Case Report

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(ISSN Online:2229–3566, ISSN Print:2277–4343)

A CLINICAL APPROACH IN THE MANAGEMENT OF PRAMEHA PIDAKA (VIDRADI) WITH REFERENCE TO DIABETIC CARBUNCLE: A CASE REPORT

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Received on: 31/8/24 Accepted on: 15/10/24

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DOI: 10.7897/2277-4343.156183

ABSTRACT

A 56-year-old female patient presented with symptoms of two large open abscess in upper back region with severe pus discharge and multiple small carbuncles around the large abscess associated with intermittent fever for 4 years. She is known case of hypertension and diabetes mellitus for 9 years. The patient was treated with Virechana karma (Purgation therapy) and for open abscess vranavath chikitsa (Wound cleaning and dressing). The total duration of the treatment was 20 days and follow up was done for one month. Improvement was assessed based on relief in the symptoms, significant reduction was seen in pus discharge, slough, pain and appearance of granulation tissue was observed. Any complication or adverse effect due to treatment were not observed during the treatment period.

Keywords: Carbuncle, Prameha Pidaka, Vidradi, Virechana, Vrana ropana

INTRODUCTION

Acharya Charaka and Sushruta explained the term Prameha pidaka as a complication of Prameha. According to Acharya charaka 7 types[1] and according to Acharya Sushrutha10 types[2] of Prameha pidaka, vidradi is one among them. Etiological factors specified in the context of Prameha, if continued further increases the vasa, medha and affects 3doshas, results development of Prameha pidaka. In case of prameha, due to long persisting Dosha imbalance, the body gets deteriorated owing to vitiated Medo Dhatu and Kleda. Ultimately, aggravated Dosha exhibit their symptoms on the surface of the skin, they are usually elevated or discolored in nature. Usually, they are present in muscles, joints or vital parts these are known as Prameha pidaka[3].

Vidradhi formation is due to vitiation of dosha resides in asthi and spreads and vitiates to the twacha, rakta, mamsa, meda, and gradually reformed into excessively severe inflammatory swelling, which is mahamulam (deep rooted), rujavantham, vruttam or aayatam that is called vidhradhi[4].

While treating the Prameha Pidaka, priority should be given to make all efforts to control the particular type of Prameha. In the premonitory symptoms stage should treat with Upavas, kashyapana, aja mutra. In well manifest Pidaka should adopt Vamana and virechana (According to the dosha) if the shodhana not adopted in proper time it leads to complication then treat with incision and drainage (Patana and Shodhana). In patient who do not follow all these, then pus gets increased greatly inside, creates a big cavity and become incurable. Hence, the patient of prameha should be treated as early as possible[5].

Prameha pidaka can be co related with Carbuncle based on the symptoms. It is an infective gangrene of the subcutaneous tissue due to staphylococcal (Staphylococcus aureus) infection[6]. It is a cluster of boils that is forming a connected area of infection. Over a period of several days, if the carbuncle is not treated timely, it fills with pus, may develops white or yellow tips which ruptures and discharge fluid. Carbuncle commonly occurs in diabetic patients with poor immunity and patient undergoing radiotherapy[7]. An abscess or furuncle appears beneath the skin in the hair duct which is caused mostly by the Staphylococcus aureus bacterial infections (red colored, irritation, and discomfort with pus collection which later leaves a scar). The study findings proved that the typical site of carbuncle was nape of neck (40%) followed by the back (26.67%)[8-12]. Skin of these sites is coarse and has poor vascularity around 40% of the patients with the symptoms of more than 2weeks duration[13].

METERIALS AND METHODS

Case History

A 56-year-old female patient, K/C/O Hypertension and Type 2 DM since 9years. Admitted our hospital with complaints of two large open abscess with severe pus discharge in upper back and multiple small carbuncle around the large abscess with pain, swelling, burning sensation, and mild itching, associated with intermittent fever. First large abscess started from buttock region, then gradually spreads to thigh region and spreads all over the body. previous abscess scar mark present all over the body. Treated in nearby clinic and hospital diagnosed as abscess and treated accordingly, two times hospitalization was treated with IV antibiotic and wound debridement and dressing. Post treatment, subside the symptoms and heal the abscess with scar, after three to four weeks' periods it reoccurrence the abscess in other site.

Hence the patient has get fed up with this she didn't go hospital since last one year she is doing self-dressing at home.

Comorbidities: K/C/O Type II diabetes mellitus for 9 years- on regular oral medication and frequent follow-up**.** K/C/O HTN since 9 years

History of past illness: Underwent Umbilical hernioplasty 9 years back.

Family History: No history of similar complaints running in the family. History of DM runs in the family

Personal History
Bowel - Constipated 2 days once.
Appetite - Reduced
Sleep - Disturbed due to severe pus discharge in upper back.

Drug History
T. Glimiz-Mf2 SR 1-0-1
T. amlodipin 0-0-1
T. atenolol 1-0-0
T. linobenz 600mg (she uses take this antibiotic when occurrence new abscess and feels feverish which is advised by surgeon for one time)

Examination Findings
Systemic Examination: CVS, CNS, RS – No abnormality detected.

Table 1: Local Examination

1. Vrana akrut: Circular shape and edges was edematous	**2. Sparsh**: Ushna (Local temperature raised).
3. Gandha: foul smelling	**4. Srava**: Thick pus discharge was present.
5. Vedana: Present	**6. Varna:** The overlying skin becomes red, dusky and edematous. Peripheral skin was blackish in color.
7. Itching: Mild itching was present.	

Pathological Investigations

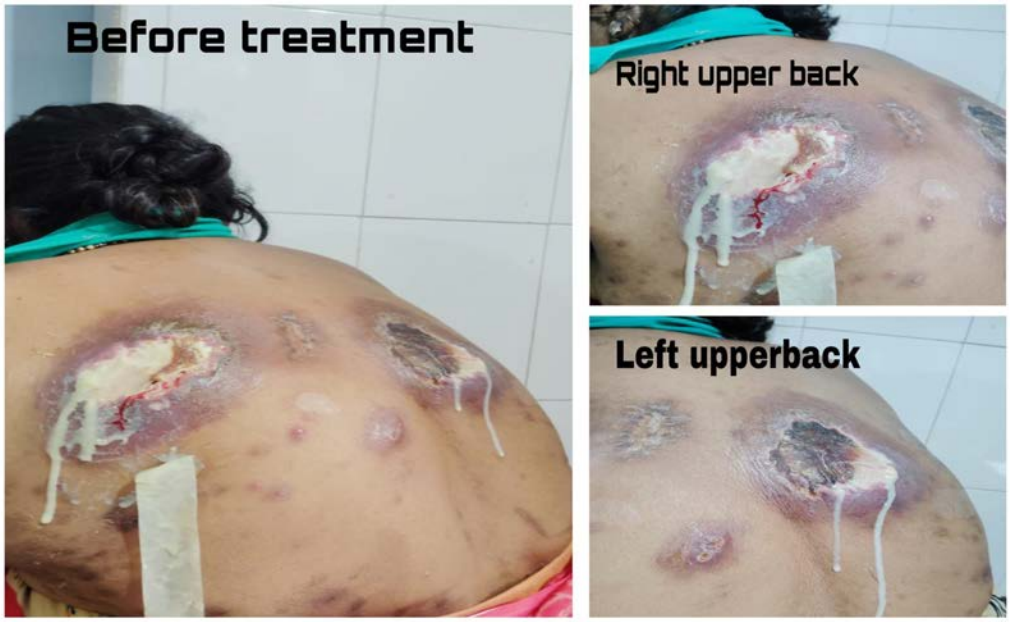
Table 2: Blood investigations

1	WBC	19,900cell/cumm	8	Urine Albumin	+ +
2	Hb%	11.9gm%	9	Urine sugar	1.0%
3	Platelet count	3.82lakhs/cumm	10	Urine Microscopy	15-20 pus cell
4	Cholesterol	192mg/dl	11	VDRL	Negative
5	Triglycerides	119mg/dl	12	HIV	Non-reactive
6	FBS	**223mg/dl**	13	HbA1C	**7.81%**
7	PPBS	**231mg/dl**	14	Serum creatinine	0.91mg/dl

Prameha pidaka was diagnosed based on clinical symptoms. Treatment was planned according to the Prameha pidaka chikitsa by adopting shodhana chikitsa along with bahya vrana upakrama (external).

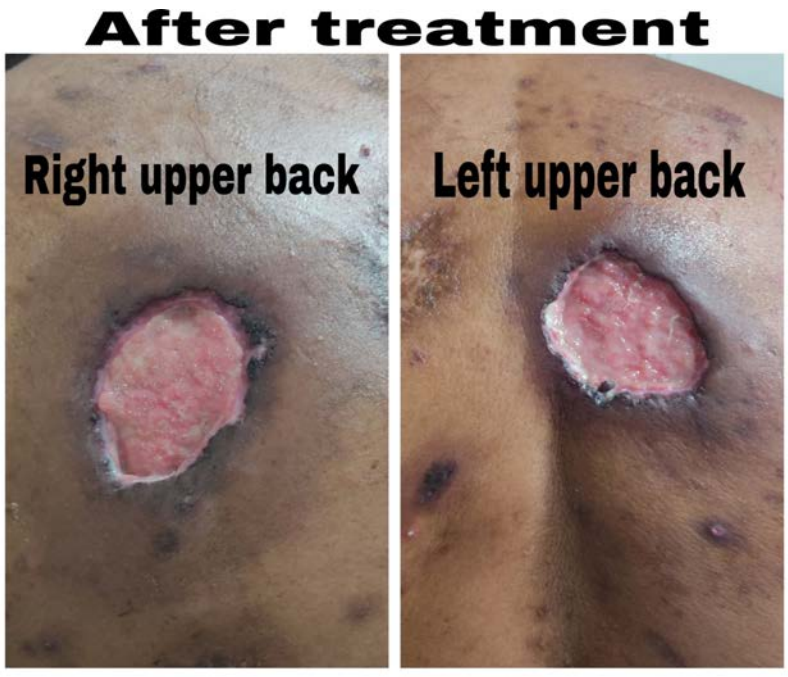
Ethical Consideration: The case study was conducted as per ICMR National Ethical Guidelines for Biomedical and Health Research Involving Human Participants.

Informed Consent: Informed consent was obtained from the patient.




After wound debridement


During Snehapana


After treatment
Right upper back
Left upper back

OBSERVATION AND RESULT

Table 3: Timeline of treatment: Patient consulted at our hospital on 4/1/2024

Date	Treatment	
4/1/2024 to 24/1/2024	Vrana Prakshalana Vrana dhupana Vranopakrama	With Panchavalkala kwatha Haridradi choorna Jathyadi taila
6/1/2024 to 8/1/2024 (low grade fever was present)	Antibiotics was given (which is prescribed previously by surgeon)	
9/1/2024 to 14/1/2024	Deepana Pachana	Chitrakadi vati
15/1/2024 to 19/1/2024	Snehapana	Guggulu tiktaka grutha
20/1/2024 to 22/5/2024	Vishrama kala	3 days
On 23/5/2024	Virechana	Trivruth lehya 50mg

Treatment Adopted: At first patient was complaints of severe pus discharge from the abscess site, hence wound debridement was done. After wound debridement, marked decrease in pus discharge was noticed. She complaints a low-grade fever following wound debridement; hence, three days of previously prescribed antibiotics are administered. After this temperature progressively went down, started with Chitrakadivati 1tab TID for Deepana pachana was administered for seven days. Following an evaluation of Agnibala and Koshta, Snehapana was conducted for five days in Arohana Krama using Guggulu Tikthaka Grutha. Samyak Snigdha Lakshana was observed on the fifth day. Vishurama Kala was given next three days abyanga with murchitha tila taila and mrudu sweda(ushna jala snana and guru oravarana). After vishrama kala Virechana is given with trivruth lehya. Samsarjana krama is followed the total duration of treatment 20days, follow-up was done after one month. Pathya and apathya were advised during the treatment and follow-up period. During the treatment Diabetes and hypertension medicine continued as same as early.

Sthanika vrana chikitsa: From day one to till the completion of treatment, avasthanusara bahya vrana upakrama was adopted. Sthanika seka was done regularly to both abscess with Panchavalkala kwatha. Vrana Dhupana with Haridra, Sarshapa, Vacha, Guggulu was done whenever there was pus and Vrana ropana was done regularly with Jatyadi tail, Jatyadi grutha depending on the avasta.

Table 4: Observation of Abscess

Parameters observed	On 4/1/2024 (Before wound debridement)	On 6/1/2024 (After wound debridement)	On 16/1/2024 (During snehapana)	On 24/1/2024 (After virechana)
Itching	Present	Present	Mild Reduced	Reduced
Discharge	Severe discharge	Reduced	No Discharge	No Discharge
Pain	Moderate pain	Severe pain	Reduced	Reduced
Foul smell	Present	Mild reduced	Reduced	Reduced
Burning sensation	Present	Present	Reduced	Reduced

DISCUSSION

The treatment aimed at healing of abscess and improvement of general health of patient. Uncontrolled diabetes may also affect circulation, the imbalance between angiogenic factors such as TGF-B, FGF2, VEGF, angiogenin, angioinhibitory factors and abnormal apoptotic potential in diabetic patients may lead to disturbed angiogenesis. Diabetic wounds are in the stage of chronic inflammation and do not progress to the stage of proliferation and remodeling, thus obstructing the normal wound healing process. Due to normal phase interference, various parameters, including growth factors in the wound microenvironment, and immune cell circulation are interfered with, and the wound bed receives less energy, inhibiting the activation of caspase-3 and affecting metabolism here. Therefore, diabetic wounds are characterized by delayed wound healing, which is usually associated with infections caused by disrupted levels of micro circulating cell and decreased levels of endogenous growth factor, leading to the development of non-healing chronic ulcers. Further infection of the wound often leads to limb amputation.

Acharya Sushruta has classified and described prameha pidaka treatment included vidradi as one. For apakva pidaka, sophahara line of treatment is advocated whereas, for pakva pidaka urdhva (Vamana) and adha shodhana (purgation) is indicated. Prameha pidaka is considered under bhedya rogas[14]. In the present case, the pidaka attained pakva stage and opened hence visravana done to obtain vrana prakshalana, sodhana and ropana.

As vidradhi is completely a diseases of Pitta pradhana vyadhi. Virechana is appreciated in shashtiupakrama[15] for both Pitta pradhana and vrana as well as vidradhi chikitsa.

Guggulu Tiktaka gritha is indicated in meha and vidradi roga[16], it does Pitta shamana, Rakta prasadana and the action of anti-inflammatory, anti-microbial activity.

Trivruth having the pharmacological actions like anti-inflammatory, anti-bacterial, hepatoprotective, anti-diabetic. Virechana helps in improve the blood circulation and does the srothoshodhana, Dosha nirharana and Vatanulomana.

Panchavalkala contains tannins, phytosterols, and flavonoids, which have anti-inflammatory, antimicrobial and analgesic activity and promote healing and epithelialization[17].

Haridradi dhupana helps to prevent the antibacterial action.

Jathyadi taila and Jathyadi grutha accelerated wound healing in irradiated skin tissue by faster re-epithelialization, reducing inflammation, collagen fibers deposition, and TGF-β1 expression.

Prameha pidaka comes at the 6th kriyakala of prameha, that is bhedha avastha. Prameha pidakas can transform to be asadhya in nature, without a proper intervention at the right time. Controlling medo dushti, proper puya nirharana and vrana ropana are the keys to be followed in the treatment of prameha pidaka. If not properly

addressed, it will lead to spread of infection, septicemia it may even lead to death.

CONCLUSION

First and foremost, treatment of prameha pidaka or diabetic carbuncle prime control of diabetes mellitus. Prameha pidaka is the bahudoshapradhana vyadhi, vidradi is the result of vitiation of all three dosha with pitta dosha pradhana. Virechana place important role in pitta dosha and helps for srothoshodhana and various types of bahya upakrma were performed, such as varna prakshalana, dhoopana, and ropana, with varying dravyas based on the avasta of vrana. Shodhana and Vrnopakrama can be used to effectively manage Prameha pidaka, and appropriate pathya palana can stop its relapse.

Further research with a large enough sample size and detailed research methodologies is required to verify and substantiate the role of Ayurveda interventions in treating a prameha pidaka-vidradhi(carbuncle).

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Cite this article as:

Ramya D, Vijayamahantesh Hugar and Vedavathi Manchaiah. A clinical approach in the management of Prameha pidaka (vidradi) with reference to Diabetic carbuncle: A Case Report. Int. J. Res. Ayurveda Pharm. 2024;15(6):6-10
DOI: http://dx.doi.org/10.7897/2277-4343.156183

Source of support: Nil, Conflict of interest: None Declared

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