

# Management of Herpes zoster in Ayurveda through Bloodletting therapy along with other Ayurveda treatment: A case study

## Case Report

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## Abstract

Herpes zoster is a very painful disease. Generally, it is a unilateral and self-limiting condition. Inappropriate or delayed therapy might make the disease worse and increase the risk of complications such as post-herpetic neuralgia. Age-related immunosuppression and low immunity make people more susceptible to herpes infection and more likely to develop post-herpetic neuralgia (15%). According to *Ayurveda*, it correlates with *visarpa*. It is a *raktapradoshaj vikara* (disease caused by vitiated blood) and primarily a *pitta*-predominant disease manifesting *twaka* (skin) so *visarpa* is one of the major skin diseases. Here we present a case of a 66-year-old female patient with k/c/o HTN and hypothyroidism visited the OPD with symptoms of unilateral onset of blisters on the right side of the back region, the right axillary region, and the medial aspect of the right arm, within 48 hours; along with burning Pain, itching, and sleeplessness due to burning. According to *Ayurveda*, the patient was clinically diagnosed with *pittaj visarpa*. Considering *pitta dosha* and *rakta dhatu dusti*, *raktmokshan* was planned as the prime treatment. The patient showed improvement in burning pain after the first setting of *raktamokshan*. The numeric rating scale revealed that the patient experienced relief in the severity of burning pain (from 8 to 0) and itching (from 5 to 0). Other *Ayurveda* treatments like *pittaghna chikitsa* (*pitta* pacifying) and *pradeha* (local application) were used. Rapid blister formation stopped within three days of treatment, and after 28 days, all blisters crusted off and a normal skin complexion was achieved. Thus, *Ayurvedic* treatment was valuable and cost-effective for treating conditions like herpes. *Ayurveda* protects patient's immune systems and reduces the chances of post herpetic neuralgia and reinfection.

**Key Words:** Herpes zoster, Bloodletting, *Pittaj Visarpa*, *Raktamokshan*, *Siravedha*, *Ayurveda*.

## Introduction

Varicella - zoster virus is the causative factor of herpes zoster (1). It's the most common type of viral infection. It is a very painful condition, but it is self-limiting. Herpes zoster is more common in people with age group of 60 to 69 (2), as well as in immunocompromised individuals (1). Herpes begins with burning pain and is followed by a vesicle eruption in the next 2-3 days. There are three stages of herpes infection: the pre-eruptive phase (which lasts about 48 hours), the acute exudative stage (which lasts up to 2-4 weeks), and the chronic stage (which lasts more than 4 weeks after the vesicles have healed) (3). The person infected with herpes may continue to experience mild to

moderate pain, known as post-herpetic neuralgia. It is most common complication associated with herpes infection. Post-herpetic neuralgia, which can be avoided by diagnosing herpes within 72 hours of the appearance of an eruption and treating it appropriately (4). Herpes, can be compared with *visarpa*, according to *Ayurveda*. The disease, in which spreading is very rapid in different directions, is known as *visarpa* in *Ayurveda* (5). According to *Charka Samhita*, *tridosha* vitiation along with *rakta dhatu* and rapid spreading are the key features of *visarpa* (6). *Susruta Samhita* has mentioned that *visarpa* in one of the *kshudra kushta* is caused by *twaka* (skin), *rasa*, *rakta*, and *mamsa dhatu* vitiation, resulting in increased inflammation, and eruptions causing other local or systemic symptoms (7). *Acharya Vagbhat* also called it *vata-pitta dosha dustijanya vikar* (disease caused by *vata-pitta* vitiation) and a painful condition with *visphota* (8). *Visphota* is a *pitta-dominant nija-vrana* lesion characterised by pain, burning sensation, and eruption. *Ayurvedic* treatments for *visarpa* include *raktamokshan* (9) (bloodletting), *pradeha* (local application), and other *pittashamak* (*pitta*-calming treatment). The objectives of treatment

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were early management of burning pain, reduction in vesicle eruption, appropriate healing, and avoidance of major complications like post-herpetic neuralgia.

## Materials and methods

A 66-year-old female patient visited the OPD with symptoms of unilateral onset of blisters on the right side of the back region, axillary region, and medial aspect of the right arm, within 48 hours, along with burning pain, itching, and sleeplessness due to burning pain, were diagnosed clinically as *pittaj visarpa* as per Ayurveda. Considering *pitta dosha and rakta dhatu dusti, raktmokshan (bloodletting)* was planned as the prime treatment. Other *ayurveda* treatments like *pittaghna chikitsa* (pitta pacifying) like *kaishor guggulu, sariva ghan vati, lagusutshekar rasa* and for *pradeha* (local application) *kailas jeevan* was used. The primary outcome was burning pain and itching, which were assisted by numeric rating scales (NRS), while blister assessment was done by observing area occupied by blister and form of blisters.

## Informed consent

Patient provided with the informed consent before starting of treatment. Consent was fully explained to the patient, including the benefits and drawbacks of the study, and she willingly signed and consented. Also grant permission for the work to be published.

## Patient information

On June 18, 2020, a 66-year-old female patient with *pittapradhan vataprakruti*, 68 kg of weight, and a height of 5'4" presented to *Deerghayu Panchakarma Chikitsalaya, Dombivali, Thane*, with a complaint of backache, specifically right shoulder pain. For the aforementioned complaint, *gokshuradi guggulu and yograj guggulu* were prescribed. Within the next 2 days, the patient gradually noted symptoms like a lump of blisters on the right side of the back spreading rapidly towards the right axillary region and medial aspect of the right arm with intense burning pain and moderate itching. The patient also noticed sleeplessness. As a result, on June 20, 2020, the patient returned to the clinic with all of these complaints.

Past medical history - known case of hypertension and hypothyroidism (since last 20 years) currently on Tab. Telma H (40/12.5) OD and Thyronorm 75 OD respectively.

Addiction- no any

Family history - Patients mother had hypothyroidism. No other specific history recorded.

## Patient daily routine

Wake up time: 6 am, Exercise: walking for 25 minutes, Tea: 2 cups a day, Breakfast (9 am): poha,

*upma, thallipeeth, idli, dosa*, Lunch (around 1.30 pm -1.45 pm): *chaapati, sabhji, bakhri, dahi*-almost 4-5 times a week, sprouts, leafy vegetables like *methi, palak, mula*, pickles regularly, *lanka* (green chilli), *lasun chatni, udid daal*, Fruits: Rarely, bananas, apples, and pears. Water consumption: 2-4 litres per day; daytime sleep: no; Dinner (8 pm): *chapati, sabhji, chawal, daal*; Sleep time: 11 pm.

## Findings

### Local examination

Area: On the right side of the back, the right axillary region, and the medial aspect of the right arm; Color: reddish (*aarakta varnata*); Shape: asymmetric; Odor: no specific smell; Touch: hot (*ushna*); secretion: after itching, serous discharge (*lasika srava*); Pain: severe (according to numeric rating scale), Burning: severe; Tendency to bleed: slight on intense itching; Loss of sensation: no; Blisters: present; Palpitation: no Lymphadenopathy seen.

### General examination

Patient was afebrile; Pulse: 78/min; R.R.: 21/min; B.P.: 130/80mm Hg; Temperature: 98.7 F

General Appearance: healthy, having weight: 68 kg and height 5'4"

### Systemic examinations

CVS, CNS, and RS are within normal limits. But the patient was restless because of severe burning pain at the site of the eruption. Other reflexes were normal.

### Asthavidha pariksha:

*Nadi* (pulse): *pittavataj, Mala* (bowel habit): regular, *Mootra* (urination): normal, *Jihwa* (tongue): *sama* (coated), *Shabda* (voice): *spasta* (clear), *Sparsh* (touch): normal, *Druk* (vision): normal, *Aakriti* (general body build): *madhyam* (medium built).

### Dashvidha Pariksha

*Prakruti* (constitutional status): *pittapradhan vataprakruti, Sarta* (status of tissue and its related system): *madhyam, Satva* (mental state): *alpa, satmya* (diet status): *madhyam, Vyayam shakti* (physical capacity): *avara, Vaya* (age factor): *vridha, Vikruti: pitta pradhan, Abhyavaharan* (diet capacity) and *Jaran shakti* (digestive capacity): *madhyam*.

### Investigations

The clinical picture of herpes zoster is almost always distinctive enough for diagnosis and laboratory investigations are not required (10). While laboratory tests reserved for more atypical cases (11). So no investigations were performed in this patient as the clinical picture was cleared.

**Timeline**

**Table 1: Timeline of the event was as follow**

Day	Date	Complaints	Treatment plan
1st day	20/6/2020	Burning Pain- severe [NRS score 8] Blister formation Moderate itching [NRS score 5] Pink discoloration Sleeplessness	<i>Sariva ghan vati</i> (12)- 2 bid (each tablet of 250mg) <i>Laghusutshakar ras</i> (13) -2bid (each tablet of 250mg) <i>Kaishor guggulu</i> (14)- 2bid (each tablet of 250mg) <i>Kailas jeevan</i> L/A
4th day (First follow-up)	23/06/2020	Burning Pain-moderate [NRS score 5] Sever blister formation Mild itching [NRS score 3] Dark pink discoloration Sleeplessness	Same as above
8th day (Second follow-up)	27/06/2020	Burning pain- mild [NRS score 3] Blister- new blister formation stops and earlier blisters starts to crust off Mild Itching [NRS score 2] Reddish discoloration Normal sleep	Same as above
12th day (Third follow-up)	01/07/2020	Burning pain- mild [NRS score 2] Blister – blisters starts to crust fall off Mild Itching [NRS score 1] Brownish discoloration seen	<i>Vishatinduk</i> (15) <i>vati</i> - 1 bid (each of 65mg) <i>Laghusutshakar ras</i> - 2bid <i>Kaishor guggulu</i> - 2bid <i>Kailas Jeevan</i> L/A
15th day of treatment (Fourth follow-up)	04/07/2020	No pain [NRS score 0] but slight burning sensation over there. No Itching [NRS score 0] Blister – starts to dry and fall off Brownish discoloration seen	Same as above
17th day (Fifth follow-up)	06/07/2020	No pain [NRS score 0] No burning sensation No itching Blister - most of the dry and fall off Skin complexion- towards normal	Same as above
27th day (Six follow-up)	16/07/2020	No pain [NRS score 0] No itching No burning sensation Blisters- all blisters disappeared Towards normal skin complexion	Same as above x 5days

**Table 2: Details of *siravedh* (bloodletting through venipuncture)**

Day	Date	Procedure
Day 1 <sup>st</sup>	20/06/2020	<i>Raktamokshan - siravedh</i> (16,17) (bloodletting through venipuncture)
Day 8 <sup>th</sup>	27/06/2020	<b>Pre-procedure</b> - Patient was asked to have some sweet food before visiting clinic. After visiting the OPD patient were asked to lie down on examination bed with extended right hand with fists holding thumb inside. The area near cubital vein was cleaned using spirit and sterile cotton swab. Tourniquet is applied approx. 5cm above the cuboidal fossa, so that vein will be visible.
Day 15 <sup>th</sup>	04/07/2020	<b>Procedure</b> - Vein was tapped 2-3 times to engorge it. After that <i>siravedha</i> - approx. 250 ml of blood Was let out from right hand cubital vein with the help of 18 number needle. <b>Post-procedure</b> After approx.120 ml of bloodletting the needle was taken out. Patient asked to release the fist and relax the hand; Tourniquet was released slowly and punctured vein was bandage with cotton swab.

**Diagnostic assessments**

Clinically, the patient was diagnosed with *pittaj visarpa*. According to Ayurveda, *kushtha* and *visarpa* are associated to infectious disorders like Herpes, which mostly affect the skin. These two are consider as differential diagnosis of each other. Due to rapid spreading herpes is frequently associated with *visarpa* because of its nature. *Visarpana* or *parisarpana* refers to a rapidly dispersing nature (5). The intensity of the burning pain, stoppage of new blisters formation, crust off of older blisters and area occupied by blister were

used to make the assessment. Intensity of burning pain and itching were rated using the numeric rating scale (NRS) (18). All the photographs of clinical findings are given below, chronologically.

**Therapeutic intervention**

There is *pittapradhan vata dosha* vitiating, *rakt dhatudusti*, and *twak* (skin) as *adhistan*. Considering all these vitiating factors, a treatment protocol was planned for the patient. *Dushta raktavsechan* (impure bloodletting) was the prime treatment. *Ayurveda*

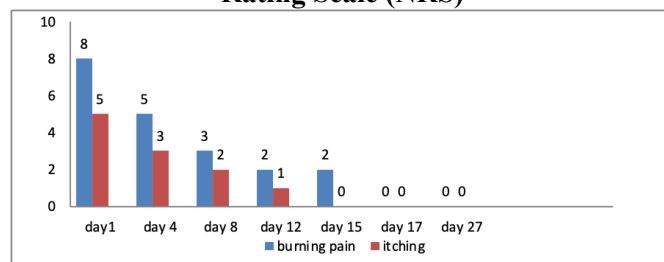
treatment protocol for internal medicines was planned considering *visarpa vyadhi* and *dosha-dhatu* involvement in it. Treatment of concomitant illnesses like hypertension and hypothyroidism was continued as earlier. Ideally in Sushrta samhita place for bloodletting in *visarpa* was two *anguli* above the *kshipra marma* (19). In *yakrutavikara siravedh* from right cubital vein is indicated (19). *Yakruta* is stated as *raktavaha strotas mulasthan*.(20) and *visarpa* is *raktavaha strotas vikar* (21), as in this patient the vein above *kshipra marma* was not prominently visible so we decided to do bloodletting from cubital vein and which is easily accessible. The first setting of *siravedha* (bloodletting) was done from the right hand cubital vein using an 18 number of needle immediately after diagnosis. After the first setting of *siravedha*, the burning pain and itching reduced markedly. Total settings of three *siravedha* were required to achieve complete recovery, along with internal medications. *Sariva ghan vati*, *Laghushutashekar rasa*, *Kaishor guggulu*, *Vishatinduk vati*, and *Kailas Jeevan* ointment for local application, were all easily available market preparations given throughout the total span of treatment. As treatment progresses, symptoms subside. All herbal and herbo-mineral medications used in treatment were given in Table 1 along with their dose and duration. The patient was also educated with *pathya-apathya* (22).

During the whole duration of treatment, no allopathic medications like antivirals, analgesics, or corticosteroids were administered.

**Follow-up & outcome**

*Siravedha* was done on the first day of blister formation. As illustrated in Figure 1, the patient experienced relief in the severity of burning pain (from 8 to 0) and itching (from 5 to 0) as measured by the numeric rating scale. The next two settings of *siravedha* were done at an interval of 7–7 days. Blisters were increased in initial three days of and decrease afterwards. The area occupied by blister and form of blisters are describes below in table 4. The first three follow-ups occurred after 3–3 days, followed by 5 and 10 day follow-ups. Clinically, changes in patient during follow-ups are seen, as shown in the below images1-image 8. The final photograph (image 9) was taken after the treatment was completed. We are connected to the patient by telephonic conversation, and even now, till the date of submission of this study, the patient does not show any symptoms, especially of post-herpetic neuralgia.

**Figure no. 1 – Graphical representation of burning pain & itching at each follow-up assisted by Numeric Rating Scale (NRS)**



**Table 3: Pathya-apathya**

Pathya	Apathya
i) Diet ( <i>Ahara</i> )- Soup of green gram beans, clarified butter, black raisins, indian gooseberry, yellow/ red lentils porridge, rice, jowar roti, all fruity vegetables, fruits like pomegranate, sapodilla. ii) Lifestyle ( <i>Vihar</i> ) - rest.	i) Diet ( <i>Ahara</i> )- leafy vegetables, horse gram legume, black gram dal, garlic, excessive salt and salty things, heavy food like non-vegetarian, curd. ii) Lifestyle ( <i>Vihar</i> ) - Exercise, daytime sleep, suppression of natural urges, anger, sorrow, exposure to heat and sun.

**Table 4: Assessment of blister parameter**

Sr. no.	Parameter assisted	Day 1	Day 4	Day 8	Day 12	Day 17	Day 20	Day 27
1	Area occupied by blisters	blisters on the right side of the back region, the right axillary region spreading towards the medial aspect of the right arm	blisters on the right side of the back region, the right axillary region spreading towards the medial aspect of the right arm	Area of blisters remained same. No further spreading observed.	Area of blisters remained same. No further spreading observed.	No further spreading of blisters observed. All blisters were dried.	No further spreading of blisters observed. All blisters were dried.	No further spreading of blisters observed. All blisters were dried.
2	Form of blisters	Small, Pinkish, tender blisters	Small but rapidly spreading blisters, dark pinkish discoloration with severe burning pain and itching	No new blister eruption, Reddish- blackish discoloration, some blisters started to crust off	No new blister eruption, brownish-blackish discoloration, some of blisters crust off	No new blister eruption, brownish-blackish discoloration, most of blisters crust off	No blisters remained, Skin complexion towards normal	No blisters remained, dead skin flaked off and Skin complexion achieved towards normal



<p><b>IMAGE 1: DAY FIREST -20-6-2020</b></p>	<p><b>IMAGE 2: RAKTMOKSHAN BY SIRAVEDHA (BLOODLETTING BY VENEPUNCTURE) ON DAY 1<sup>st</sup></b></p>	<p><b>IMAGE 3: DAY FOURTH (FIRST FOLLOW UP) 23-6-2020</b></p>
		
<p><b>IMAGE 4: DAY EIGHTH (SECOND FOLLOW UP) 27-6-2020</b></p>	<p><b>IMAGE 5: DAY TWELFTH (THIRD FOLLOW UP) 1-7-2020</b></p>	<p><b>IMAGE 6: DAY SEVENTEEN (FOURTH FOLLOW UP) 6-7-2020</b></p>
		
<p><b>IMAGE 7: DAY TWENTY (FIFTH FOLLOW UP) 9-7-2020</b></p>	<p><b>IMAGE 8: DAY TWENTY-SEVENTH (SIXTH FOLLOW UP) 16-7-2020</b></p>	<p><b>IMAGE 9: AT THE END OF TREATMENT (SEVENTH FOLLOW UP) 22-7-2020</b></p>
		

## Discussion

In this case, the patient was examined thoroughly and diagnosed as having *pittaj visarpa* according to Ayurveda. *Visarpa* can be compared to herpes zoster in modern science, having a rapid spread and intense burning at the site of blisters. VZV can remain dormant in the nerve ganglion for years, causing postherpetic neuralgia (23). The treatments recommended in Ayurveda for *visarpa* are *raktamokshan* (bloodletting), *pradeha* (local application) and other *pittashamak chikitsa* (pitta pacifying treatment). *Visarpa* is a *rakta-pitta pradoshaj vikara* (disease caused by *rakta-pitta* vitiation) with *rakta*, *lasika*, *mamsa*, *twaka* and *vata*, *pitta*, *kapha* are *saptkodravya sangraha* (seven contributing factor) explained in *samprapti* (pathogenesis) of *visarpa* (6) while *twaka* (skin) and *mamsa* (subcutaneous tissue) as *adhasthan* (place where it expressed). Due to its *visarapan* (spreading) nature, it is called a *visarpa*. The present case has a predominant vitiation of *pittaj dosha*; it is clinically diagnosed as *pittaj visarpa*. The prime treatment for *visarpa*, as per the Samhita, is *raktamokshan* (bloodletting). The area of blisters was large, so rather than leech therapy, *siravedha* was chosen. So at the first visit, by accessing the patient's *bala* (strength), *siravedha* was done from the right side of the cubital vein as the blister formation started to spread over the right side of the axilla and chest. After the first setting of *siravedha*, the patient had relief from the burning pain (from severe [8] to moderate [5]). At the interval of 7–7 days, two more settings of *siravedha* were done. For internal medication (palliative treatment), *dahashamak* (pacifying the burning sensation), *raktaprasadak*, *pittahara* (pacifying the pitta), and *deepan-pachan*

drugs were selected. The *sariva ghan vati* was chosen for its *madhura* (sweet), *tikta* (bitter) *rasa*, *raktaprasadhak*, *dahashamak*, *vishaghna*, and *raktagata amapachan* properties (12). *Sarivaroot* (*Hemidesmus indicus R. Br.*) has also proven to have potent antiviral action against the herpes virus (24, 25). *Hemidesmus indicus R. Br.* also has analgesic, neuroprotective, and immunomodulatory effects (26). Both *lagusutshekar rasa* and *kaishor guggulu* work primarily on *pitta* and *rakta* vitiation. *Lagusutshekar* was given to digest *saam pitta dosha* leading to promote formation of good quality of *rasa-rakta dhatu*. It is helpful in reducing the burning sensation. In *Kaishor guggulu* has blood-purifying properties (27) it contains all the *tikta rasa dravya*, which helps in *deepan* and *pachan*. *Vishatinduk vati* was used in patients at later follow-ups after *pachan* treatment, with the goal of avoiding future complication of post-herpes neuralgia. It contains *shuddha kuchala*, which acts as a potent analgesic, nerve tonic, and nerve stimulant (28, 29). *Kailas Jeevan Ointment* was used for local application (*pradeha*); it is primarily indicated for burning sensation and wound healing. All its contents are of *sheeta virya* and *pittahara* property, providing a cooling effect.

## Conclusion

This case study gives better solution for early management of burning pain, decreased blister eruption, adequate healing, and avoidance of serious complication like post-herpetic neuralgia in *visarpa* by using Ayurveda treatment protocol. It also emphasized the role of *raktamokshan* (*siravedh*) in *visarpa* as mentioned in classics. *Raktamokshan* is a novel, simple,

superior, and cost-effective method of treating *visarpa* (herpes zoster) burning pain and blister. The multimodular *ayurveda* treatment protocol for *visarpa chikitsa* including *pradeha* (local application), *pittaghna chikitsa* (pitta pacifying) and *pathya-apathya* were also proven effective in management of herpes. A single case was reported in the current study. For better comprehension, this treatment protocol should be used on large number of participants with *visarpa* (herpes).

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