Psoriasis is a chronic, inflammatory, multisystem disorder with predominantly skin and joint manifestations affecting approximately 2 to 3% population worldwide. Psoriasis typically follows a relapsing and remitting course. Psoriasis most commonly manifests on the skin of the elbows, knees, scalp, lumbosacral areas, inter-gluteal clefts and glans penis.

Both Ayurveda and modern medical science have accepted that diet, activities, environmental, genetic, immunological and psychological factors play key role in the etio-pathogenesis of dermatological disorders including psoriasis[1].

Psoriasis is a disorder with multiple different phenotypical variations and degrees of severity. Approximately 80% of patients with psoriasis have mild to moderate disease, whereas 20% have moderate to severe disease. The severity of psoriasis is defined not only by extent of body surface area involved but also by the involvement of particular site like hands, feet, face, or genital region, because, despite the involvement of a smaller body surface area, the disease may interfere significantly with activities of daily life or quality of life[2].

Therefore, to assess the outcome of treatment in clinical trials, a measure to assess the quality of life is important. The DLQI (dermatology life quality index) scoring is most commonly used measure to assess the quality of life in the patients of psoriasis. DLQI may be used alone or with the other important outcome measures which assess the outcome based on the symptomatic improvement, degree of severity and reduction in the surface area of skin lesions like PASI score. Hence, in the present
clinical trial we have used PASI score along with the DLQI scoring to assess the outcome of trial.

The present trial (clinical study) may be 1st and a unique study which carried a comparative study between Nishadi Vati (a herbo-mineral compound), Kushthaghna Vati (a polyherbal compound) and Virechan therapy (a type of bio-purification) and used the PASI score and DLQI scoring to assess the outcome of the trial.

In Ayurvedic system of medicine most of the dermatological disorders are described under the roof of Kushtha. Kushtha is one of the most chronic disorders as described in Ayurveda. Most of the Ayurvedic texts categorized the Kushtha Roga into two groups, Mahakushtha and Kshudrakushtha which are further sub-divided in to seven types and eleven types respectively. Ayurveda described a wide range of etiological factors for dermatological disorders including its psychosocial aspect.

It has been known since antiquity in Ayurveda that a connection exists between the skin and mind. Charaka has clearly described the skin as ‘चेत: समवायि’ i.e. skin has an eternal relationship with the mind. Now days it is well acknowledged that psoriasis is strongly associated with various psychological factors. Stress and related psychological factors play an important role in the manifestation and or exacerbation of psoriasis. Therefore, more than a cosmetic nuisance, psoriasis produces anxiety, depression and other psychological problems that affect the quality of life. Patients of psoriasis always experience physical, mental and socio-economic embarrassment in the society. This embarrassment leads to mental stress which further causes aggravation of pre-existing disease[^3].

Under psychosocial stress, psoriatic patients showed increased number of activated T-cell with a shift towards a Th1-derived cytokine profile and increased number of cutaneous lymphocyte-associated antigens-positive T cells and natural killer cells in the circulation, which was pathologically relevant in aggravation of psoriatic plaques[^4].
Psoriatic patients are associated with reduced quality of life, negatively impacting psychological, vocational, social, and physical functioning. Reduced quality of life is usually due to social rejection as compared to healthy subjects. These patients also experience greater physical discomfort, mood swings, poor body image and self-image, and restricted daily and social activities due to visibility of their lesions.

Kushtha is one among the Deerghakaaleen Vyadhees (most chronic disorders) and also included in Ashtamahagada as it is very difficult to cure. Similarly, the psoriasis is also one of the most chronic disorders and very difficult to cure. Even though the skin diseases are not fatal, they create comparatively greater stress and strain due to the blemished skin. This psychological stress leads to manifestation of mental and emotional disorders like delusions as well as somatoform disorder and factitious disorders and further aggravates the pre-existing disease. Since the Kushtha (dermatological disorders) including the psoriasis is very difficult to cure and no single drug is efficacious in the treatment. Therefore, in the present clinical trial, we have used compound formulations Nishadi Vati and Kushthaghna Vati.

Psoriasis is considered a single disease entity with several morphologic variants, and a full range of severity and expression based on Heredity (certain HLA types and psoriasis susceptibility genes), environmental factors (such as trauma and climate), co-morbidities (particularly infection and emotional stress), concomitant medications and immune status of the host. On the basis of genetic susceptibility and hereditary association, the psoriasis may be classified into two groups which are type-1 and type-2.

Type-1 is early onset and usually begins in the second and third decade of life. Most of the patients are associated with genetic susceptibility, inheritance and thus associated with a positive family history. Type I psoriasis has an irregular course and tends to generalize. Type-2 is late onset usually begins in the sixth decade of life. Most of the patients showed a negative family history because they lack hereditary association.
Previously it was considered that the psoriasis is a disorder of keratinization which involved the hyper-proliferation and differentiation of keratinocytes. But now various recent studies suggested that the psoriasis is a chronic multisystem disorder brought on by stress which involves a complex interplay between environmental factors, genetic susceptibility and immune system. IL-23 induces immune inflammatory pathologies via Th17 is considered an effector pathway in the pathogenesis of psoriasis. Thus, genetic factors, immune system, environmental factors and psychological factors like stress play major role in the etio-pathogenesis of psoriasis.

Management choice for psoriasis depends on many factors, including the extent of disease, its effect on quality of life, and the patient’s perception of their illness. Conventional treatment of psoriasis is based on the degree of severity. There can be substantial variation between individuals in the effectiveness of specific psoriasis treatments.

Traditional, pharmaco-therapeutics include emollients, topical corticosteroids, phototherapy, and systemic medications. Topical medication is often used as first line treatment for mild to moderate psoriasis. Phototherapy is reserved for widespread disease, or when the psoriasis is unresponsive to topical treatment. Systemic therapies are reserved for moderate to severe disease. Biologicals are specific and newer approach of treatment. These are immunosuppressive agents, designed to selectively interfere with the immune mechanisms that induce psoriasis. Their use is restricted to the treatment of moderate to severe psoriasis which has failed to respond to other systemic therapies (and/or phototherapy) or where such treatments are contra-indicated or not tolerated.

Therapies for psoriasis are not curative but provide symptomatic management. The economic burden, along with the clinically relevant reductions in quality of life experienced by many patients with psoriasis, underscores the need for prompt, effective, and sustained disease management. Over time, psoriasis can become resistant to a specific therapy. Therefore, these therapies (topical medications,
phototherapy and systemic medications) can be used alternatively to overcome resistance and this type of strategy is termed as treatment rotation.

To minimize the toxicity of any therapy, proper patient selection and appropriate monitoring is crucial. The administration of any systemic therapy must be individualized. Every patient needs to be carefully evaluated with reference to disease severity, quality of life and general medical and psychological status. Successful management of psoriasis patients depends on clinician’s understanding of the various treatment options as well as their recognition of associated adverse reactions.

In this way the modern medical science has unraveled substantially the various mechanisms which are involved in the pathogenesis of psoriasis and designed numerous therapeutic modalities like topical medication, phototherapy and systemic agents with different range of systemic drugs like methotrexate and newer approach like biological. These agents exhibit a wide range of action to arrest the disease process in several ways. However, the efficacy of drugs is compromised due to various side effects during course of treatment. Long term therapy with these agents especially with biologicals is also expensive and thus also aid to economic burden of an individual.

Hence, it is the need of time to find out safe, efficacious and also cost effective treatment for psoriasis and here comes the role of Ayurveda. The unique and holistic approach of treatment in Ayurveda provides long lasting beneficial results and a better quality of life to the patients. Now days, people are showing growing interest towards Ayurvedic system of medicine, which is holistic and not only treat diseases but also prevent them and also the treatment is free from side effects.

Most of the drugs in the Nishadi Vati and Kushthaghna Vati possess Rasayan property. Rasayan mentioned as a class of important drugs in the Ayurvedic system of medicine is reputed to promote physical as well as mental health, improve defence mechanism, exhibit anti-stress effect and enhance longevity. Rasayan help to impede the aging process by delaying the degenerative processes inside the biological system. Therefore, Rasayan aid in the immunomodulation & general wellbeing, improve the
functioning of fundamental organs and keep the signs of early aging at bay. Till date many of the Rasayan drugs claimed for their immunomodulatory effects via modulation of cytokine secretion, histamine release, immunoglobulin secretion, class switching, cellular co-receptor expression, lymphocyte expression, phagocytosis and so on.

Various studies on Rasayan drugs suggest their following action

- Immunomodulator
- Adaptogenic
- Antioxidant
- Nootropic and
- Anti-stress

The principles and practice of Rasayan in Ayurveda is basically based on the immunomodulation. Therefore, use of Rasayan in the patients of psoriasis would improve mental health, leads to immunomodulation, reduce the oxidative stress inside the body, reduces psychological stress, since the stress and altered immunity are the main factors involved in the pathogenesis of psoriasis.

Samshodhan (bio-purification) is very specific, effective as well as very popular therapeutic modality in Ayurvedic system of medicine. Panchakarma is the therapeutic technology of Sansodhana. Panchakarma is technology with five specially designed therapeutic procedures for internal bio-purification of the body and Virechan therapy is one of them.

Panchakarma is the cornerstone to Ayurvedic management of diseases. Panchakarma is the process, which gets to the root cause of the problem and re-establishes the essential balance of Tridosha (namely, Vata, Pitta and Kapha) inside the body. Panchakarma is not only used for alleviating diseases but is also a useful tool for maintaining excellent health. Virechan therapy is very popular among Panchakarma because it is easy to carry out.
Bio-purification is believed to purify or cleanse all the body tissues and bring about the harmony of body humors (Tridosha i.e. Vata, Pitta, Kapha, and Manasa Dosha i.e. Raja and Tama) to obtain long-lasting beneficial effects. In today's busy life, stress is a major factor in the initiation or exacerbation of several psychosomatic disorders including psoriasis. Bio-purification also restores the mental health, reduces the stress and therefore, help in the management of psoriasis. Hence, in the present study we have decided to explore the role of Nishadi Vati, Kushthaghna Vati and Virechan therapy in the management of psoriasis.

The present clinical study has been carried out on 101 patients who have been divided into the three groups. Total 120 cases have been registered out of which 19 patients dropped out and 101 had completed total trial duration with regular follow ups.

The contents of thesis has been divided into following chapters

1. Introduction
2. Conceptual study of Psoriasis
3. Conceptual study of Kushtha
4. Conceptual study of Virechan
5. Drug Review
6. Materials and Methods
7. Observation and Results
8. Discussion
9. Summary and Conclusion

The findings have been elaborately described and discussed categorizing in above sections.
REFERENCES


