

Management of Herpes Zoster solely employing Ayurveda: A case report

Case Report

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Abstract

Background: Varicella-zoster virus (VZV) causes two distinct clinical syndromes: varicella (chickenpox) and herpes zoster. Though human-specific, varicella-zoster virus infections can last for a few hours or even a day or two outside of humans. Herpes zoster is similar to *Visarpa* disease in Ayurvedic texts. *Visarpa* spreads very rapidly to many different body parts. Because it spreads throughout the body, it is also known as *Parisarpa*. Analysing the herpes zoster symptoms, it reveals vitiating *Twak*, *Rakta*, and *Mamsa Dhātu*, with vitiation of *Vata-Pitta*-dominated *Tridosha*. This helps us understand the gravity and importance of the disease. *Visarpa* is not a chronic illness like *Kushtha* (skin diseases), but, if left untreated, might lead to severe complications. **Material and methods:** A 25-year-old female with the main complaint of gradually erupted vesicles on the ventral aspect of her right forearm and excruciating burning pain, erythema, and mild itching. The patient was treated with *Patolakaturhinyadi Kashayam*, powders of *Sariwa* (*Hemidesmus indicus* R.Br.), *Yashtimadhu* (*Glycyrrhiza glabra* Linn.), *Amalaki* (*Embolia officinalis* Gaertn.), *Gandhaka rasayana*. *Shatadhauta ghrita* and *Durva ghrita* were used for local application. **Observation and Result:** With the aid of internal treatment employing these *yogas*, the patient shown optimistic outcomes, and herpes zoster was successfully treated with Ayurveda.

Keywords: Herpes Zoster, *Patolakaturhinyadi Kashayam*, *Shatadhauta Ghrita*, *Visarpa*.

Introduction

'*Visarpa*' term denotes its spreading nature and the disease is also termed as '*Parisarpa*' due to its characteristic of extensive spreading all over the body. *Rakta* (blood), *Lasika* (lymph), *Twak* (skin) and *Mansa* (muscle) are *Dushya* (substratum of pathology) and three *Doshas* (*Vata*, *Pitta*, *Kapha*) take part in the pathogenesis of *Visarpa*. (1) With similarities in manifestations and course of the disease, *Visarpa* can be correlated with herpes zoster. Herpes zoster is caused by the varicella-zoster virus. After an attack of chicken pox, the virus lies dormant in the sensory root ganglia. Herpes zoster is a manifestation of its reactivation. The primary symptom of herpes is a unilateral vesicular eruption inside the dermatome that is accompanied by excruciating pain. Its spread is very rapid; when it covers a large area, the entire area experiences burning sensations, pain, and discharge. Therefore, the main aim of treatment should be to restrict the spread to a limited area, minimize pain, promote vesicle healing, and avoid complications. Antiviral medications, such as acyclovir, corticosteroids, and topical lidocaine jelly, are frequently used by modern medical specialists for

managing it. Although the safety of acyclovir has been proven through numerous clinical trials, it is associated with adverse reactions such as confusion or sleepiness, hallucinations, behaviour changes, nausea, vomiting, diarrhoea, and transient renal insufficiency. (2) A case with typical signs and symptoms of '*Visarpa*' which can be correlated with 'Herpes Zoster' in modern science, is described in this article. Drugs with *Vatapittahara* properties were administered as both *Vata* and *Pitta Doshas* were found to be vitiated. As the disease has a fast-spreading nature and is extremely painful, it can even produce severe complications. As a consequence, active and early management is required. *Pittashamaka* (*pitta*-calming treatment) and *Raktashodhaka aushadhi*, as well as *pradeha* (local application), were advocated as modalities of treatment. Along with these specific lifestyle changes (*Pathya-Apathya*) has an effective role in treating this situation. This case study provides insight into the entirely Ayurvedic approach to treating herpes zoster. Early diagnosis and ayurvedic therapy prevent long-term consequences such as post-herpetic neuralgia, in addition to providing total symptom relief. The ability to successfully treat herpes zoster in a suitable ayurvedic manner is further strengthened by this, and it also encourages researchers to conduct additional research.

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Case Report

Patient information

A 25-year-old female, 51 kg in weight, who was not previously known to have any significant illnesses, had complaints of gradually erupted vesicles on the

ventral aspect of her right forearm and excruciating burning pain, erythema, and mild itching. She had been experiencing fever, body malaise, disturbed sleep, and generalised weakness for the last 5 days; she had a severe loss of appetite and was unable to relish food for the last 7-8 days. She went to the Ayurvedic OPD for betterment on 02/12/2022.

General Examination

Patient had pulse rate 80/min, blood pressure 110/80 mm Hg. Respiratory rate – 18/min. Temperature: 100.8° F.

Systemic Examination

The respiratory and cardiovascular systems were within normal limits. The patient was conscious and oriented, but she was somewhat anxious and was experiencing extreme pain at the site of the blisters; her pupillary reflexes were normal. Deep tendon and superficial reflexes were both normal. No tenderness or organomegaly was detected in the gastrointestinal system.

Ashtavidha Parikshana: Nadi (pulse) was *Vatapittaja*, Jivha (tongue) was *Sama* (coated), *Aakriti* was *Madhyam* (medium built), *Mutra* (Urine) was *Atipeeta* (Dark Yellow), *Mala* (stool) was *Pichhila* (slimy), *Sparsha* was *Ushna* (hot). Bowel habits were irregular. *Druk* (vision) was normal with correction of refractive error.

Dashavidha Examination showed *Pittapradhana Vatanubandhi Prakruti*, *Madhyama Sarata*, *Alpa Satva*, *Madhyama Samhanana*, *Madhyama Satmya*, *Avara Vyayamashakti*, *Taruna Vaya*, *Vikruti Vatapitta Pradhana*, *Abhyavaharana* and *Jarana Shakti* were *Madhyama*.

Family history: Maternal history: hypertension

Paternal history: No any major illness

Patient's daily routine

- *Ahara* (diet): Veg diet, 3 times / day, *Sarvarasatmya*
- *Vihara*: Mild exposure to *Vata* and *Atapa*
- *Nidra* (sleep): *Prakruta* before the onset of symptoms and disturbed since few days

Local Examination

On Inspection

There was around 3cm-5cm region of erythema and eruptive lesion on the ventral aspect of the right forearm. Lesions were found to consist of grouped, tense, superficially seated vesicles. There was no herpes rash on the rest of her body. There were no secretions initially, but in later stages, mild serous discharge from vesicular eruptions was seen.

On palpation

The area was tender to the touch, No local loss of sensation

Timeline

The detailed timeline with therapeutic intervention is given in Table 1.

Investigations

Since the patient had no history of any serious illness and herpes infection was the primary clinical diagnosis based on the signs and symptoms, no laboratory investigations were advised. Photographs are given in Fig. 2 (A to G).

Diagnostic Assessments

Once the rash has developed, the signs and symptoms of herpes zoster are typically distinct enough to facilitate a precise clinical diagnosis. (3) Burning pain and tenderness were the two parameters assessed to check the clinical symptomatic relief based on NRS (Numerical Rating scale). Laboratory investigations may be beneficial for patients with an atypical rash, which is indicative in cases of immunosuppression. (4) But in the present case, the vesicular eruption and other signs were sufficient to make the diagnosis. NRS ranging from 0 to 10 (ranging from no pain to the worst pain imaginable) has been used to assess the burning pain and local tenderness present. (5) NRS score according to severity of symptom is presented in table 2. NRS has been presented in fig.1.

Differential Diagnosis

Herpes simplex, Erysipelas, Contact dermatitis, insect bite and drug eruptions.

Usually, herpes simplex is bilateral, and common sites of herpes simplex like the face and genitals were not affected in this case. Vesicular eruptions are not present in erysipelas. (6) Hence, herpes simplex and erysipelas were ruled out. Insect bites, Contact dermatitis, and drug eruptions were ruled out by assessing recent exposure to insect bites, contact with allergic things, or a history of drug consumption. Vesicles are blisters that are less than 5 mm in diameter; bullae are blisters that are 5 mm or larger in diameter. The majority of the blisters in the present case have a diameter of less than five mm. Therefore, bullous eruptive conditions such as bullous impetigo, bullous pemphigoid were primarily ruled out.

Therapeutic intervention

A treatment strategy was implemented taking into account the factors *Pittavatanubandhi Samprapti*, *Rakta Dhātu*, and *Tvak Sthana*. The ease of access to these medications at our clinic and the Ayurvedic descriptions of the medications were both considered important factors for selecting specific medications. Although *Shodhana* modalities like *Raktamokshana* are indicated in treatise, for *visarpa* (7), initially as the patient was in *Samavastha*, *Shamana* line of treatment was administered (8). *Patolakaturohinyadi Kashayam* is indicated in diseases which are produced by vitiation of *Pitta*. (9) Powders of *Sariwa* (*Hemidesmus indicus* R.Br.), *Yashtimadhu* (*Glycyrrhiza glabra* Linn.) and *Amalaki* (*Emblia officinalis* Gaertn) were combined in equal quantities and given internally considering their *Dahaghna* and *Pittashamaka* properties, as well as easy availability. *Shatadhauta Ghrita* was advised for local application. Patient was advised to follow *Pathya* and *Apathya* modalities. Later on, during follow-up, some

internal medications were omitted considering the relief of symptoms. Medication for local application was also altered. Neither allopathic topical ointments nor

antivirals were taken or used during the course of treatment.

Table 1: Showing Ayurveda plan of treatment along with timeline

Date	Treatment	Aushadha Sevana Kala and Dosage
Day 1 02/12/2022	Internal Medications: 1) Patolakaturohinyadi Kashayam	20 ml decoction
	2) Combination of powders of <i>Sariwa (Hemidesmus indicus R.Br.)</i> , <i>Yashtimadhu (Glycyrrhiza glabra Linn.)</i> and <i>Amalaki (Embllica officinalis Gaertn.)</i> (all the three drugs were taken in equal quantity)	2 gm TDS
	3) <i>Gandhaka Rasayana (250 mg)</i>	1 tab BD
	Local application: Shatadhauta Ghrita	Twice a day
Day 4 05/12/22	Similar continuation of all medications	Similar dosage and <i>Aushadha Sevana Kala</i> (as above)
Day 8 09/12/22	Internal Medications: 1) Patolakaturohinyadi Kashayam	20 ml BD (frequency reduced)
	2) Combination of powders of <i>Sariwa (Hemidesmus indicus R.Br.)</i> , <i>Yashtimadhu (Glycyrrhiza glabra Linn.)</i> and <i>Amalaki (Embllica officinalis Gaertn.)</i> (all the three drugs were taken in equal quantity)	2 gram BD
	Local application: Shatadhauta Ghrita	Twice a day
Day 12 13/12/22	Internal Medications: 1) Combination of powders of <i>Sariwa (Hemidesmus indicus R.Br.)</i> , <i>Yashtimadhu (Glycyrrhiza glabra Linn.)</i> and <i>Amalaki (Embllica officinalis Gaertn.)</i> (all the three drugs were taken in equal quantity)	2 gram BD
	Local application: Durva Ghrita	Twice a day
Day 16 17/12/22	Internal Medications: 1) Combination of powders of <i>Sariwa (Hemidesmus indicus R.Br.)</i> , <i>Yashtimadhu (Glycyrrhiza glabra Linn.)</i> and <i>Amalaki (Embllica officinalis Gaertn.)</i> (all the three drugs were taken in equal quantity)	2 gram BD
	Local application: Durva Ghrita	Twice a day
Day 23 24/12/22	Local application: Durva Ghrita	Once a day

Follow up and outcomes

Patient came to Ayurveda OPD on the 3rd day of the onset of the vesicles. Some pictures were captured before starting treatment by the patient herself (fig.2 A). Severe burning pain, erythema and tenderness were there. On first follow-up, within four days of administering internal medicine, the patient experienced some improvement in the severity of the burning pain and tenderness. (fig.2 C) This was assessed by the Numerical Rating Scale (NRS). Fig. 1 shows the effect of therapy on the NRS symptom score. Local redness was mildly reduced, but some tenderness was still there. Changes in subsequent follow-ups are shown in images. The patient came for a second follow-up on day 8 (fig.2 D) Burning pain was drastically reduced, some of the vesicles began to rupture, and spread remained restricted to a limited area, which was the great gain of Ayurveda management, but mild *Samata Lakshana* like *Picchhila Mala* was still there, hence medications were continued at the same dosages. Vesicles were in the initiation of the drying phase. On the 3rd follow-up, at day 12 (fig.2 E), blisters started drying and crusting, brownish discoloration was seen in the healing phase, and burning pain was reduced to a great

extent (NRS score 2). At this stage, external application changed to promote further healing. Subsequent progressive reductions in the symptoms were achieved at the 4th follow-up; on day 16 (fig.2 F), there was no erythema, no tenderness, and some crusts started to fall off as well. Exfoliated dead skin started flaking off, and internal medication and local application continued for the next 7 days. At the 5th follow-up, on day 23, no erythema, no tenderness, and completely healed skin were observed (fig.2 G); only local application was prescribed, at this stage.

Table 2: NRS score in relation with severity of symptom (5)

Clinical	Severity of symptom	Numerical rating
Pain	No pain	0
	Mild pain	1-3
	Moderate pain	4-6
	Severe pain	7-10
Tenderness	No tenderness	0
	Mild tenderness	1-3
	Moderate tenderness	4-6
	Severe tenderness	7-10

Figure 1: Numerical Rating scale

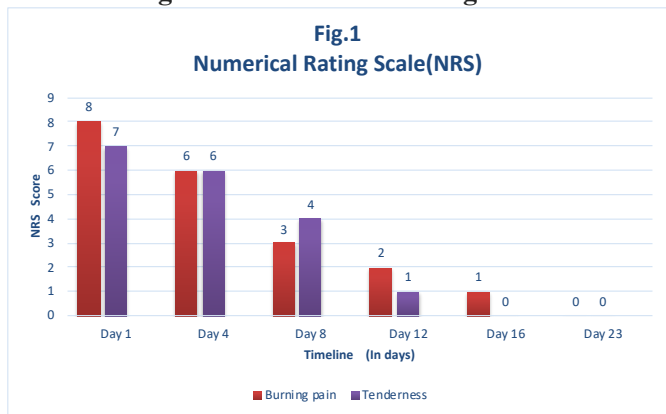


Figure 2: Images showing stage wise improvement of Visarpa (Herpes zoster)



Table 3: Pathya-apathya (10)

Pathya	Apathya
1)Ahara: <i>Dadima (Punica granatum L.)</i> <i>Mudga (Phaseolus radiatus L.)</i> , <i>Intake of Yava (Hordeum vulgare L.)</i> , <i>Shasthika Shali (Oryza sativa Linn.)</i> <i>Draksha (Vitis vinifera L.)</i> ,	1)Ahara: excessive salty diet, non-veg,egg, fast food, spicy substances,diet with excessive oil 2)Vihara: <i>Divaswapna (Day sleep)</i> <i>Ratri jagaran (night awakening)</i>

Discussion

The onset of herpes zoster is heralded by pain within the dermatome, which may precede lesions by 48–72 hr; an erythematous maculopapular rash evolves rapidly into vesicular lesions. (11) The prodrome of segmental pain (usually excruciating) begins 1–4 days before the eruption. Erythema and oedema are rapidly followed by the appearance of grouped vesicles in a segmental distribution.(2) Initial symptoms are burning pain, erythema, and tenderness, which are followed by typical herpetic lesions. These are unilateral and distributed dermatomally. The lesions become pustular and crusted in 2 to 3 weeks. (12) In this case, the patient had severe burning, erythema at the area of the vesicles, and slightly raised body temperature, so she was diagnosed as having *Pittapradhana Vataja Visarpa*, and the patient underwent purely Ayurvedic treatment. As the patient was showing *Samata Lakshana* along with severe burning pain, immediate *Shodhana* was not a feasible choice. As a result, the *Shamana* line of treatment was planned in order to provide relief. *Tikta rasa Sevana* is indicated when the disease is *Pittapradhana*. *Tikta Rasa* (bitter taste) is *Pittashamaka* and is also helpful in *Amapachana*. It is composed of *Vayu* (air) and *Aakashha* (ether) as the predominant elements. Therefore, it contains *Laghu* (light), *Ruksha* (causing dryness) (13) and *Lekhana* (scraping) properties. With the aid of these properties, it removes *Margavrodha* from the cell (obstruction to nutrient transport and information transfer across the cell membrane). (14) It has *Kushthaghna*, *Jwaraghna* (anti-pyretic), *Dahaghna* and *Vishaghna* (anti-poison) properties and pacifies *Kapha* and *Pitta Dosha* (15, 28) Hence, *Tikta Rasa* was considered a key factor in the treatment modality. *Patolakaturohinyadi Kashaya* contains maximum drugs with *Tikta Rasa*. It contains *Patola (Trichosanthes dioica Roxb.)*, *Katuka (Picrorhiza kurroa Royal ex Benth)*, *Shwetachandana (Santalum album Linn.)*, *Murva (Marsdenia tenacissima W. and A.)*, *Guduchi (Tinospora cordifolia Willd Miers.)*, and *Patha (Cissampelos pareira Linn.)*. The majority of these medications contain *tikta*, *madhura rasa*, and *sheeta virya*, as well as certain variations. Considering the saturation of fluid inside the vesicles, *Rukshana* (absorption of moisture) for suppression of *Kleda* (excessive moisture) is an important function of these drugs. *Tikta rasa* helps in *Kleda Shoshana* (absorption of excessive fluid). (16) These drugs also possess *Rasaprasadana* (improvement in the quality of blood), *Raktashodhana* (purification of

Pathya-Apathya

Pathya aids in maintaining the effective functioning of *srotas* and contributes in the prevention of *srotodushti*. It provides explanations employing the *ahara* (diet), *vihara*, and *aushadhi* (medications). The *pathya-apathya* for *visarpa* which was followed by patient is explained in table 3.

the blood), and *Agnidipana* (improvement of the biological fire) properties. It helps to detoxify the liver and pacify the vitiated *Pitta* and *Kapha Doshas* carried by *Rakta Dhatu* and *Rasa Dhatu*. Various phytochemical constituents of *Kashaya* may help to correct the pathophysiology of *Visarpa*. (17) Powders of *Sariwa* (*Hemidesmus indicus* R.Br.), *Yashtimadhu* (*Glycyrrhiza glabra* Linn.), and *Amalaki* (*Embllica officinalis* Gaertn.) were administered internally. *Sariva* (*Hemidesmus indicus* R.Br.) possesses *Madhura* (sweet taste), *Tikta Rasa* (bitter taste), *Snigdha* as well as *Guru Guna*, *Sheeta Veerya* (cold potency), and *Madhura Vipaka*, which pacifies *Vata-Pitta Dosha*. It is *Tvakdosahara* (reduces skin disorders), *Raktasodhaka* (blood purifier), and *Varnya* (to improve the complexion). It is included in *Dahaprashamana Mahakashaya* by *Acharya Charaka*. (18) Its antiviral mechanism can be described as direct interaction with virus particles, serving as a virucide agent, or blocking virus attachment to the host cell surface. Additionally, rather than targeting a single virus, it may also have molecules that act by inhibiting particular host functions essential for viral activity. (19) *Acharya Charaka* included *Yashtimadhu* (*Glycyrrhiza glabra* Linn.) in *Kandughna* (20) (relieves itching), *Varnya* (improves complexion) (21) and *Dahaprashamana* (18) (relieves burning sensation) *Gana*. It possesses *Madhura* (sweet taste), *Snigdha*, *Guru Guna*, *Sheeta Veerya* (cold potency), and *Madhura Vipaka*. All these properties are helpful in pacifying *pitta vikara* (diseases caused by *pitta*). Previous in vitro studies shown that it also possesses antiviral activity to some extent. In human embryonic fibroblast cells inoculated with five strains of varicella zoster virus, glycyrrhizin produced an inhibitory effect on viral proliferation with an IC50 (inhibitory concentration reducing activity to 50% of controls) of 0.71 mM. (22) Natural analgesic properties are seen in *Glycyrrhiza glabra*. (23) These proven antiviral, analgesic activities and *Dahaprashamana* activity due to its *Guna* might be the probable reasons for reducing burning pain in herpes zoster. *Amalaki* (*Embllica officinalis* Gaertn.) has *Sheeta Veerya*, *Madhura Vipaka* and possess *Kushthaghna* property as well. (24) *Acharya Charaka* indicated it in *Visarpa Chikitsa* (25). Alkaloids, tannins, phenolic chemicals, carbohydrates, and amino acids were evaluated positively during preliminary phytochemical screening of the plant extract, which might contribute to its antipyretic and analgesic activities. (26) *Gandhaka Rasayana* functions by taking advantage of its *Pittahara*, *Kledahara*, and *Raktashodhaka* (property to purify the blood) activities. It can be utilised very well when both *Rakta* and *Pitta* are vitiated simultaneously (27). In *Visarpachikitsa*, if there is *Daha* in *Visarpa*, then for *Daha-shamanartha* (pacification of burning sensation), *Shataadhauta ghrta* is advised for local application (28). *Durva* (*Cynodon dactylon* Linn.) is a *Madhura Vipaki* and *Sheeta Veerya* drug indicated in *Twak Roga*, *Daha*, and *Visarpa*. (29) *Durvasiddha Ghrta* (ghee medicated by the juice of *Cynodon dactylon*) is indicated as *Vranaropaka* in *Visarpa Chikitsa*. (30) Hence, it was recommended in order to

promote early healing of vesicular lesion. Herpes zoster can affect various nerves. Spread of vesicular lesion follows the affected nerve dermatome. Hence area of skin which could be affected may be large. But in present case, with the above-mentioned treatment approaches, we were able to restrict the spread to a limited area of skin (about 3cm-5cm). although the duration is same as of physiological reversal of disease but the intensity of symptoms like pain, burning was significantly reduced with the help of treatment. Nearly 21.1 percent patients develop post-herpetic complication called postherpetic neuralgia after episode of Herpes zoster. (31) In present case, post-herpetic neuralgia is also prevented effectively by Ayurveda therapeutic intervention.

Informed Consent

The patient was provided with informed consent in structured format. She was given a thorough explanation of consent, along with the advantages and disadvantages of the trial, and she willingly signed it and given consent to publish this article.

Conclusion

In accordance with the treatment principles of disease, the Ayurvedic method for managing herpes zoster resolves the pathogenic aetiology and provides a better and more affordable solution. Without the vitiation of *rakta* and *pitta*, *visarpa* never manifests; therefore, *pittashamaka* (*pitta*-calming treatment) and *raktashodhaka aushadhi* should be the primary lines of treatment. *Tikta Rasa* medications administered internally and the advised diet regimen, along with the topical application of *Sheeta veerya ghrta*, were effective for recovery. Without using antiviral medications, the patient recovered with the aid of Ayurvedic treatment. It reduced the signs and symptoms of disease, and complications were also avoided. With the above-mentioned treatment approaches, we were able to restrict the spread to a limited area, and the patient recovered far more quickly than the condition typically progresses. The results observed in this case were encouraging and emphasised the importance of Ayurvedic intervention in the successful management of herpes zoster.

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