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Management of Herpes Zoster (*Visarpa*) by Combination Therapy – A Case Study

Wairagade SD¹, Wairagade T², Nagrare AV³, Mahakalkar C⁴

¹Professor, Department of Kayachikitsa, Datta Meghe Ayurved Medical College Hospital and Research Centre, Wanadongri, Nagpur, Maharashtra, India; ²MBBS Third Year (Major), HBT Medical College and Dr. R N Cooper Hospital, Mumbai, Maharashtra, India; ³Associate Professor, Department of Agadtantra, Datta Meghe Ayurved Medical College Hospital and Research Centre, Wanadongri, Nagpur, Maharashtra, India; ⁴Professor Dept. of General Surgery Jawaharlal Nehru Medical College, Datta Meghe Institute of Medical Sciences, Sawangi (Meghe), Wardha, Maharashtra, India.

ABSTRACT

Introduction: Herpes zoster commonly known as shingle's caused by the varicella-zoster virus (VZV). Current studies have shown that exosomes play a significant role in the pathogenesis as well as the spread of herpes. Combination therapy has shown pain reduction, reduction in burning and arrest the progression of the disease. This approach is cost-efficient and simple to implement. Pittaj visarga may be linked with herpes in Ayurveda. The treatment principles are Raktmokshan (~Bloodletting) and Pradeha (Local application of medicines).

Case presentation: A 28-year-old male presented in OPD of Kayachikitsa at Datta Meghe Ayurved Medical College Hospital and Research Centre. We treated his Herpes zoster on the basic principles of management of *Vata-Pittaj Visarpa*.

Results: Rapid decrease in pain severity was observed after 3 days of Combination Therapy according to the Zoster Specific Brief Pain Inventory (ZBPI) Questionnaire.

Conclusion: Repeated application of *Ayurvedic Formulation Lepa* along with internal medications gave complete relief. Adaptive trials are necessary to discover further practical applicability of Ayurveda and modern treatment together. Future research on the effect of combination therapy on exosomes is necessary.

Key Words: Herpes Zoster, *Pittaj Visarpa*, *Shaman Chikitsa*, *Ayurvedic formulation Lepa*

INTRODUCTION

Herpes zoster is commonly known as shingles caused by the varicella-zoster virus (VZV). Due to ageing or immunosuppression decrease in immunity for VZV causes reactivation of VZV in dorsal root ganglia. There is unilateral vesicular eruption within the dermatome associated with severe pain.¹ Modern medicine doctors routinely manage it with antiviral therapy like acyclovir, corticosteroids and the local application of lidocaine jelly. In herpes zoster, early clinical diagnosis and management within 72 h after the appearance of the rash is important to avoid complications.² The main aim of treatment is pain management; induce healing, reduction in viral spread and avoidance of complications. This technique is cost-effective and easy to apply. It is being used for a wide range of diseases in *Ayurveda* including pain and burning management and skin diseases.³

Exosomes are extracellular vesicles released from cells upon fusion of an intermediate endocytic compartment, the multi-vesicular body (MVB), with the plasma membrane. They are means of intercellular communication and transmission of macromolecules between cells. Exosomes have been attributed roles in the spread of proteins, lipids, mRNA, miRNA and DNA and as contributing factors in the development of several diseases including herpes. Exosomes are involved in immune responses; they activate T cells in the activation of immune responses. Exosomes transfer protein, lipids mRNA and microRNA into acceptor cells. They also provide the means of bad communication in various neurodegenerative diseases. They can be found in various body fluids like blood, CSF, Stool, Urine and even exhaled air.⁴ In *Ayurveda*, *Visarp* is *Vata pitta* predominant, and a wide range of acute skin diseases may be included under herpes is one of them.

Corresponding Author:

Dr. Sonali Dilip Wairagade, Professor, Department of Kayachikitsa, Datta Meghe Ayurved Medical College Hospital and Research Centre, Email Mobile: 9822644614; Email: sonaliwairagade@gmail.com

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Patient information

It is a single case study and the informed consent of the patient is taken in his language. A 28-year-old male visited in OPD (OPD no. – 2011060009) of Kayachikitsa at Datta Meghe Ayurved Medical College Hospital and Research Centre with blisters in the left axilla and left the subscapular region with severe burning pain.

Findings

General examination:

The patient was febrile, pulse 80/min, blood pressure 110/80 mm Hg. His appearance was pale. Blisters were present in the left axilla and left sub- scapular region.

Systemic examination:

In the systemic examination, respiratory, cardiovascular system examination was within normal limits. The patient was conscious but he was restless, severe pain and burning at the site of the axillary nerve was also present, his pupillary reflexes were within normal limits. Deep tendon reflexes & superficial reflexes were also normal.

Ashtavidha Parikshan his *Nadi* (pulse) was *Vatpittaj*, *Jivha* (tongue) was *Sama* (coated), *Aakriti* was *Madhyam* (medium built), bowel habit was regular and normal. *Druk* (vision) was normal.

Clinical findings

The patient had a complaint of blisters in the left axilla and left the sub- scapular region with severe burning pain ZBPI Score was very high that eventually reduced after treatment.

Diagnostic assessments

The patient was diagnosed based on clinical findings. Photographs are given in Figure 1. The assessment was done based on the Zoster Specific Brief Pain Inventory (ZBPI) questionnaire.⁵ It is a Pain Scale based on a Brief Pain inventory. It is herpes zoster; hence a more reliable for diagnostic and therapeutic assessment of herpes in clinical trials. This also measures intensity, Duration, the area covered, mental condition relations of patients with other people, ability to perform daily activities.⁶

Therapeutic intervention

The treatment plan was done considering *Vatpitta Dosha*, *Rakt Dhatu*, *Tvacha Sthan*. Removal of *Dushta Rakta* along with Shaman through internal medicines was considered. The involvement of *Ambu (Kled)* is also considered an important factor during planning the treatment⁶. Ayurveda Treatment was planned considering *Vyadhi Sankar* of *Visarpa*. S. Table 1 summarizes various properties of internal medicines mentioned in *Ayurveda*.⁷ Easy availability of these medicines at our hospital and *Ayurveda* description of the medicines both were given importance to choose particular medicines.

- A] *Chandrakala Vati*
- B] *Panchatiktaghruta guggulu*
- C] *Ayurved* formulation *Lepa* no.1 –

Gairika Churna 5gm + *Yastimadhu Churna* 3gm + *Chandan* 1gm for *Lepa* (external application) twice daily with *Dugdha* was given for local application. This *Lepa* is mainly indicated in burning and wound healing.

- D] *Acyclovir* (400 mg)

Table 1: Showing Combination treatment Plan

Sr. No.	Treatment plan	Doses/day	Duration
A	<i>Chandrakala Vati</i>	250 mg / thrice a Day	7 days
B	<i>Panchatiktaghruta guggulu</i>	250 mg / thrice a Day	7 days
C	<i>Ayurvedic</i> formula- tion <i>lepa</i> no. 1	Local Application Thrice a day	7 days
D	Tab. <i>Acyclovir</i>	400 mg/ twice a day	7 days

Follow up and outcomes

The patient got relief in the severity of burning pain and other symptoms; rash and blisters were also subsided due to combination therapy within 3 days. This was assessed by the ZBPI questionnaire. Changes after 3 days follow-ups are shown in images [Figure 1 and 2]. Currently patient does not have any pain, burning related to herpes till the date of submission of this version of the manuscript.



Figure 1: Photographs of Patient before Treatment.



Figure 2: Photographs of Patient after Treatment.

DISCUSSION

Herpes zoster commonly known as shingles has a rapid spread along with severe burning at the site of lesion Varicella virus (VZV). Skin disorders vary greatly in symptoms and severity. So they can be temporary or permanent. They can be situational or genetic, minor or mortal. Thus, *Visarpa* is one which if mismanaged can lead to a life-threatening situation. *Tvaka Roga* is *Chirakari* and so recurrent relapse occurs easily. It has been stated that, *Punahpunah shodhan* in *Bahudoshajanya Tvak Roga*.⁵⁻⁷

Chandrakala Vati: This contains *Vanga*, *Ayasa*, *Abhraka bhasma*, *Kajjali*, *Shalmali* etc with *Bhavana of GhrithKumari*, *durva* in it. It acts upon *Pittaj vyadhi* Hence Beneficial in all kind of *Daha*.⁸

Panchatiktaghruta guggulu:⁹ This is a very potent drug indicated exclusively by Chakradutta in *Kushtha Adhikar*, due to the combination of *Tikta Rasa* and *Ghruta kalpana*, this makes it very potent as *Raktadosha Pachaka* and *Raktaprasadaka*. It acts on *Vatashonitaja vyadhi*. If *Vata* is aggravated in excess compared to *Pitta* then *Tiktaghruta* is useful.⁹

Gairika Bhasma - *Gairika* a silicate of alumina and oxide of Iron. As per *Acharya Charaka*, *Garika* is one among *Khus-thahar Pradeha*. It is having properties i.e. *Madhur Kashaya Rasa Snigdha Guna* and *Sheet Virya* Due to its property it Act as *Pitta Shamka*.¹⁰

Yastimadhu churna - It is the most commonly used *Ayurvedic* herbs. It is having property i.e. *Madhura in Rasa*, *Guru*, *Snigdha in Guna*, *Madhura in Vipaka*, and *Sheet Virya* in nature, Due to its property, it pacifies the aggravated *Pitta* and *Vata*. It is also having the property of a blood purifier and increases the quality and quantity of blood so useful in a bleeding disorder.

Chandan powder - The strong antiseptic property, trigger the immune system and supports the body to heal. *Chandan powder* shows minimal side effects such as dermatitis, itching and digestive problems. It is not recommended to be used raw on the skin, for applying on the skin always blend it with some type of liquid base.

Acyclovir - *Acyclovir* is considered the “gold standard” of treatment.¹⁰ *Acyclovir*, an acyclic purine nucleoside analogue, is a highly potent inhibitor of herpes simplex virus (HSV), types 1 and 2, and varicella-zoster virus, and has extremely low toxicity for the normal host cells.

This case is a successful presentation of the management of an acute condition like *Visarpa* through Combination Therapy. It has shown relief in the symptoms of *Visarpa* like *Daha* and *Pidika*. Use of *Kashaya - Tikta Rasa Pradhan Shaman Aushadhi* has relived *Kandu* and *Toda*

CONCLUSION

The disease Herpes Zoster in modern medicine and *Visarpa* has a lot of similarities, particularly *Pittaja* and *Vatapittaja Visarpas* can be correlated with Herpes Zoster. *Ayurvedic* Treatment with Antiviral *Acyclovir* as a combination therapy has shown better and faster relief in *Visarpa* (Herpes Zoster).

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