



Case Report

Ayurvedic management of adverse drug reactions with *Shvitrahara Varti*

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Abstract

Adverse drug reactions (ADR) are an expression that describes harm associated with the use of medications at therapeutic dose. Traditional medicines also can develop ADRs due to their improper use. *Shvitrahara Varti*, one of such medicines holds *Bakuchi* as a component and is to be used judiciously. Furanocoumarins like psoralen present in *Bakuchi* makes skin hypersensitive and causes phytophotodermatitis in few cases. Hence, one should be careful while using medicines that contain *Bakuchi*. One such case is observed, where extensive reactions with application of *Shvitrahara Varti* were noticed and managed with Ayurvedic treatment.

Keywords: Adverse drug reactions, *Bakuchi*, blisters, *Shvitra*, *Shvitrahara Varti*, vitiligo

Introduction

Traditional systems of medicines, including herbal medicines are being used since centuries for health-care by people in countries of the South-East Asia Region as well as in other parts of the world. Traditional medicine continues to be a valuable source of remedies to the people around the world to secure their health.^[1] Ayurvedic medical system, the traditional medicine of Indian Subcontinent has been in vogue since Vedic period or even earlier. It emphasizes on the maintenance, promotion of health and curing diseases through natural resources.^[2] There is a belief prevailing in the society that these natural products are safe and are free from adverse effects, which is not always true. Majority of adverse events with the use of herbal medicines or products are attributable either to poor product quality or to improper use.^[3] One such adverse event was observed with the use of *Shvitrahara Varti*^[4] that has been reported here.

Vitiligo is a condition that causes de-pigmentation of sections of skin that occurs when melanocytes, die or are unable to function. The world-wide incidence is lesser than 1%.^[5] Though the condition is rare and non-communicable; patients who are stigmatized for their condition may experience depression and similar mood disorders.^[6] The modern medical system has treatment modalities including topical corticosteroids etc., but

is also known for their greater adverse events.^[7] Considering the inconveniences and limitations of modern medical system, the suffering population is searching options through traditional systems of medicines.

In Ayurveda, this condition is comparable with *Shvitra*. Ayurveda has ample of drugs to treat this condition. Single drugs such as *Kakodumbara* (*Ficus hispida* Linn.),^[8] *Khadira* (*Acacia catechu* Wild.),^[9] *Apamarga* (*Achyranthes aspera* Linn.),^[10] *Bakuchi* (*Psoralea corylifolia* Linn.)^[11] etc., and compound formulation such as *Shvitrahara Varti*, *Shvittrari Rasa*,^[12] *Gomutrasava*,^[13] *Shashilekha Vati*,^[14] etc., are useful in the management of *Shvitra*. *Shvitrahara Varti*, one of such preparations is successfully being practiced by Ayurvedic physicians.

Case Report

A 58-year-old, male patient visited the out-patient department (OPD) of Rasa Shastra and Bhaishajya Kalpana during the month of November, 2012 presenting with symptoms of non-segmental vitiligo spreading over elbow and knee joint. History revealed that patient is non-hypertensive, non-diabetic and did not have any symptoms of endocrinal or immunological disorders. He worked in brass industry for the last 5 years and retired recently. On analysis, his *Prakriti* is found to have *Pitta* dominance. The lesions were non-itchy without any discharge.

Patient was prescribed *Shvitrahara Varti* [Table 1] as a local applicant along with internal drugs [Table 2]. It is advised to convert *Varti* into a paste by levigating in the presence of *Gomutra* and apply as a thin layer over the affected area (elbow and knee) followed by exposure to sun rays in the morning.

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After three consecutive topical applications, patient started feeling a burning sensation over the parts affected. Burning sensation became intense followed by pain, blister formation and mild inflammation. He stopped application of *Shvitrahara Varti* from day 3. On consecutive days, the blisters became extensive, dark red in color with purple margins and the blisters bursted of their own with watery discharge. Patient attended the OPD for treatment on 7th day [Figure 1].

Management and Observations

All the medicines were stopped immediately. Patient was advised to irrigate the lesions with freshly prepared *Panchavalkala Kwatha*,^[15] followed by local application of *Sarjarasa Malahara* [Table 3].^[16] Internally, combination of *Punarnavashtaka Kwatha*,^[17] *Manjishtadi Kwatha*^[18] along with

Table 1: Formulation composition of *Shvitrahara Varti*

Content	Part used	Botanical name	Quantity
<i>Bakuchi</i>	Seed	<i>Psoralea corylifolia</i> Linn.	4 parts
<i>Ashuddha Haratala</i>	Mineral	Yellow orpiment	1 part
<i>Gomutra</i>	Cows urine	-	Quantity sufficient for <i>Bhavana</i>

Table 2: Treatment provided

Internal medicines		External medicines	
Medicine	Dose	Medicine	Dose
<i>Erandabhritha Haritaki</i>	3 g at bed time with luke warm water	<i>Shvitrahara Varti</i>	For local application with <i>Gomutra</i> in the morning
<i>Kaishora Guggulu</i>	2 tab of 500 mg/ 3 times a day		

Table 3: Formulation composition of *Sarjarasa Malahara*

Content	Quantity
<i>Sarjarasa</i>	1 part
<i>Tila Taila</i>	4 parts
<i>Aarnala (Kanji)</i>	16 parts

Table 4: Treatment schedule after the formation of blisters

Internal medicines		External medicines	
Medicines	Dose	Medicines	Dose
<i>Punarnavashtaka Kwatha</i> and <i>Manjishtadi Kwatha</i>	40 ml twice/day	<i>Sarjarasa Malahara</i>	Quantity sufficient for local application
<i>Kaishora Guggulu</i>	2 tab of 500 mg/ 3 times/day	<i>Panchavalkala Kwatha</i>	Quantity sufficient for local irrigation

Kaishora Guggulu^[19] was administered [Table 4]. Patient was advised to continue the application of *Malahara* as frequent as possible until complete remission is observed and visit the OPD at regular intervals of a week for follow-up.

Discussion

Shvitrahara Varti is found to be beneficial in cases of *Shvitra* and is frequently being practiced by *Ayurvedic* fraternity. This formulation is a combination of fine powders of *Bakuchi* and *Haratala*, levigated in the presence of *Gomutra*. *Bakuchi* is the predominant component of the formulation. Its compounds are preferred in the management of *Shvitra* since ages.^[20] *Haratala* is useful in different types of skin diseases.^[21] Urine, in general is attributed with properties like *Shodhana* and beneficial in cases of *Kushtha* (skin diseases), *Shopha* (inflammation) etc.,^[22] The combination of these three components are expected to work synergistically and bring back the normal complexion of the skin. At the same time, *Bakuchi* contains several chemical constituents including flavonoids, coumarins and meroterpenes, etc.,^[23] that makes the skin sensitive and hence, the precautionary measures are to be taken while its use. Inappropriate application in higher doses or application in sensitive individuals may lead to the development of adverse effects.

The reactions observed in the current study can be compared with the type of augmented adverse reactions that are related to the main pharmacological effect of the drug (Type A). The lesions were extensive, appeared with severe pain leading to loss of function of the affected parts. The drugs were stopped immediately and medicines were prescribed to counter the condition. *Panchavalkala Kwatha* is beneficial in cases of *Shopha* and *Vrana*. *Sarjarasa Malahara* is beneficial in pacifying *Daha* (burning sensation) and *Shoola* (pain). The combination of *Punarnavashtaka Kwatha* possesses *Pitta Shamaka* property. *Manjishtadi Kwatha* acts as *Rakta Shodhaka* (blood purifier) and *Kaishora Guggulu* is beneficial in *Kushtha* (skin diseases) and *Vrana* (wounds). The combination of all the medicines prescribed in the current case helps to alleviate the adverse effects, check *Rakta Dushti* and pacify aggravated *Pitta*. Application of *Sarjarasa Malahara* locally will check the morbid *Doshas*.

Conclusion

Adverse drug reactions are the integral part of drug pharmacology. They are expected to occur with administration of any drug. Medicines from traditional systems of medicines are not exempted from this. *Ayurveda* has considered in detail about the possible ways by which untoward effects can occur and provided all the guidelines to avoid the occurrence of such incidences. In any eventuality, if untoward effects are noticed due to non-compliance code of conduct, treatment procedures for such conditions have also been prescribed. It implies that, there is always a chance of developing adverse effects by the utilization of drugs from traditional systems of medicines.

Blisters occurred because of the presence of psoralen in *Varti*, which is a natural phenomenon and positive sign in the management of *Shvitra*. But, the individual under the treatment



Figure 1: Reactions on Day-1 on both the elbow and knee joints



Figure 2: Improvement by 7th day



Figure 3: Improvement by 14th day



Figure 4: Improvement by 21st day

in the current case may be idiosyncratic to the drug and hence, extensive lesions were developed. At the end of treatment; the lightened skin at the elbow and knee became dark with and showed signs of repigmentation [Figures 2-4].

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हिन्दी सारांश

श्वित्रहर वर्ति से होनेवाले प्रतिकूल प्रभाव का आयुर्वेदिक दृष्टि से एक अध्ययन

हसमुख आर जाधव, हितेष घेटिया, प्रसांत बी., गालिब, पटगिरी बी.जे., प्रजापति पी.के.

प्रतिकूल औषधीय प्रतिक्रियाएँ एक प्रकार की ऐसी अभिव्यंजना हैं जो चिकित्सार्थ दी जानेवाली औषधीय मात्रा के फल स्वरूप व्यक्त होती हैं और उससे सम्बन्धित कुप्रभाव को दर्शाती हैं। पारम्परिक औषधियाँ भी अनुचित प्रयोगों से प्रतिकूल औषधीय प्रतिक्रियाएँ दे सकती हैं। श्वित्रहर वर्ति, जिसका मुख्य घटक बाकुचि है, श्वित्रमें प्रयोग किया जाता है। फुरानोकौमारीन्स की तरह का सौरेलिनबाकुची में उपस्थित होने के कारण त्वचा को बाकुची के प्रति अतिसंवेदनशील बना देती है जिससे कुछ लोगों में फाईटोफोटोडर्मेटाईटीस उत्पन्न हो जाता है। अतः प्रत्येक को बाकुचियुक्त औषधियों के उपयोग में सावधानी रखनी चाहिए। यहाँ एक ऐसी ही अवस्था का उल्लेख किया गया है जहाँ श्वित्रहर वर्ति के प्रयोग के फलस्वरूप व्यापक प्रतिक्रिया देखी गई और उसका आयुर्वेदीय चिकित्सा के द्वारा समाधान किया गया है।

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