

## Ayurvedic Management of Dermatographism

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### Abstract

Dermatographism is a type of urticaria which literally means writing on the skin. Dermatographism can also be called as 'Skin writing' or 'Dermographism' or 'Dermatographic urticaria'. Dermatographism is seen in 4-5% of the general population. It is more common in young adults but it can appear at any age. Dermatographism is characterized by symptoms of itching, rash and wheals which are induced by scratching, stroking, tight or abrasive clothing or other personal wear. Rubbing, minor pressure or any form of physical stress to the skin may also initiate lesions. No previous works are available regarding the efficacy of *Ayurveda* in the management of 'Dermatographism'. The present report deals with a case of 'Dermatographism' diagnosed as 'Udarda' according to *Ayurveda*. Efficacy of treatment was assessed on the scoring of 'Dermatology life quality index (DLQI)' and. Total two assessments were done, before treatment and after two months completion of treatment. Internal *Ayurvedic* medicines like, 'Aragwadha amritadi kashaya', 'Ayaskriti', 'Varanadi kashaya' and 'Dashamoola hareetaki' were prescribed with dietary restrictions and life style changes. In present case, patient got 75% relief on DLQI within two months of *Ayurvedic* treatment in dermatographism. *Ayurvedic* treatment seems to be promising in the management of Dermatographism.

**Keywords:** Dermatographism; *Ayurveda*; DLQI; Dermatology Life Quality Index; *Udarda*; Urticaria.

### Introduction

Dermatographism is a variety of urticaria which literally means writing on the skin [1]. Dermatographism can also be called as 'Skin writing' or 'Dermographism' or 'Dermatographic urticaria'. When normal skin is stroked with a dull object, it becomes raised and inflamed to assume the shape of the stroke and it is characterized by local erythema followed by edema and a surrounding flare reaction. Exaggeration of this response is known as Dermatographism. Dermatographism is seen in 4-5% of the general population. It is more common in young adults but it can appear at any age. Peak incidence is in the second and third decades of life [2].

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Dermatographism is characterized by symptoms of itching, rash and wheals which are induced by scratching, stroking, tight or abrasive clothing or other personal wear. Rubbing, minor pressure or any form of physical stress to the skin may also initiate lesions [2]. Dermatographic urticaria appears within 6 minutes and undergoes spontaneous disappearance within 15-30 minutes [3].

No previous works are available regarding the efficacy of *Ayurveda* in the management of 'Dermatographism' (Google scholar search by using search words 'Dermatographism - *Ayurveda*'). For sustained relief patients seek the help of *Ayurvedic* physician for various allergic disorders. Chronic idiopathic urticaria and various other allergic conditions can be correlated with the diseases explained in *Ayurvedic* texts such as, 'Sheeta pitta', 'Udarda' and 'Kotha' [4]. The present case report deals with a patient of 'Dermatographism', not getting satisfactory relief with modern medicines and opted *Ayurvedic* treatment for sustained relief. 'Dermatographism' can be correlated with 'Udarda'. Written informed consent was obtained from the patient for the publication of present case report.

## Case Description

A 16 year old male patient came to our care (07.09.2016) with the complaints of, itching, rash/wheals which are induced by scratching, stroking, tight or abrasive clothing or other pressure stimuli. Rubbing, minor pressure or any form of physical stress to the skin initiates lesions. Urticarial lesions are characterized by raised, inflamed, assumes the shape of the stroke / pressure with local erythema followed by edema and a surrounding flare reaction without pain. Patient has been suffering with skin lesions since last one year (2015). Patient also has been suffering with constipation, indigestion and loss of appetite. Patient was diagnosed as having 'Dermatographism' and took allopathic treatment (anti-histamines) but didn't get sustained relief.

The condition was insidious in onset and gradually progressive. The urticarial lesions aggravate/precipitated by cold environment / objects and also aggravates during night times as well as early morning hours. Wheals were induced by pressure, cold, tight garments and also by stress. The lesions disappeared within 30 minutes. Genitals, muco-cutaneous junctions, mucosa are not involved. Patient was non smoker and non alcoholic. No family member has suffered with atopy or urticaria or any other relevant disease. The condition was progressive, recurrent and creating anxiety to the patient.

Routine hematological, biochemical investigations, renal function tests and liver function tests were within normal limits. AEC (Absolute eosinophil count) was

elevated (460 / cu mm) (08.09.2016).

## Diagnosis, Assessment & Treatment

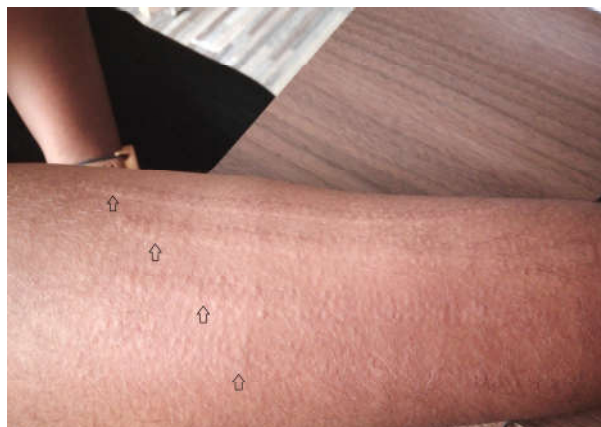
Patient was diagnosed as having 'Dermatographism' and according to *Ayurveda*, diagnosis of 'Udarda' [5] is made. Diagnosis of 'Dermatographism' is made clinically based on history and clinical findings.

To measure the efficacy of treatment, 'Dermatology Life Quality Index (DLQI)' scale was used; Total two assessments were carried out; one before starting *Ayurvedic* treatment and the other after completion of two months of treatment based on the scoring of DLQI. The aim of DLQI is to measure how much the skin problem has affected patient's life over the last week. DLQI questionnaire is designed for use in adults, i.e. patients over the age of 16. It is a self administered 10 item questionnaire, where patients have to indicate, on a likert scale with multiple options (0: not at all; 3: very much), how much they have been troubled by each problem, with higher scores indicating worse quality of life with a total possible score ranging from 0 to 30 [6].

The main objective of the treatment was, to withdraw the patient from allopathic medicines and to maintain the patient on *Ayurvedic* medication, to reduce the severity of the disease, avoidance of precipitating factors/stimuli, management of other associated pathology and reassurance. *Ayurvedic* internal medicines along with strict diet plan and life style changes were implemented to manage Dermatographism (Table 1).

**Table 1:** Intervention

	<i>Shamana chikitsa</i>
08.09.2016 to 07.10.2016	1. <i>Dashamoola hareetaki</i> , twice a day before food; 2. <i>Varanadi kashaya</i> - 80 ml, twice a day before food;
08.10.16 to 08.11.16	1. <i>Aragwadha amritadi kashaya</i> - 80 ml, twice a day before food; 2. <i>Ayaskriti</i> - 20 ml, twice a day after food with equal quantity of water;



**Fig. 1:** Dermatographism

## Discussion

In *Ayurveda*, all skin diseases are described under the umbrella of '*Kushtha*' (skin diseases). Besides this, some allergic conditions which are not explained under *Kushtha* are mentioned separately such as, *Sheetapitta*, *Udarda* and *Kotha*. Various etiopathological factors like *asaatmya ahara* (uncongenial), *viruddha ahara* (incompatible food combinations), *dushi visha* (poisonous / allergic in nature) etc; plays a major role in causation of allergic conditions/urticaria. Various forms of urticaria, angioedema etc; allergic conditions can be correlated with *Sheetapitta*, *Udarda* and *Kotha*. *Sheetapitta* and

*Udarda* both are used synonymously but with a slight difference i.e., *Sheetapitta* is a *vata* dominant condition whereas *Udarda* is a *kapha* dominant. Along with *Shodhana* procedures (especially *vamana*), *shamanaushadhi*'s (pacificatory medicines) which are having the properties like, *ushna* (hot), *teekshna* (quick), *ama pachaka* (digestants) and *vatanulomana* (causing downward movement of *vata* dosha) are useful for *vata*, *kapha shamana* and also for *vimargagami pitta* (*pitta* dislodged from its own place) seen in *Sheetapitta* and *Udarda*. Along with internal medication, *pathya* and *apathya* (diet protocol suitable to the patient and disease) are also very important in the management of diseases according to *Ayurveda* especially *Sheetapitta* and *Udarda* [4,7]. The present case was diagnosed as '*Udarda*' based on the clinical findings.

In present case, even though '*Vamana*' is an ideal choice of treatment it was not implemented as the patient was reluctant to undergo '*Vamana*' procedure due to his academic schedule and wanted to get relief with *Ayurvedic* internal medicines only. '*Dashamoola hareetaki*' was prescribed to achieve *deepana* (stomachic), *pachana*, *vatanulomana* by that to manage the symptoms like loss of appetite, indigestion and constipation as complained by the patient. '*Varanadi kashya*' was prescribed to manage *kapha* aggravation. After one month consumption of '*Dashamoola hareetaki*' and '*Varanadi kashya*' patient got good relief in constipation, indigestion and loss of appetite and also reduction of severity, frequency and intensity of urticaria. After achieving the '*niraama avastha*' (after proper *amapachana*), '*Aragwadha amritadi kashaya*' and '*Ayaskriti*' were prescribed for one month to manage '*Udarda*'. Patient got good relief in cold induced urticarial episodes (relief found especially in the aggravation of urticaria after cold water bath and exposure to cold air) as well as early morning and night time aggravation of urticarial episodes. The size of hives, frequency and intensity got reduced and patient felt better after two months consumption of internal *Ayurvedic* medicines.

Before starting treatment (08.09.2016), total score on DLQI was '12' (the skin condition causing very large effect on patient's life), which is reduced to '3' (small effect on patient's life) during after completion of two months of treatment assessment (08.11.2016). Patient has achieved 75% of relief within two months of *Ayurvedic* treatment. Along with internal medication, *pathya* & *apathya* (diet protocol suitable to the patient and disease) like stop eating curd and drinking hot water were suggested to the patient, *nidana parivarjana* (avoiding disease provoking factors such as avoidance to cold exposure, avoidance of precipitating physical/mechanical stimuli) and

physical exercise (to pacify *kapha* dosha) were advised to the patient to prevent recurrence and also to control dermatographism. No adverse effects were reported by the patient. The patient got clinically meaningful improvement by internal medicines along with dietary restrictions and life style changes. *Ayurvedic* treatment seems to be promising in the management of Dermatographism with in short period of time and without causing any adverse effects. Lack of follow-up assessment is the main drawback of the present study.

## Conclusion

The *Ayurvedic* diagnosis of '*Udarda*' is made for '*Dermatographism*' in present case. *Ayurvedic* medicines along with dietary modifications and life style changes has showed promising results in controlling dermatographism with high success rate within short duration and also without producing any adverse effects in present case. In present case, patient got 75% relief on Dermatology Life Quality Index (DLQI) within two months of *Ayurvedic* treatment in dermatographism. Present study findings can't be generalized and further long term follow up studies with large sample are required to substantiate these findings.

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