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# A CASE CONTROL STUDY OF TILKALKA (SESAMUM PASTE) MADHUSARPIVARTI IN THE MANAGEMENT OF VIDRADHI BHEDANA AND VISTRAVANA (I & D)

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#### **ABSTRACT**

The diseases Vidradhi (abscess) is a common ailment irritating humankind and incapacitate the sufferer for his routine work. The primary aim of the treatment was to give an effective and safe surgical approach to this perplexing problem. The healing of wound formed after I & D still remains a major problem to the surgeon as well as to the patient. Though systemic action of drugs are in prevalence, satisfactory local management still remains a pipe dream. Routinely in modern surgical practice H<sub>2</sub>O<sub>2</sub> (Hydrogen peroxide) and Betadine is commonly used for cleaning and debridement of I&D wound. H<sub>2</sub>O<sub>2</sub> produces heat when come in contact with tissues and disturb the newly formed granulation tissue which decreases wound healing rate. An attempt was made at the proper understanding of the historical aspect of Vidradhi Chikitsa (treatment), its etiopathogenesis, methodology of wound healing after I & D both in the light of Ayurvedic and modern knowledge. So present study reveals efficacy of Tilkalka (sesamum paste) madhusarpi Varti w.s.r. to Vidradhi after its Bhedan and Vistravana (I&D) procedure. The case control study was conducted on which randomly selected 2 patients and divided in 2 groups 1st is control group treated with H<sub>2</sub>O<sub>2</sub> and Betadine, 2<sup>nd</sup> is trial group treated with *Tilkalka madhusarpi* Varti. The clinical assessment was done on the basis of grading criteria with basic symptomology of Vidradhi after I&D like pain, local temp, discharge, colour and smell. Then mean scores levels of these symptoms before and after the treatment of 2 groups were done & final conclusion was obtained.

KEYWORDS: Vidradhi, Bhedan, Vistravan, Tilkalka (Sesamum paste), Madhusarpi Varti.

#### **INTRODUCTION**

Ayurveda (the science of life) is one of the branches of *Veda*, which forms the spine of healthy life. The recent advances and researches in *Ayurveda*, have not only promoted its utility but also established its importance in medical sciences.

India has long history and culture running over 5000yrs of using traditional medicines for health care and developing them with a modern scientific outlook. *Ayurveda* is scientific system of medicine in India. *Ayurveda* was developed through ancient wisdom, clinical experiences and various experimentation in scientific manner.

According to the *Ayurveda* human body is composed of *Dosha* (3 humour), *Dhatu* (7 elements) & *Mala* (Body wastes). *Vata, Pitta, Kapha* and *Rakta* are main constituents of body¹. When they get vitiated, they cause disease in the body. According to this theory, "*Vidradhi*" is explained in *Sushruta* and *Charak Samhitas*.

Sushruta the father of surgery has mentioned Vidradhi as; when the vitiated Doshas situated in the Asthi (bones), takes place in Twacha (skin), Rakta (blood), Mamsa (muscles) and Meda Dhaatu (fatty tissue) and produces excessively severe inflammatory

swelling. It is very painful having different discolouration like red, blackish etc., according to Doshdushti (abnormality). This type of swelling is broad based, rounded or elongated in nature, known as *Vidradhi*<sup>2</sup>. Some times *Jwar* (fever) may present. *Sushruta* also mentioned that "*Nimnadarshanam Angulya Avapidite Prattyunnaman Bastavivodaka Sancharanan*" means when vidradhi gets ripen it shows fluctuation test positive and pitting oedema.

Charak also explained Vidradhi is a disease which is having the more involvement of Rakta Dushti and by this Rakta Dushti, pus formation (Paka) takes place predominantly<sup>3</sup>.

As per the view of modern science they explain the abscess is a localized collection of pus (Dead or dying neutrophills + protenatious exudates)<sup>4</sup> near about same as the. The symptoms of abscess are mentioned as throbbing pain and fever with or without chills. They gives signs of abscess as calor (heat), rubor (redness), dolor (pain), tumour (swelling) and fluctuation test positive. These signs and symptoms are signs and symptoms of *Vidradhi* so here we can compare the pyogenic abscess with *Vidradhi*.

After *Vidradhi Bhedana* (incision of abscess) and *Vistravana* (drainage) *Karma* (procedure), *Sushruta* also mentioned the insertion of *Tilakalka Madhu Sarpi Varti*<sup>5</sup> in incised wound for better healing as well as *Apunarbhav Chikitsa* (preventive treatment).

Routinely in modern surgical practice  $H_2O_2$  (Hydrogen peroxide) and Betadine is commonly used for cleaning and debridement of I&D wound.  $H_2O_2$  produces heat when come in contact with tissues and disturb the newly formed granulation tissue which decreases wound healing rate.

*Madhu* (Honey) is having a property that most of the micro-organism cannot grow in it due to low water activity and pH is 3.2- 4.5. When *Madhu* used as topically it dilutes with body fluid, results in formation of hydrogen peroxide.<sup>6</sup>

 $C_6H_{12}O_6 + H_2O + O_2 \longrightarrow C_6H_{12}O_7 + H_2O_2$  *Krishnatilakalka* (paste of black Sesamum seed), *Madhu* (honey) and *Ghrita* (butter) pasted together and

applied on a sterile roller cotton bandage piece (Varti). Insertion of this Varti in the cavity of Vidradhi after its Bhedana (incision) and Vistravana (drainage), is very effective by their Shodhan (cleansing agent), Ropana (Healing property), Dahahara, Shoolahara and Sheeta (cold) Guna (property).

While going through the *Sthanic Chikitsa* (local treatment) for *Vidradhi* after its *Bhedana* and *Vistravana* in *Sushruta Samhita* we came across the use of *Tilakalka* (Paste) *Madhu Sarpi Varti*.

#### **METHODOLOGIES**

The materials required for the study are

- 1. Krishnatilakalka (paste)
- 2. *Madhu* (honey)
- 3. Sarpi (Ghrita)
- 4. Roller cotton bandage (Vikeshika)
- 5. Betadine
- 6. Hydrogen peroxide

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Dravya	Krishnatilakalka (paste) <sup>8</sup>	Madhu <sup>9</sup>	Ghrita <sup>10</sup>
Properties			
English name	Sesamum seed	Honey	Ghee/Butter
Latin name	Sesamum indicum	-	-
Rasa	Madhur	Madhur	Madhur
Virya	Ushna	Sheeta	Sheeta
Vipaka	Madhur	Madhur	Madhur
Doshaghnata	Vata-pitta-kapha nashak	Vata-pitta-kapha hara	Vata-pitta hara
Karma	Shodhan-Ropan	Shodhana, Ropana,	Rakshoghna, Balya
		Lekhana, Sandhana kara	

#### **Preparation of Drug**

- 1. Krishnatilakalka (paste)
- 2. *Madhu* (honey)
- 3. Sarpi (Ghrita)(fig.1)

All these drugs was taken in equal proportions and mixed to form sufficient amount of *Kalka* (paste). A sterile cotton roller bandage was dipped in that *Kalka* (Paste) for soakage.

Thus this *Tilakalka* (paste) (fig.2) *Madhu Sarpi Varti* (fig.3) was prepared with all aseptic precautions in O.T, *Shalyatantra* department of S.V.N.H.T's *Ayurved* college Rahuri.

#### **Dosage of Medicine**

- 1. Krishnatilakalka (paste), Madhu and Sarpi was taken in equal quantity depending upon the cavity of Vidradhi.
- 2. Betadine and hydrogen peroxide was taken in equal quantity to soak the cotton roller bandage depending upon the cavity of *Vidradhi*.

#### **Mode of Administration**

Local application of *Varti* into the cavity of *Vidradhi*.

#### **Duration of Treatment**

Upto the wound healing means epithelialization. An informed written consent of patient was considered before starting treatment. After registration of the patient for research study specially prepared research proforma was filled up with respect to history, physical and clinical examination and investigations. The clinical trial on 02 patients was conducted and observed. In both groups, patients was diagnosed on the basis of signs and symptoms described in the ancient and modern literature of *Vidradhi*.

#### **Group A: Experimental group**

• Patients were selected and treated with local insertion of *Tilakalka* (paste) *Madhu Sarpi Varti* after *Vidradhi Bhedana* (incision) and *Vistravana* (drainage).

#### **Group B: Control group**

• Patients were selected and treated as control group with local insertion of hydrogen peroxide and Betadine *Varti*. (fig.4)

#### SELECTION CRITERIA

#### **Inclusive Criteria**

- 1. Age between 18 to 60 yrs.
- 2. Sex both male & female.
- 3. Site perianal and ischeorectal abscess (*Gudavidradhi*).

- 4. Ripe abscess with positive fluctuation test.
- 5. Classical signs and symptoms of *Vidradhi* mentioned in Avurvedic literature.
- 6. Patients physically fit for anesthesia and surgical procedure.

#### **Exclusive Criteria**

- 1. Age below 18 yrs. and above 60 yrs
- 2. Patients having any type of malignancy
- 3. Patients with HIV infection/AIDS
- 4. Patients with HBsAg infection
- 5. Patients with diabetes mellitus
- 6. Patients in acute alcohol withdrawal state
- 7. Patients under malnutrition

#### **PROCEDURE**

- 8. Anaemia having Hb < 8 gm/dl.
- 9. Cold abscess, Pyemic abscess, Perianal sinus, Fistula in ano.
- 10. Patients physically unfit for anaesthesia and surgical procedure.

## **Investigations**

- 1. Haemogram
- 2. BSL
- 3. BT, CT
- 4. HIV
- 5. HBsAg

6. Urine routine

EXPERIMENTAL GROUP	CONTROL GROUP	
Bhedana & Vistravana.	Incision & Drainage.	
With all aseptic precautions and required premedications	With all aseptic precautions and required premedications	
spinal anaesthesia with Inj. Lox heavy 2% (Neon pharma)	spinal anaesthesia with Inj. Lox heavy 2% (Neon pharma)	
given by anaesthetist.	given by anaesthetist.	
Position Lithotomy.	Position Lithotomy.	
Cruciate incision was given with the help of surgical blade	Cruciate incision was given with the help of surgical blade	
no. 11. (fig.5)	no. 11.	
Drainage of pus with the help of little and index finger.	Drainage of pus with the help of little and index finger.	
Excision of flap.	Excision of flap.	
Wiping with sterile cotton pad.	Wiping with sterile cotton pad.	
	Cleaning of the wound with H <sub>2</sub> O <sub>2</sub>	
	& Betadine one by one.	
Insertion of Tila Kalka (paste) Madhu Sarpi Varti in the	Insertion of H <sub>2</sub> O <sub>2</sub> & Betadine <i>Varti</i> in the cavity.	
cavity. (fig.6)		
Placing of sterile pad and fix with sticking.	Placing of sterile pad and fix with sticking.	
Non medicinal advice	Non medicinal advice	
I. NBM for 6 hrs.	I. NBM for 6 hrs.	
II. Head low position for 24 hrs.	<ol><li>Head low position for 24 hrs.</li></ol>	
III. Sitz bath with lukewarm water.	III. Sitz bath with lukewarm water.	
IV. TPRBP as per need.	IV. TPRBP as per need.	
Medication for 3 days	Medication for 3 days	
Inj. Monocef 1gm iv BD (Ceftriaxone)(Aristo)	Inj. Monocef 1gm iv BD (Ceftriaxone)(Aristo)	
Inj. Mikacin 500mg iv BD (Amikacin)(Aristo)	Inj. Mikacin 500mg iv BD (Amikacin)(Aristo)	
Inj. Aciloc 50mg iv BD (Ranitidine)(Cadila)	Inj. Aciloc 50mg iv BD (Ranitidine)(Cadila)	
Tab. Zerodol S 1 BD (Aceclofenac 100mg +	Tab. Zerodol S 1 BD (Aceclofenac 100mg +	
serratiopeptidase 15mg) (Ipca)	serratiopeptidase 15mg) (Ipca)	
IV fluids according to hydration status of patient.	IV fluids according to hydration status of patient.	
Follow up	Follow up	
On alternate day to change the Varti upto	On alternate day for dressing upto epithelialisation of the	
epithelialisation of the edges.	edges.	
CONCLUSION wound. Present Case control study was open a r		

#### CONCLUSION

Tilkalka Madhusarpi Varti acts as a Lekhan (debridement), Shodhan (cleansing agent), Ropan (healing property) by its *Sheet* and *Shoolhara* property. Tilkalka (paste) Madhusarpi Varti was similarly acts without disadvantages comparatively Betadine and H<sub>2</sub>O<sub>2</sub>. It was observed that wound healing rate greater as compare to Betadine and H<sub>2</sub>O<sub>2</sub>. Tilkalka, Madhusarpi Varti minimizes the scar after complete healing of wound. Present Case control study was open a new research path for the better wound healing after I & D with the help of traditional medicine.

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# **Photographs of the Study**

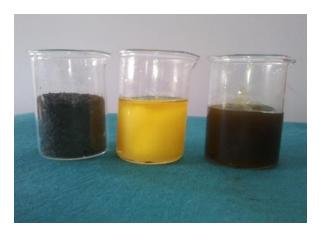


Figure 1: Tila, Ghrita, Madhu



Figure 2: Tilakalka



Figure 3: Tilkalkamadhusarpi Varti



Figure 4: H2O2 Betadine Varti



Figure 5: Perianal Abscess I&D



Figure 6: Insertion of Varti