nor epinephrine levels affect the skin barrier function thus stabilise stratum corneum layer of

the skin. Hence acute exacerbation and new lesion generation is reduced in psoriatic patient.

Simultaneously increase cortisol level reduces the inflammation, stabilises all body cell particularly mast cells. Increased cortisol level up regulates pro inflammatory cytokines which reduce exacerbation and psoriatic severity.

Increase GABA (Gamma- Amino- Butyric- Acid) activity due to increased GABA levels increases the Para-sympathetic nervous system which in turn stimulates the vagal nerve stimulating vagal afferents. It relaxes CNS and keep brain calm thus reduces stress and ultimately psoriasis.

### CONCLUSION

An extensive number of clinical studies exists supporting stress as an exacerbating factor in psoriasis. Stress appears to be an important precipitating factor in the development and exacerbation of psoriasis. These patients specially benefit from 20- 30 minute *Shavasana* session two -three times in a day. The *shavasana* is useful to control and prevent stress, thus reduces new lesions in patients having psoriasis. It is also useful for faster clearance of existing lesions.

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