



CASE REPORT

CASE REPORT ON AYURVEDIC MANAGEMENT OF CHRONIC NON-HEALING ULCER DUE TO VIPER BITE

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Abstract

Among tropical diseases, snake bites are the most often ignored. Patients who survive a snake bite frequently have nonhealing ulcers as a result of the bite. The potency of the venom determines how severe the symptoms are. Common manifestations include spreading cellulitis and swelling of the bite area. If the patient recovers, necrosis of the skin, tendons, muscles, and even bones may emerge. Amputation may be required due to a variety of secondary infections that cause gangrene and suppuration.¹⁻² After the acute period, persistent problems have a negative impact on the victim's life and may cause financial hardship for the family.

In the present case, a male patient aged 55 years came with complaints of non healing ulcer over the left foot with a history of snake bite 4 months back, following which he developed an ulcer. He was presented with severe pain on the left foot and was unable to walk due to pain. On examination a 4x3x2 cm ulcer was found over the posterior aspect of foot overlying the tendo- achilles region. He was under allopathic treatment for the last 4 months and took antibiotic medicines for a long time. Still the ulcer did not heal so they advised him to do skin grafting which is an expensive treatment modality. As he couldn't afford that, he consulted other allopathic hospitals, but all of them suggested the same. As a last resort he came to our OPD for Ayurvedic treatment. In Ayurveda it was diagnosed as *Mandali dashta dushta vrana*. Ayurvedic drugs described in classics having the property of *vrana sodhana* *Vrana ropana* and *vishahara* properties were given for the treatment, both internally and externally. In Ayurveda Viper is described as *Mandali*, which is *paithika* in nature, therefore medicines having *pittahara* property were also given.

Complete healing of the ulcer was obtained in 8 weeks.

Introduction

The tropical and subtropical regions have the highest incidence of snakebite, with India having the largest geographic impact. An estimated 2 million snakebite cases occur in India each year, with estimates ranging from 4.5

million to 5.4 million worldwide. These bites can have serious physical, psychological and socioeconomic consequences. ³Sawscaled viper bite is the cause of local envenoming, spontaneous systemic bleeding, and coagulopathy. Severe local swelling, haemorrhagic blisters, local tissue necrosis, incoagulable blood, spontaneous bleeding, mostly haematuria and acute renal impairment are the most common symptoms of hump nose viper bite. ⁴⁻⁵

Viper venom is haemotoxic and has severe necrotizing local effects. Local swelling from viper bites tends to be more severe than that caused by other snakes. Swelling can begin within 15 minutes and may become extensive over the course of 2-3 days, potentially lasting up to 3 weeks. It rapidly spreads from the bite site, potentially affecting the entire limb and surrounding areas. Regional lymphadenopathy may also occur. If the envenomed tissue is located in a confined space, such as the pulp of a finger or the anterior tibial compartment, ischaemia can develop. If no swelling is observed within two hours of a viper bite, it is generally safe to assume that envenoming has not occurred. ⁶

Clotting defects and haemolysis are common in envenomation by Viperidae. Indications of these haemostatic issues include continuous bleeding from fang punctures, venepuncture, injection sites and other new or partially healed wounds, suggesting the blood is unable to clot. Spontaneous systemic bleeding often occurs in the gums, while other reported haemorrhages include nosebleeds, vomiting of blood, skin bruising, coughing up blood and bleeding in areas such as the eyes, retroperitoneum and brain. Additionally, venom from vipers and sea snakes can lead to intravascular haemolysis. ⁷ Local necrosis from viper bites may present as bruising, blistering, and tissue death within a few days of the bite. Necrosis is particularly severe after bites from Asian pit vipers and certain rattlesnakes.

As per Ashtanga sangraha the *Mandali damsa* lakshanas include heat on the affected site, dryness of the area, appearance of yellowish red colour, thickness of the muscle with visarpa like ulcer and burning sensation, heat, moistness, putrefaction and fall off. ⁸

The complications that persist beyond the acute stage may unfavourably affect the day-to-day lives of snake bite victims. After the acute period, persistent problems have a negative impact on the victim's life and may cause financial hardship for the family.

Patient Information

55 year old moderately built male patient, who was a fisherman by profession came to OPD. He was presented with difficulty in walking due to pain on the heel due to

ulcer. 4 months back while he was knitting the fishing net, he was bitten by a viper on his right heel. He was taken to the allopathic hospital for emergency management. After that a non healing ulcer was developed on the bitten part. He was nondiabetic and non-hypertensive. He was under allopathic medication for 3 months, but the ulcer didn't heal.

Clinical finding

On examination a 4x3x2cm ulcer was found over the posterior aspect of foot overlying the tendo - achilles region with irregular margins and necrotic cells at the floor of the ulcer. The patient was unable to walk due to pain on the wound. The pain was assessed with Visual Analogue Scale(VAS) and was rated as 8.

Diagnostic Assessment

As per Ayurveda the case was diagnosed as *Mandali dashta dushta vrana* in which aggravation of *piitta* and *raktha* occurs.

The patient was assessed clinically on every fortnight visit. Picture of the wound was taken at the time of initiation of the treatment and subsequently on every visit. The subsequent observations were also noted. After 8 weeks of treatment the ulcer was completely healed.

Line of treatment

Vishahara, *Sophahara*, *Vrana sodhana* and *Vrana ropana* treatments were done. As the *visha* of mandali is *paittika* in nature, *pittahara* treatment were also included.

	Medicines	Dosage and time of administration
1	<i>Manjishtadi kashaya</i>	90 ml twice daily before food - morning and evening
2	<i>Vilwadi gulika</i>	1bd, with <i>Kashaya</i>
3	<i>Doosheevishari gulika</i>	1 bd after food
4	<i>Avipathy choornam</i>	1tsp at bedtime with hot water
5	<i>Yashti choornam</i>	1/2 teaspoon twice daily (11 am & 3 pm)
6	<i>Triphala Kashaya</i>	<i>For Kshalana</i>

First visit- Manjishtadi Kashaya, Vilwadi Gulika, Doosheevishari Gulika, Avipathy choornam and Yashti choornam were given internally and for Kshalana Triphala Kashaya was given for 3 weeks .

Follow up after 3 weeks- Dimension of ulcer was reduced to 2x1x1cm . Pain on the heel was reduced markedly and rated 2 as per the VAS scale. All the medicines were continued.

Follow up after 6 weeks-Wound was filled by healthy new red granulation tissue. Yashti choorna and kshalana were stopped and continued all other medicines

Follow up after 8 weeks -

Ulcer was healed completely.



Discussion

Manjishtadi Kashaya has *vrana ropana*, *pakahara*, *lekhana*, and *srotosodhana* properties. These properties are desirable for proper healing of wound. It is *pitta- kapha hara* in nature.

Vilwadi Gulika mentioned in *visha chikitsa* has *vishahara* property. It also acts as *rakta sodhaka*, *rakta prasadaka* and *kaphahara*.

Doosheevishahari tablet has *vishahara* property.

According to Ayurvedic classics, *Yashti choorna* is *Vata - Pitta samaka* and is used in the treatment of all types of wounds and inflammations. In various types of *vrana*, *Chakradatta* has advocated the use of this drug. *Vranapaha*, *sothapaha* and *varnya* properties of *Yashti choorna* helps in wound healing, reducing inflammation and in the healing of damaged skin respectively.

Avipathi choorna has *pitta hara* property.

Thriphala has antimicrobial and anti-inflammatory properties.

Conclusion

Ayurveda has very effective treatment modalities for chronic ulcers due to viper bite. A number of medicines are available which can be prescribed for each condition. It is necessary to utilize the possibilities of Ayurvedic treatment. Treatments like skin grafting are very expensive. So financially challenged patients cannot afford it. Cost-effective Ayurvedic treatment would be a relief to those patients suffering from chronic ulcers due to viper bite.

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