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Case study

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Effect of triphala kwathprakshalanin the management of carbuncle (prameha pidika)”: A case study

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ABSTRACT

Carbuncle is an uncommon skin and soft tissue infection, predominantly occurring in diabetics. It is quite surprising that there are very few series on carbuncle over last 2-3 decades. It is painful, pus-filled bumps forming due to bacterial infection resulting in inflammation of one or more hair follicles. Carbuncles are likely to occur on hairy areas of the body particularly at the back of the neck. But they may also be found on shoulders, thighs, groin, buttocks, and armpits. Carbuncles are very infectious too and may spread to other parts of the body and even to other people. The initial cause of a carbuncle can often not be determined. Poor health may be a predisposing factor like Chronic skin conditions, diabetes, kidney disease, liver disease and weak immune system, folliculitis, friction from clothing or shaving, having hair pulled out, generally poor hygiene, poor nutrition. Diagnosis of Carbuncles by merely looking at the affected area, Pus sample, blood test span of the Carbuncle if lasts for two weeks, lesion culture, Urine test. If it is untreated, it may causes serious complications like sepsis and infections in other parts of the body. In modern, treatment are Antibiotics and incision at the tip of the carbuncle and drain out the pus but not get much relief. In *Ayurveda* describes carbuncle as *pidaka*, one of the major complications of diabetes mellitus. *Acharya susruta* explains carbuncles as 10 types. A 60 year old diabetic male patient was presented of small nodule in his

right buttock with pain and pus discharge. *Triphala kwath prakshalan* done for 15 days and heal satisfactory. *Triphala* have antimicrobial and anti-inflammatory property and balance the tri-doshas. *Triphala* proved to be an efficient measure in carbuncle.

Keywords: Carbuncle, Infection, Diabetes, *Pramehapidika*, *Triphalakwath*

INTRODUCTION

The word carbuncle is believed to have originated from the latin: Carbunculus, which means charcoal. [1] Carbuncle was recognized as a complication of diabetes by charak and sushruta [2]. Carbuncle is often a broad, swollen, erythematous, deep and painful mass that usually open and drain through multiple channels [3]. A **carbuncle** is a cluster of boils caused by bacterial infection, most commonly with *Staphylococcus aureus* or *Streptococcus pyogenes*. [4] The presence of a carbuncle is a sign that the immune system is active and fighting the infection. [5] The infection is contagious and may spread to other areas of the body, or other people; those living in the same residence may develop carbuncles at the same time. [6] A carbuncle is palpable and can range in size to be as small as a pea or as large as a golf ball. Surface is red and angry, looking like hot red coal. Pus discharge and itching may occur. There may be localized erythema, skin irritation, and the area may be painful when touched. Sometimes more severe symptoms may occur, such as fatigue, fever, chills, and general malaise as the body fights the infection [7]. A carbuncle is most likely to occur on a hairy area of the body such as the back or nape of the neck. But also can develop in other areas of the body such as the buttocks, thighs, groin, and armpits [8]. Increase the risk of developing a carbuncle poor hygiene, diabetes, weak immune system, dermatitis, kidney disease, liver disease, shaving and other activities that break the skin [9]. Treatment are washing the carbuncle and covering the area with a sterile bandage also may promote drainage and healing and help prevent the infection from spreading.

Medications such as acetaminophen or ibuprofen can help relieve the pain of an inflamed carbuncle. Antibiotics are also used. In *Ayurveda*, carbuncles can be correlated to *pramehapidika*. Acharya Sushruta had described 10 types of such related conditions. *Ayurveda* offers a multifaceted approach concerning the management of *pramehapidika* through standard protocol mentioned concerning

Madhumeha along with effective measures concerning the management of *dushtavrana* mentioned under *shashtiupkrama*. Acharya Sushruta mentioned prognosis of *Madhumehajvrana* as “*Krichrasadhya*”, which is experienced even in present day practice [10]. *Triphala* are beneficial in *Prameha* also in *Pramehapidika* [11]. *Triphala* is an important Ayurvedic herbal formulation consisting of the dried fruits of three medicinal plants *Terminalia chebula*, *Terminalia bellerica* and *Emblica officinalis*. So *triphalakwathprakshalan* in carbuncle is more effective. The most valuable treasures of *Ayurveda* including *Brihatraya Charaka Samhita*, *Sushruta Samhita*, *Astang*, *Ras grantas*, *Chakradata*, *Nighantu* were filtered out for the formulations having *Triphala* as a whole or in parts and especially indicated for *Prameha* and *Pramehapidika*.

CASE STUDY

A male patient aged 60 yrs, presented at *Rishikul campus Shalyatantra IPD* with painful swelling & pus discharge on buttock region since 10 days. Associated complaints were fever (on & off) and generalised weakness. The swelling gradually increased in size despite taking home remedies. He was a diagnosed case of Diabetes mellitus and was taking oral hypoglycaemic medications since 5 years. All vital parameters were within normal limits.

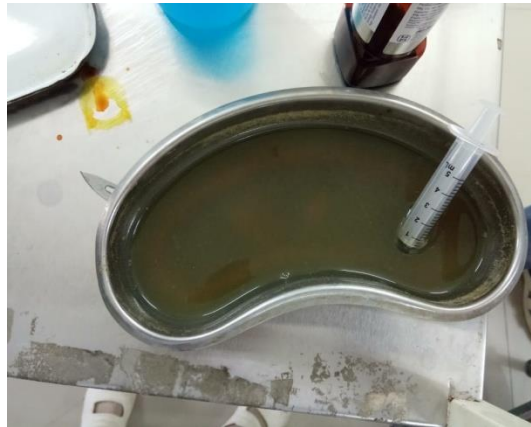
LOCAL EXAMINATION

Inspection - There was a pain and swelling at buttock region with pus discharge. Overlying skin was Red and edematous.

Palpation - Temperature – Raised, Tenderness- Present, Consistency- soft at the centre & firm all around. The case was diagnosed as *PramehaPidika* (Carbuncle).

MATERIAL AND METHOD

Triphalakwathprakshalan – 15 days



RESULTS

On 7th day, without any surgical debridement, reduction in the amount of slough was noticed. By the end of 2nd week fresh granulation tissue started

appearing on the floor of carbuncle. After 4 weeks, floor was healthy, contracting margins appeared and discharge was completely absent.

BEFORE TREATMENT



DURING TRETMENT



AFTER TREATMENT



DISCUSSION

Individual drugs of Triphala contain glycosides, alkaloids, terpenoids, flavonoids, carotenoids, etc., and these all are frequently implicated to possess. Potential as antidiabetic [Table 1]. In different classical treatises, huge therapeutic properties of Triphala have been given and various research works have also been done in this regard to further validate the above consideration. Individual drugs of Triphala, i.e., Haritaki, Bibhitaki, and Amalaki exhibits wide range of medicinal properties especially that Triphala is one of the magic remedy in various ailments and specifically in Prameha. Different references are available for Triphala in different treatises. Barley soaked in Triphala

DISCUSSION

Individual drugs of *Triphala* contain glycosides, alkaloids, terpenoids, flavonoids, carotenoids, etc., and these all are frequently implicated to possess potential as antidiabetic [12]. Individual drugs of Triphala, i.e., *Haritaki*, *Bibhitaki*, and *Amalaki* exhibits wide range of medicinal properties especially that *Triphala* is one of the magic remedy in various ailments and specifically in *Prameha*. *Triphala* as a whole is expected to be more effective due to the combined activity of the individual components. Antioxidant property of *Triphala* arises from the Polyphenols, which reduces the oxidative stress by converting the reactive oxygen free radicals to non-reactive products. *Triphala* are beneficial in *Prameha* and also in *Pramehapidika* [13].

MODE OF ACTION OF TRIPHALA KWATH PRAKSHALAN

Antimicrobial Activity of *Triphala-Triphala* controls microbial growth caused by *Streptococcus*. The activity is comparable to that of *triphala*. It inhibits dose dependent growth of gram positive and gram negative bacteria [14]. *Triphala* and its individual components showed antibacterial effect on both gram –positive and gram-negative bacteria, which suggests the ingress of active phytochemicals through both the bacterial cells walls. The three fruits constituting *triphala* show potent antibacterial activity against *E.coli*, *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Proteus vulgaris*, *Staphylococcus epidermidis*, *Salmonella typhi*, *Salmonella typhimurium*, *Enterobacter aerogenes*. *Triphala* possess antibacterial activity against pathogens like *Salmonella*, *Staphylococcus*, *Pseudomonas* and *E.coli*, *Bacillus* isolated from wounds of workers and students [15].

Triphala in wound healing - *Triphala* extracts show significant wound closure in vivo. The granulation tissue shows reduced bacterial count, increase in collagen, hexosamine, uronic acid [16]. Collagen sponges incorporated with *triphala* when used to close wounds showed increase thermal stability, water uptake capability, faster wound closure, improved tissue regeneration. Epigallocatechin gallate interaction with collagen contributes to this quick wound healing activity [17]

Triphala as anti-inflammatory -*Triphala* when topically administered prevents levels of inflammatory cell, protein content and TNF- α compared with that of the control group [18].

PROPERTIES OF TRIPHALA-

DRUG	RASA	GUNA	VEERY	VIPAKA	DOSAHAR PRABHAVA
			A		
HARITAKI	PANCHRAS	LAGHU, RUKSH	USHNA	MADHUR	TRIDOSHAHARA,
I	LAVANA	A		A	KAPHA PITTA
	RAHITA, KASHA				VISHESHATAH
	YA PRADHAN				
BIBHITAKI	PANCHRAS	LAGHU, RUKSH	USHNA	MADHUR	TRIDOSHAHARA, KAPHAHA
KI	LAVANA	A		A	RA VISHESHATAH
	RAHITA, KASHA				
	YA PRADHAN				

AMALAK I	PANCHRAS LAVANA RAHITA,AMLA PRADHAN	RUKSHA,SEET A	SITA	MADHUR A	TRIDOSHAHARA,PITTAHAR A VISHESHATAH
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CONCLUSION

On the basis of this case study it can be concluded that, *triphala kwath prakshalan* could be an efficient measure concerning the debridement of the slough that requires repeated surgical interventions in the management of carbuncle with potential outcomes. No adverse drug reaction was

reported in this case, so *triphala kwath* is safe for topical application in *pidika*.

Individual drugs of Triphala contain glycosides, alkaloids, terpenoids, flavonoids, carotenoids, etc., and these all are frequently implicated to possess antibacterial, anti-inflammatory and in treatment of arthritis, stress, and cataract is all well studied and proven.

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