

Ayurved for Skin Disorders, A Clinical Success Story of Guttate Psoriasis

Case Report

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Abstract

Psoriasis is a chronic inflammatory papulo-squamous disorder of skin characterized by sharply defined erythematous-squamous lesion varying from pinpoint to large plaque, affecting 1-3% of population worldwide. Psoriasis is well known for its course of remission and exacerbation. Here we report a case of 14-year-old male 42 kg weight, rotund physique child, diagnosed as Guttate psoriasis, Guttate psoriasis can be closely correlated with *Ekkushtha* (one of subtype of *Kushtha*) in Ayurveda. Management of patient with, *shodhan* therapy (Biological purification of body) like *mriduvirechan* (Mild laxative) and *shaman* therapy (conservative therapy) showed remarkable improvement in patient condition. There is appreciable psychological health impairment found in patient, which adversely affect patient quality of life. This case study shows that Ayurveda line of treatment (*Shodhan* and *shaman*) gives significant result in the treatment of Guttate psoriasis.

Key Words: *Ekkushtha*, *Guttate Psoriasis*, *Shaman chikitsa*, *Mriduvirechan*.

Introduction

Psoriasis is a non-infectious, chronic papulo-squamous inflammatory disorder, mainly affecting skin and occasionally joints too (1,2,3,4). Psoriasis is divided into 5 subtypes vulgaris (plaque), guttate, inverse, pustular and erythrodermic (5). Guttate psoriasis is particular form of cutaneous psoriasis generally affect children and young adults. Begins in childhood in almost 1/3 of cases as independent or superimposed existing plaque psoriasis (6). Recurrent streptococcal infection triggers Guttate psoriasis (6,7). The term "Guttate" refers "appearing as droplet" and clinically present with small, erythematous, squamous lesions over trunk and upper extremities, sooner appearance of psoriatic scales over lesions differentiates it from drug eruptive lesion. It is a complex multifactorial disease caused by interaction of immunological, genetic and environmental factors, like stress, excessive alcohol consumption and smoking. Paediatric psoriasis has been associated with certain comorbidities, such as obesity, hypertension, hyperlipidaemia, diabetes mellitus, and rheumatoid arthritis making its early diagnosis and management essential (8). In Ayurveda Guttate Psoriasis can be closely correlated with *Ekkushtha* (Psoriasis), classical features of *Ekkushtha* mentioned in ancient

literature are *Aswednam* (Anhidrosis), *Mahavastum* (spread over large body surface), *Matsya-Shaklopamam* (appearance of the skin, resembles to silvery scales of fish) (9,10,11). It is a disease of Tridosha with *vata-kapha* (Psychobiological parameter of body) predominance. *Nidana Parivarjna* (avoidance of causative factors) *Sanshodhan* (Biological purification of body) and *Sanshaman* (Conservative treatment) therapies were done to manage such disorders. Here we are reporting a case summary of 14-year-old, 42 kg weight, male child, of rotund physique presents with the complaints of multiple erythematous silver scaly plaques at trunk and backside of the body. It is a *Tridosha* disease with *vata-kapha* (Psychobiological parameter of body) predominance. *Nidana Parivarjna* (avoidance of causative factors) *Sanshodhan* (Biological purification of body) and *Sanshaman* (Conservative treatment) therapies were done to manage such disorders, those diseases treated with *shodhan* does not recur, so to remove the accumulated *doshas* purification procedures like *Vaman*, *virechan*, *ashthapan-basti* should be done but contemplating the paediatric age group and *sukumar-awastha* only *mriduvirechan* (mild laxative) and *shaman* therapy (conservative treatment) been given.

Presenting Complaints and medical history

A 14-year, 42 kg body weight, male child residing in rural area, came to OPD of Government Ayurvedic Hospital Raipur (c.g) (12 December 2019) with complaints of multiple erythematous silver scaly plaques at trunk and backside of the body for 3 years, also had complaint of sleep disturbance due to severe itching for 6 months, occasional history of constipation for 6 months. Past

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history row same illness since November 2016, initially he visited a family doctor (20 November 2016) and took some anti-fungal drugs orally and topical application for 2 months with no relief. No clinical flare-up or retreat was observed during the expert treatment (dermatologist) from 2017 to 2018. Then the patient reported to our Out Patient Department for Ayurvedic treatment with the same complaints.

Clinical Findings

Patient presented with irregular, erythematous, silver scaly plaques over trunk and hips with no swelling, discharge, pulsation, tenderness, fluctuation, or temperature. On examination, patient was well oriented to time place and person. Signs like pallor, icterus, cyanosis or clubbing, Lymphadenopathy were absent. Vital were stable and growth & developmental milestones were attained corresponding to age. On Skin examination, plaque diameter was 0.3 cm - 0.5 cm, multiple erythematous lesions, irregular, hard margin and itchy in nature. No significant physical and systemic deformity was observed.

Diagnostic Focus and assessment

On the basis of previous History, medical documents, and presenting sign and symptom, patient was provisionally diagnosed Guttate Psoriasis and diagnosed as *Ekkushtha* in Ayurveda. Psoriasis is clinically diagnosed and usually a skin biopsy not require. Classically *kushtha* mentioned under *Raktapradoshaj-vikar*; clinical features of *Ekkushtha* are, *Aswednam* (Anhidrosis), *Mahavastum* (spread over large body surface), *Matsya-Shaklopamam* (appearance of the skin, resembles to silvery scales of fish), these features are equivalent to features of Guttate psoriasis, therefore provisional diagnosis of patient was made as Guttate psoriasis.

Therapeutic focus and assessment

MriduVirechan(Mild Luxative)

Ekkushtha is a *Tridoshaj-vikar* with *kapha* predominance (According to Acharya Sushrut) and *vata-kapha* predominance (According to Acharya Charak). *Kapha* and *vata-kapha* predominant disease were treated via *Vaman* therapy (Vomiting) but

contemplating the paediatric age group and *sukumar awastha mridu-virechan* (mild laxative) advised instead of *Vaman* therapy. *Virechan* helps to eliminate the aggravated *doshas* from body, via pacifying pitta and *kapha* it reduces scaling, itching and discolouration. Hence we planned to give mild laxative (*Mridu-Virechan* with *avipattikar choorna* and *erand oil*) for first 7 days.

Deepan-pachan(Appetizer and Digestive)

Tab *Agnitundi vati* given as deepen-pachan drug, it will promote absolute digestion and assimilation of food as well as medicines taken, so we will get proper action of medication.

Internal Medication

All medicine was given are used in skin disorders according to Ayurveda, some of this medicines helps to purify the blood, which will help to suppress itching and restore the normal texture of skin, some medicines shows anti-inflammatory property, as inflammation plays an important role in pathology of psoriasis in order that, these medicines used will interrupt the pathology of disease.

Local Application

Gandhak oil has a dioxide gas that releases a distinct odour. Benefits of sulfur pertaining to psoriasis and psoriatic arthritis, Sulfur lowers toxins in the body. Sulfur eases itching caused by psoriasis. Melanocyte proliferation stimulants are of interest as potential treatments for the depigmentary skin disorder. *Piper nigrum L.* (Piperaceae) water extract and its main alkaloid, piperine, promote melanocyte proliferation.

Follow up and outcomes

Follow up has been done regularly, but as from last week of March 2020 complete lockdown was imposed on India due to COVID-19 Pandemic hence no more follow-up was continued. This case study shows that Ayurveda line of treatment (Shodhan & Shaman) gives significant result in the treatment of Guttate Psoriasis.

Table 1: Timelines of events

S.no	Date of Consultation	Symptoms	Clinical findings	Investigation	Treatment Given
1	12.12.2019	Itching, multiple erythematous Lesions at trunk and backside of the body, Sleep disturbance constipation	On skin examination irregular, erythematous, silver scaly plaques are present on the trunk and hips. Plaque diameter was 0.3 cm - 0.5 cm, irregular, hard edge, Other signs like swelling, discharge, pulsation, tenderness, fluctuation, temperature are absent.	Patient was not willing for investigation	<i>Erand oil</i> 15 ml at night with <i>Avipattikar choorna</i> 3 gm, <i>Agnitundi vati</i> 2 tab at morning in empty stomach

2	20.12.2020	No more complain of constipation while other symptoms were persisting	On skin examination. Irregular, erythematous, plaques are present on the trunk and hips. Other signs like swelling, discharge, pulsation, tenderness, fluctuation, temperature are absent.	Patient was not willing for investigation	<i>Tablet Gandhak Rasayan: 1 Tab BD Panchatiktadi Ghrita Guggulu: 5 gm TID with luke warm water Manjisthadi kwath: 20 ml TID Arogyavardhani Vati 2 Tab TID Khadirarishta 20ml TID Formulation prepared: Abhrak bhasma 65mg + Kaishor guggulu 125mg+Rasmanikya 62.5mg+Rajat Bhasma 15 mg+Trikatu choorna 500mg twice a day with honey For local application: Gandhak oil and Marichyadi oil twice daily</i>
3	04.01.2020	Itching is mild compare to previous follow-up, Patient started getting good sleep at night multiple erythematous Lesions at trunk and backside of the body	Irregular, erythematous, plaques are present on the trunk and hips, lesions were smooth, Edges were flat, lesions embossed at the level of skin	Patient was not willing for investigation	<i>Tablet Gandhak Rasayan: 1 Tab BD Panchatiktadi Ghrita Guggulu: 5 gm TID with luke warm water Manjisthadi kwath: 20 ml TID Arogyavardhani Vati 2 Tab TID Khadirarishta 20ml TID Formulation prepared: Abhrak bhasma 65mg + Kaishor guggulu 125mg+Rasmanikya 62.5mg+Rajat Bhasma 15 mg+Trikatu choorna 500mg twice a day with honey For local application: Gandhak oil and Marichyadi oil twice daily</i>
4	19/01/2020	Itching is absent, multiple Brownish lesions were present at trunk and back side of the body	Hyper pigmented skin lesions were present, edges at the level of skin, smooth, no other signs are present.	Patient was not willing for investigation	<i>Tablet Gandhak Rasayan: 1 Tab BD Panchatiktadi Ghrita Guggulu: 5 gm TID with luke warm water Manjisthadi kwath: 20 ml TID Arogyavardhani Vati 2 Tab TID Khadirarishta 20ml TID Formulation prepared: Abhrak bhasma 65mg + Kaishor guggulu 125mg+Rasmanikya 62.5mg+Rajat Bhasma 15 mg+Trikatu choorna 500mg twice a day with honey For local application: Gandhak oil and Marichyadi oil twice daily</i>
5	06/02/2020	Symptoms were reduced compare to previous follow-up	Lesions start getting brownish color	Patient was not willing for investigation	<i>Tablet Gandhak Rasayan: 1 Tab BD Panchatiktadi Ghrita Guggulu: 5 gm TID with lukewarm water Manjisthadi kwath: 20 ml TID Arogyavardhani Vati 2 Tab TID Khadirarishta 20ml TID Formulation prepared: Abhrak bhasma 65mg + Kaishor guggulu 125mg+Rasmanikya 62.5mg+Rajat Bhasma 15 mg+Trikatu choorna 500 mg twice a day with honey For local application: Gandhak oil and Marichyadi oil twice daily</i>
6	20/02/2020	almost symptom free	There are only brownish marks of lesions of same size are present, clinically complete healed out. Skin color starts getting normal	Patient was not willing for investigation	<i>Tablet Gandhak Rasayan: 1 Tab BD Panchatiktadi Ghrita Guggulu: 5 gm TID with luke warm water Manjisthadi kwath: 20 ml TID Arogyavardhani Vati 2 Tab TID Khadirarishta 20ml TID Formulation prepared: Abhrak bhasma 65 mg + Kaishor guggulu 125mg+Rasmanikya 62.5mg+Rajat Bhasma 15 mg+Trikatu choorna 500mg twice a day with honey For local application: Gandhak oil and Marichyadi oil twice daily</i>

Figure 1



Discussion

Psoriasis is a chronic disease with frequent relapse and need long duration medication. Currently there is no definite cure of Psoriasis, but can be medically treated for the betterment of quality of life of patient, as in these disease patient not only present with physical manifestations, there is significant mental and psychological health impairment, these aggregate deleterious effect on patient social wellbeing and work performance. *Arogyavardhani vati* (12) is a polyherbo-mineral preparation advised for skin disorders, Its constituents are *shuddha parad* (Herbal purified Mercury), *shuddha gandhak* (Herbal purified sulphur), *lauh-bhashma* (Ash prepared from iron), *Tamrabhashma* (Ash prepared from copper), *Haritaki* (*Terminalia chebula* Retz.), *Vibhitaki* (*Terminalia bellarica* Roxb.), *Amalki* (*Emblica officinale* Gaertn.), *Shilajatu* (Ashphaltum), *Guggulu* (*Commiphora mukul* Hook and Stocks), *Chitramoola* (*Plumbago zeylanica* Linn.), *Katuki* (*Picrorhiza kurroa* Royal ex Benth) and *Nimbswaras* (juice of *Azadiracta indica* A. Juss), various studies supporting the antibacterial and antifungal activity of *Arogyavardhani vati*. Plenty of *Triphala* in *Arogyavardhanivati* is very beneficial to eliminate the *Amatoxin* (Undigested form of food) from the body. In pathology of psoriasis there is sustained inflammation resulting into unchecked keratinocytes proliferation and malfunctioned differentiation, as inflammation plays an important role in the pathology of psoriasis, the anti-inflammatory and potent analgesic properties of the medicine is extremely beneficial in treating skin disease. Being loaded with antioxidant, *Arogyavardhini vati* scavenges free radicals from body and prevent the deleterious effect of disease on body, its antipruritic activity alleviates itching. *Gandhak rasayan*(13) shows various properties such as, anti-viral, anti-bacterial, anti-inflammatory and anti-pruritic. Infectious events are major triggering factor in occurrence of guttate psoriasis, so due to anti-bacterial activity of *gandhak rasayan*, it may alleviate symptoms of guttate psoriasis, similarly because of anti-pruritic activity it helps to relief from itching. Its mechanism of action as per Ayurveda, *Gandhak rasayan* help to sustain the optimum status of *Raktadhatu* (Blood) also act as *Rasayan* (Rejuvenator), due to its *swedjanana* (Induce Perspiration) activity, it removes *Pitta* and

kapha dosha (Humours) from the body, and because of *Kandughan* (Antipruritic) property, it alleviates itching. *Panchtikta ghrita guggulu*(14) an herbal preparation generally advised for skin disorder boosts with the goodness of five better herbs viz. *Nimb*, *giloy*, *kantkarri*, *patola*, *vasa* along with *ghrit* and *guggulu*. *Nimb* (*Azadiracta indica*) possess antiulcer and dose dependent anti-inflammatory activity. *Berberin* and *tinosporin* found in *Guduchi* (*Tinospora cordifolia* Willd) have anti-oxidant and immuno-modulating activity. *Vascicinone* present in *Vasa* (*Adhatoda vasica* Nees) have anti-inflammatory, anti-histaminic and anti-oxidant properties, *Ghrit* possess lipophilic activity which helps in ion transportation to the target organ, facilitates drug entry to the cell and drug delivery to mitochondria, microsomes and nuclear membrane, also helps in re-establishing texture of normal skin. Due to all these properties, these compound will act at the cellular level of skin & check the uncontrolled proliferation of keratinocytes, hence use of these compound reduce symptoms of disease. Its mechanism of action according to Ayurveda, as most of the contents of this compound are *tiktaras* (Bitter taste), *laghu* (Lightness) and *ruksha guna* (Dryness), it mollifies *pitta* and *kapha dosha*, and also works on *lasika* (Interstitial fluid), *rakta* (Blood), *meda* (Adipose tissue) and *sweda* (Sweat). *Manjisthadi kwatha*(15) Its major constituent is *Manjistha* (*Rubia cordifolia* Linn) rich in anthraquinones like *purpurin*, *munjistin*, *rubiasin* and *mollugin* has anti-inflammatory, analgesic, and antioxidant properties. As sustained inflammation plays an important role in pathology of psoriasis therefore these compound is useful in interrupting pathology of disease. As per Ayurveda *Manjistha* has *Raktshodhak* (blood purify) property and it pacify *pitta dosha*. *Marichyadi tail*(16) has antiseptic, antifungal, anti-inflammatory, and immuno-modulatory property hence use of these preparation will deplete the symptoms of psoriasis. As per Ayurveda, mechanism of action of *Marichyadi tail* it reduces *rukshata* (Dryness), *kharata* (Roughness) it also possess *rakta-shodhak* (Blood purifier) *Kandughna* (Anti-pruritic) property, in combination, the induration of lesion as well as scaling was significantly decreased. Thickness and scaling are caused due to vitiation of *Kaphadosha*. *Khadiraristha*

(17), major constituent is *Khadir (Acacia catechu Willd.)* which pacify *kapha* dosha, its chemical constituents are quercetin, fiscetin, epicatechin, and other important tannins. Catechu is reported to regulate cytotoxic T-cells. Fiscetin shows hepato-protective activity, Quercetin a compound reported to inhibits histamine release and tannin acts as the vasoconstrictor. Hence the mentioned pharmacological actions are collectively potent to counteract the inflammatory autoimmune reactions as occurs in Psoriasis. *Khadira* is *tikta-kashaya rasa* (bitter and astringent taste), these two *rasa* by the virtue of their pharmacological properties like *Soshana* (Drying up), *Vishaghnatva* (anti-poisonous), *Kandu-prashamana* (reduce itching sensation), *ropana* (wound healing), *Tvak-mamsasthirikarana* (nourishment and strengthening of skin and muscle), *Kleda-upashosana* (dry of exudation) and *pidana* (Medicated paste applied all over wound except at opening), all these therapeutic activity leads to reduce edema, detoxification of body, antihistaminic action, clearing of derbies, contraction, healing of wound and restoration. Thus these pharmacological properties as a whole are able to exert an anti-inflammatory action on the affected areas of skin, which is beneficial to cure psoriasis, especially during active lymphocyte infiltration. *Rasamanikya* (18) is an efficient Ayurvedic formulation with properties to manage the disease occurring due to vitiation of *vata* and *kapha* dominance skin disorders. *Rasamanikya* (an arsenical formulation) contains *Haratala* (arsenic trisulphide) as an integral component, Arsenic has been highly liable for production of interleukin-1 β in murine keratinocyte cell line (HEL30) though, these have been used safely in Ayurvedic clinical practice since ages without any noticeable unanticipated effects; there is need to generate scientific evidence that these are safe and nontoxic. Combined effects of these drugs are helpful in interrupting the immunological reaction, removal of a toxic substance from the body, relieving pain, inflammation, infection, alleviate itching and improve general body condition. The combination of these drugs has the potential to alleviate all the manifestations of Psoriasis.

Conclusion

Shodhan and shaman therapy based on Ayurvedic principle had shown marked improvement in all symptoms of psoriasis, hence it is evident that this management will produce significant result in psoriasis, such result provide hope to many who are suffering from psoriasis, limitation of these case report is single case study and need to be studied in more number of patients for its concrete evidence.

As per ancient literature *Kustha* is mentioned under *Raktapradoshaj-vikar*, *virechan chikitsa* (Therapeutic Purgation) is the main line of treatment for *Raktapradoshaj-vikar*, According to pathology of disease it is a *Tridosh ojevkar* with *Vata-kapha* predominance according to *Acharya Charak*, *Acharya Vagbhatta* and *Kapha* predominance according to *Acharya Susrut*, *Vaman-chikitsa* is the one treatment for *Kapha* and *Vata-kapha* predominance disorder, contemplating the pediatric age group and *Sukumar awstha*, *Virechan-chikitsa* is advised instead of *Vaman chikitsa* because *Vaman-chikitsa* is contraindicated in pediatric age group, Hence, *Virechan karma* was planned for the better treatment of *Ekkushtha* (Figure 04).

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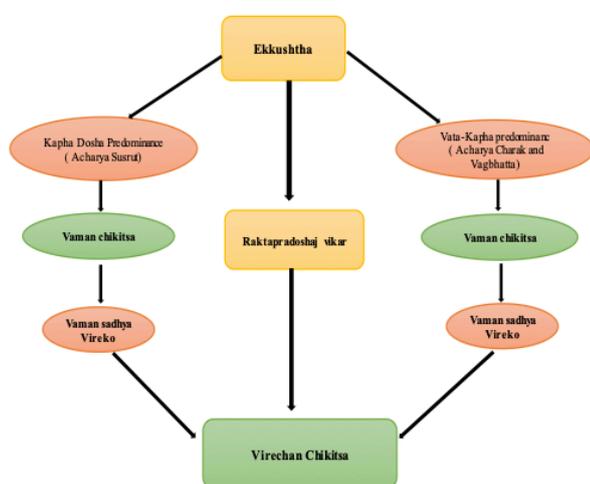


Figure :- 2

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