

## International Research Journal of Ayurveda &amp; Yoga

Vol. 4 (11),65-73, November, 2021

ISSN : 2581-785X; <https://irjay.com/>DOI: <https://doi.org/10.47223/IRJAY.2021.41109>

## A Comparative Study of *Durvadi Taila* and *Panchvalkal Ointment* in Post Operative Wound Healing

Diksha Trivedi,<sup>1</sup> Hemant Kumar<sup>2</sup>

1. M.S. Department of Shalya Tantra, Dr. Sarvepalli Radhakrishnan Rajasthan Ayurveda University, Jodhpur
2. M.D. Department of Sharir Kriya, Dr. Sarvepalli Radhakrishnan Rajasthan Ayurveda University, Jodhpur

### Article Info

#### Article history:

Received on: 11-10-2021

Accepted on: 22-11-2021

Available online: 30-11-2021

#### Corresponding author-

Diksha Trivedi M.S. Department of Shalya Tantra, Dr. Sarvepalli Radhakrishnan Rajasthan Ayurveda University, Jodhpur

Email:- [nprshrimali@gmail.com](mailto:nprshrimali@gmail.com)

### ABSTRACT:

A healthy lifetime of 100 years has been the cherished wish of humanity from antiquity. This has been considered essential to realize the four principal instincts of life namely *Dharma, Artha, Kama and Moksha*. Only the absence of illness isn't defined as health. Today it's defined as comprehensive state of well being which refers to physical, mental, spiritual and social well being of a person (W.H.O.'s definition of health), which is extremely almost like definition of *Swastha*- healthy person given by *Acharya Sushruta*. One of the most important branches of *Ayurveda* is *Shalya Tantra* in which various surgical and para-surgical procedures have been described. *Vrana* is one among of them. The main aim of this paper is to assess the efficacy of the trail drugs i.e. *Durvadi Taila* and *Panchvalkal Ointment* on post-operative wounds. The most widely and vitally explained chapter of *Shalya Tantra* is *vrana*. Classification of *Vrana, Nadi Vrana, Shuddha Vrana, Dagdha Vrana, Sadhya Vrana* etc., their prognostic evaluation and management with *Shashti Upkrama* i.e. from *Aptarpana to Rakshavidhana*, continuous suturing in clean wounds (*Shuddha Vrana*), avoidance of sepsis (*Dushta Vrana*) and excision (*Chhedana*) of expelled out omentum and careful suturing of perforation of intestine within the management of perforating wounds of abdomen, etc. are remarkable for their modern outlook.

**Keywords:** - *Ayurveda, Vrana, Shashti Upkarmas.*

### INTRODUCTION

*Acharya Sushruta* an eminent surgeon of his era who has given not only the concept of surgical principles but he also provide the bottom of recent cosmetic surgery to the world and he was much before his time in expounding and practicing the gorgeous concept of wound healing. Aside from his contributions to Cosmetic Surgery and Wound

Healing, Haemostasis, Burn, Management of Fractures etc. are almost like those considered best even today. *Vrana* or wound is the most vital surgical entity as the study of *Shalya Chikitsa* brings out it very clearly therefore the knowledge of its effective management for a surgeon is that the basic required skill on which the result of surgery revolves.

The word '*Vrana*' ("*Vrana*" + "*a*" within the sense of



This work is licensed under a CC BY 4.0 License

“*Gatra Vichurnana*”).<sup>[1]</sup> literally means a discontinuation of tissues. All wounds including clinical & open wounds with or without tissue loss heal by same basic biological processes. The study of wound healing process is done to increase our level of understanding about the cellular and molecular changes occurring during the healing of wound. Good healing of wound (*Samyak Vrana Ropana*) with minimal *Vrana Vashtu*<sup>[2]</sup> (scar formation) and least pain is main motive of every surgeon. The problem of *Vrana Ropana* (Wound Healing) has been managed at different levels since the human arrived on earth and even today. There is an enormous scope for researchers to figure out and find good solution for healing of wounds. In contrast to *Ayurveda*, not many healing agents are practiced in modern medicine, either as an internal or as a external medications and most of the drugs serve only the removal of sloughs/ debris and prevention of bacterial growth, and by virtue of that the healing of wound takes place, which will be considered only as a cleansing of wound (*Vrana Shodhana*) which fulfils the aim of wound healing (*Vrana Ropana*) partially. During this present study, additionally to *Vrana Shodhana* and *Vrana Ropana* properties, *Vaikritapahama* (free from any marked deformity) which is additionally the prime need of today’s growing cosmetic era has been considered. The *Ropana* action is one among the foremost important actions amongst the **VRANASYA SHASHTI UPAKRAMA** of *Sushruta Samhita*. Many investigations and experiments are administered in life science to know the phenomenon of wound healing. Keeping of these things in sight, a set of certain drugs has been selected after reviewing the literature and couple of compound formulation of most effective drugs named “*Durvadi Taila*” has been prepared during which *Durva* (*Cynodon Dactylon*), *Daruharidra* (*Berberis Aristata*), *Kampillak* (*Mallotus Philippinensis*) have been taken and “*Panchvalkal Ointment*” has been prepared during which *Asvattha* (*Ficus Religiosa*), *Parisa* (*Thespesia Populnea*), *Plaksa* (*Ficus Lacor*), *Nyagrodha/ Vata* (*Ficus Bengalensis*) and *Udumbara* (*Ficus Glomerata*), 5 drugs are taken. This study is meant to conduct a clinical study thoroughly. These drugs are the simplest drugs, from the *Sushruta Samhita* and *Chakradutta* where it’s described for *Vrana Shodhana* and *Vrana Ropana*.

#### Stages of Wound Healing -

There are mainly three stages of wound healing:-

##### 1. **Inflammatory Stage -**

During initial few days, inflammatory stage occurs in wound area in which there is constriction of blood vessels

of the wound area. This is an attempt to revive its normal state (homeostasis) to regulate bleeding and platelets and thromboplastin also make a clot. Inflammation (redness, heat, and swelling) also occurs which indicates the immune response occurring at the site of wound. White blood cell cleans the wound from debris and bacteria.

##### 2. **Proliferative Stage -**

Once the inflammatory stage takes place, the proliferative stage comes into action which lasts about for 3 weeks. In this stage, Granulation occurs. Occurrence of granulation is a signal that fibroblast which is a special fibroblast, makes collagen to fill within the wound. Formation of new blood vessels occurs. Also the wound contracts and layer of skin covers the wound.

##### 3. **Maturation and Remodeling Stage -**

After proliferative stage ends, maturation and remodeling stage occurs which can last up to 2 year. Formation of New collagen occurs which changes the form and increases the strength of the area of scar tissue. However, the newly formed tissue is only about 80% strong as compared to original tissue. In elderly person, ability of body to heal during this stage is diminished.

#### **Nirukti of Vrana**

The word “*Vrana*” comes from the basis “*vriya*” which means “to recover” and having suffix “*ach*” in the sense of *bhava*. The “*ch*” sound is neglected and therefore the form remains “*Vrana*” + “*a*” within the sense of “*Gatra Vichurnana*”.<sup>[3]</sup>

#### **Classification -**

Description of classification of *Vrana* according to **BRIHATRAYI**.<sup>[4]</sup> (Table 1)

#### **Aims & Objects –**

- To assess the efficacy of “*Durvadi Taila*”.
- To assess the efficacy of “*Panchvalkal Ointment*” in Post-operative wound healing.
- To decide the etiological factors both local as well as systemic and answerable for the Non-healing of wound.

#### **MATERIAL AND METHODS –**

Patients having cardinal sign & symptoms of *Vrana* attending the O.P.D. & I.P.D. of Shalya Tantra, Dr. Sarvepalli Radhakrishnan Rajasthan Ayurveda University and Satellite Ayurvedic Hospital, Magra Punjla, mandore, Jodhpur were randomly selected for the study whatever age, sex, religion, occupation etc. and method was used for assessment is simple random sampling method.

#### Conceptual Study –

- *Shuddha Vrana* may be compared to a healthy and healing wound.
- Ropana alike to Healing can occur only in *Shuddha Vrana* (Healing Wound).

#### Drug Review –

The combination has been prepared from the powerful healing drugs mentioned in *Sushruta Samhita* and *Chakradutta for the Vrana Shodhana & Vrana Ropana*. **The composition of *Durvadi Taila* consist total 3 drugs and *Panchvalkal* Ointment consist total 5 drugs, which has been selected from the reference given in the classical texts.** The chemical constituents of these drugs as berberine, vitamin-c, volatile oil, B- carotene, tiglic acid, leucoanthocynin, flavonoids, lupeol and tannis possesses anti-inflammatory and anti-bacterial properties which play an important role in wound healing.

#### Clinical Study –

On the basis of clinical observation it can be concluded that-

The trial groups drugs *Durvadi Taila* and *Panchvalkal Ointment* posses potent *Vrana-Shodhana* and *Vrana-Ropana properties* (anti-inflammatory, analgesic and anti-bacterial properties).

**The overall average of Group-A is 72.9% & the overall average of Group-B is 67.9%.** Thus it can be concluded that local application of *Durvadi Taila* in patients of Group-A showed comparatively better results than local application of *Panchvalkal* Ointment in patients of Group-B. There are no adverse effects found during the course of treatment.

It is found preferable in the management of the fresh wounds as it prevents the contracture and stenosis formation of post-operative anal wounds.

It is easy to form and can be applied in any group of patient due to its prominent acceptability.

Further, it may be concluded that wound get healed within the normal time period of healing i.e. 21-30 days.

**Ethical Committee Approval –** Approval from Institutional Ethics Committee was taken on 13-10-2020 vide reference No. S.No./DSRRAU/UCA/IEC/19-20/190. Before starting the clinical trial, the present study was also registered under Clinical

Trial Registry of India (CTRI) vide [CTRI No-CTRI/2020/12/029607 registered on 12/07/2020]

#### Informed Consent –

The aim of the study, type of the therapy, the methods to be carried out and the potential risks and advantages were elaborated to the patient in detail in non-technical labels and trilingual. After that their written consent was taken before the procedure.

#### Criteria for selection of Patients –

##### • Inclusion Criteria-

Patients having complaint of Post-operative wounds of Piles, Fissure-in-ano, Cysts, Pilonidal Sinus, and Corn etc. invite second intention wound healing was included in this study.

##### • Exclusion Criteria-

Patients who are suffering from wound(s) related with systemic disorders like- Diabetes Mellitus, Hypertension, Tuberculosis, Malignancy, Burn, and Chronic infected wounds, Non-healing Ulcers etc. were excluded from this study.

#### Investigations –

##### • Routine Hematological Examination –

HB %, TLC, DLC, BT, CT, RBS, HIV, HBsAG etc.

##### • Microscopic and Routine Urine examination.

- Other investigations like Tuberculin test, Biopsy, FANC was done as per need to exclude concerned abnormality or systemic disease of the patients.

#### Criteria for Diagnosis –

- Patients with newly wounded after, cut via the ligation of Kshar-sutra in Piles and/ or Fissure-in-ano, Excision of Cyst, excised Pilonidal Sinus and Corn were selected.

- Wound was fresh with pinkish or reddish floor and not having any kind of slough or discharge.

#### Management of Wound –

- **Grouping-**

Group-A: *DURVADI TAILA*

Group-B: *PANCHVALKAL OINTMENT*

- **Posology –(Table 2)**

#### Criteria of assessment –

The assessment was done on the basis of change in the signs and symptoms of *Vrana*.(Table 3)

#### Effect of therapy by *Durvadi Taila* – (Table 4)

The above table shows that size was decrease 74% in *Durvadi Taila* group which was found statistically extremely significant. Pain and tenderness was reducing up to 71.9% & 69% which were found statistically extremely significant also. The color and swelling was reducing up to 68.6% & 66.7% which was statistically extremely significant. Improvement in Discharge were 73% with statistically extremely significant. Burning and itching sensation was reduced up to 74.2% & 73.1% which was extremely significant statistically. Base/floor was improved in 70.8% with statistically highly significant results. The smell was reduced up to 78.3% which was statistically significant.

#### Effect Of Therapy By *Panchvalkal* Ointment – (Table 5)

The above table shows that size was decrease 70.9% in *Panchvalkal* Ointment group which was found statistically extremely significant. Pain and tenderness was reducing up to 57.1% & 60% which was found statistically extremely significant also. The color and swelling was reducing up to 64.7% & 65.7% which was statistically extremely significant. Improvement in Discharge were 66.7% with statistically extremely significant. Burning and itching sensation was reduced up to 69.6% & 72.2% which was extremely significant statistically. Base/floor was improved in 70.3% with statistically highly significant results. The smell was reduced up to 73.0% which was statistically significant.

#### Overall Effect Of Therapy –(Table 6)

#### Comparison Group A & B (By Mann Whitney’s U Test) (Table 7)

## DISCUSSION

“*Vrana*” (wound) has been dealt since the period of *Vedas* to the current era & it seems to be a major problem of unrest from the early stages of medical study. The topic of “*Vrana Ropana* (wound healing)” was very serious matter of concern to the *ancient Acharyas* and presence of a good number of chapters about *vrana* alone in ancient surgical text *Sushruta Samhita* is a proof for this statement *Vrana ropana* or wound healing is a natural process which is executed by body itself but this process is having fear from *dosha dushti* and various microorganism and thus *vrana* should be protected from same. *Dosha dushti* and microorganisms may badly affects the *vrana* and can also delay the normal process of healing of wound. Inflammation, cell migration, angiogenesis, matrix synthesis, collagen deposition and epithelialization are overlapping series of events in process of wound healing for both i.e. External and Internal type of wounds. A more efficient agent for wound healing must be developed from natural products and the same thing is also being tried by *Ayurvedic* experts; the present work is also a forward step in this path under an *Ayurvedic* preparation named “*Durvadi Taila*” and “*Panchvalkal Ointment*”.

#### Probable mode of action – (Table 8,9)

Owing to the above said properties and the pharmacodynamic properties of the drugs ingredients as considered in the drug review part they finally conduct to *Vrana Ropana* and so the probable mode of action *Durvadi Taila* and *Panchvalkal Ointment* on the wound was made as follows –

*Vrana Ropana* includes *Shodhana* as well as *Ropana*, so for healing to take place two phases are to be gone through practically of local *Dhatu Dushti* and checking of the inflammatory characters.

#### 1. Removal of local *Dhatu Dushti* –

Wound severity depends upon the local *Dhatu Dushti* with jumble of local tissue *Twaka* & *Mansa Dhatu* along with *Rakta Dhatu*. The drugs consisting *Lekhana*, *Shodhana*, *Sthambhna* and *Rakta Shodhaka* properties followed by the *Samshodana* (detoxifying, cleansing) property of *Tila Taila* which removed or cleansed *Dhatu Dushti* and carried out proper medical debridement at the wound site may act

as wound heal.

## 2. Checking of Clinical features –

Healing does not occur in any kind of tissue without absolution of the main clinical feature of *Vrana*. As mentioned previously, the *Rasa*, *Guna(s)* and *Karma(s)* of the components of trial drugs helped to check out the clinical features of the *Vrana* as follows –

**Prinan, Dhaturvardhana, and Poshana** – all of these actions of *Madhura Rasa* helped to reduce the size of wound by enhancing rate of contraction & healing.

*Vatahara (Guru Guna), Shothahara, Dahashamana (Sheeta Guna, Kashya Rasa)* properties reduced the inflammation and thus ease the pain or tenderness.

*Rakta Shodhana (Tikta-Kashaya Rasa), Pittashaman, Varnya, Twaka Prasadana* actions enhance the wound color by enriching the local blood circulation.

*Shothahara Karma* reduced the swelling in the *Vrana*.

*Sthambhana, Shoshana Karma of Kashya, Tikta Rasa and Vishad Guna with Kledahar, Raktasthambhna, Chhedana* properties followed by *Krimighna Krama* led to hampered of any kind of secretions.

**Unhealthy granulation-** *Lekhana, Kledahara, Chedana, Raktashodhaka* actions of *Vishada Guna of Kashya Rasa* takes part in scraping the debris and slough.

**Infection** – it was prevented by *Krimighna, Vishaghna* properties of the compound.

Finally, the normal condition of the scar was observed because of less size of scar, near to normal skin pigmentation, smooth, even regular surface and normal consistency. *Balya, Poshana Karma of Madhura Rasa* helped in enhancing of healing by *Dhaturvardhana* leading to minimal scar formation. *Varnya, Twaka Prasadana, Raktaprasadana* action of *Madhura Rasa, Snigdha Guna* led to color similar to skin pigmentation.<sup>[5]</sup>

## CONCLUSION

A complete detail of *Vrana*, its definition, types, clinical features, and management as well as complications was given. The classification of *Vrana* was reference according to *Brihataryee i.e. Sushruta Samhita, Charaka Samhita, and Vagbhata. Vrana samprapti* is elaborating according to *Shadkriyakala*, followed by *Shashti Upakrama* i.e. the 60 modalities of *Vrana* given by *Acharya Sushruta*.

Drug Review is concern with short detail about the particular drugs of *Durvadi Taila and Panchvalkal Ointment* involving their morphological features,

pharmacological actions etc. There is also mention the preparation of the drugs. The clinical study gives detail description of total 50 patients according to their age, sex, complaints etc. They were randomly distributed into 2 groups and treated with the trial drug “*Durvadi Taila*” and “*Panchvalkal Ointment*” as local application for the duration of 30 days equally. The study was completed and their data describe to the effect of therapy was plan after statistical calculation. There are no undesirable or harmful effects found during the course of treatment. It is found to have better results in the management of wound due to its effectiveness and it is also cost-effective. The present research work was focused to find out the effective therapy for *Vrana* with the help of *Ayurvedic* and Modern process. Though, the results are very good, but further study on large scale with longer time period of therapy is needed to achieve attains an exact conclusion.

**Acknowledgment: Nil.**

**Financial Support: Nil.**

**Conflict of Interest: Nil**

## REFERENCES

1. Shastri AD, editor, (1st Ed.). Vol-1, Sushruta Samhita of Sushruta, chikitsa-sthan Dwivraniya Adhyay; Chapter-1, verse6. Varanasi: Chaukhambha Sanskrit Sansthan, Reprint 2017, pp.4;
2. Shastri AD, editor, (1st Ed.). Vol-1, Sushruta Samhita of Sushruta, sutra-sthan vranaprashneeyadhyaya; Chapter-21, verse40. Varanasi: Chaukhambha Sanskrit Sansthan, Reprint 2017, pp.122;
3. Shastri AD, editor, (1st Ed.). Vol-1, Sushruta Samhita of Sushruta, chikitsa-sthan Dwivraniya Adhyay; Chapter-1, verse6. Varanasi: Chaukhambha Sanskrit Sansthan, Reprint 2017, pp.4;
4. Shastri AD, editor, (1st Ed.). Vol-1, Sushruta Samhita of Sushruta, chikitsa-sthan Dwivraniya Adhyay; Chapter-1, verse3. Varanasi: Chaukhambha Sanskrit Sansthan, Reprint 2017, pp.1;
5. Kashinath Pandey and Gorakhnath Chaturvedi Charak Samhita Vidyotini vyakhya Vol-2 Chikitsa-sthan Dwivraniya chikitsitam; Chapter-25, verse5. Varanasi: Chaukhambha Bharti Academy, Reprint 2018, pp.679;

**How to cite this article:** Trivedi D, Kumar H “A Comparative Study Of *Durvadi Taila* And *Panchvalkal* Ointment In Post Operative Wound Healing” IRJAY.[online]2021;4(11);65-73 Available from: <https://irjay.com>;  
DOI: <https://doi.org/10.47223/IRJAY.2021.41109>

Table 1 Description of classification of *Vrana* according to BRIHATRAYI

<i>Vrana</i>	NIJA VRANA	AGANTUJA VRANA	SHUDDHA VRANA	DUSHTA VRANA
<i>Acharya Charaka</i>	+	+	-	-
<i>Acharya Sushruta</i>	+	+	+	+
<i>Acharya Vagbhatta</i>	+	+	+	+

Table 2 POSOLOGY

S.NO.	PARTICULARS	GROUP-A	GROUP-B
1.	<b>DRUG</b>	<i>Durvadi Taila</i>	<i>Panchvalkal Ointment</i>
2.	<b>DOSE</b>	As per requirement	As per requirement
3.	<b>APPLICATION METHOD</b>	Local application	Local application
4.	<b>DURATION</b>	Twice daily for 4 weeks	Twice daily for 4 weeks

Table 3 Criteria of assessment –

S.NO.	RESULT	CRITERIA
1.	<b>Marked Response</b>	100 % relief in the sign & symptoms along with complete wound healing within 30 days.
2.	<b>Good Response</b>	76-99 % relief in sign & symptoms along with complete wound healing within 21-30 days.
3.	<b>Fair Response</b>	51-75 % relief in sign & symptoms along with complete wound healing in more than 30 days.
4.	<b>Unsatisfactory Response</b>	Up-to 25 % relief in sign & symptoms without any progress towards wound healing.



**Table 4 EFFECT OF THERAPY BY DURVADI TAILA –**

Symptoms	N	MEAN		Diff.	% of change	SD	SE	t	p	result
		BT	AT							
Wound Size	25	2	0.52	1.48	74.0	0.59	0.12	12.6	<0.0001	HS
Pain	25	2.28	0.64	1.64	71.9	0.74	0.15	11.7	<0.0001	HS
Tenderness	25	1.68	0.52	1.16	69.0	0.37	0.07	15.5	<0.0001	HS
Colour	25	2.04	0.64	1.4	68.6	0.58	0.12	12.1	<0.0001	HS
Swelling	25	1.32	0.44	0.88	66.7	0.53	0.11	8.4	<0.0001	HS
Discharge	25	1.48	0.4	1.08	73.0	0.28	0.06	19.5	<0.0001	HS
Burning Sensation	25	1.24	0.32	0.92	74.2	0.40	0.08	11.5	<0.0001	HS
Itching Sensation	25	1.04	0.28	0.76	73.1	0.60	0.12	6.4	<0.0001	HS
Base/Floor	25	1.92	0.56	1.36	70.8	0.57	0.11	12.0	<0.0001	HS
Smell	25	0.92	0.2	0.72	78.3	0.61	0.12	5.9	<0.0001	HS

**Table 5 EFFECT OF THERAPY BY PANCHVALKAL OINTMENT**

Symptoms	N	MEAN		Diff.	% of change	SD	SE	T	p	result
		BT	AT							
Wound Size	25	2.2	0.64	1.56	70.9	0.58	0.12	13.4	<0.0001	HS
Pain	25	2.24	0.96	1.28	57.1	0.54	0.11	11.8	<0.0001	HS
Tenderness	25	1.6	0.64	0.96	60.0	0.61	0.12	7.9	<0.0001	HS
Colour	25	2.04	0.72	1.32	64.7	0.48	0.10	13.86	<0.0001	HS
Swelling	25	1.4	0.4	1	71.4	0.71	0.14	7.1	<0.0001	HS
Discharge	25	1.44	0.48	0.96	66.7	0.68	0.14	7.1	<0.0001	HS
Burning Sensation	25	1.84	0.56	1.28	69.6	0.46	0.09	14.0	<0.0001	HS
Itching Sensation	25	1.44	0.4	1.04	72.2	0.54	0.11	9.7	<0.0001	HS
Base/Floor	25	1.48	0.44	1.04	70.3	0.35	0.07	14.8	<0.0001	HS
Smell	25	1.48	0.4	1.08	73.0	0.28	0.06	19.5	<0.0001	HS

**Table 6: Overall effect of therapy**

Result	Group-A ( <i>Durvadi Taila</i> )		Group-B ( <i>Panchvalkal Ointment</i> )	
	Patients	%	Patients	%
Marked Response	0	0%	0	0%
Good Response	9	36%	4	16%
Fair Response	16	64%	21	84%
Unsatisfactory Response	0	0	0	0

**Table 7: Mann Whitney's Test: Comparison Group A and Group B**

Parameter	Group	Mean diff.	SD	P	U	Result
Wound size	A	1.480	0.5859	0.7918	300	NS
	B	1.560	0.5831			
Pain	A	1.720	0.7371	0.0198	207.5	S
	B	1.280	0.5416			
Tenderness	A	1.160	0.3742	0.1890	260	NS
	B	0.9600	0.6110			
Color	A	1.4	0.5774	0.7066	296	NS
	B	1.32	0.4761			
Swelling	A	0.880	0.5260	0.5297	284	NS
	B	1	0.7071			
Discharge	A	1.080	0.2769	0.4338	281	NS
	B	0.9600	0.6758			
Burning sensation	A	0.9200	0.4	0.0064	210.5	VS
	B	1.280	0.45			
Itching sensation	A	0.7600	0.5972	0.0863	238	NS
	B	1.040	0.5385			
Base/ Floor	A	1.360	0.5688	0.0238	228	S
	B	1.040	0.3572			
Smell	A	0.7200	0.6137	0.0092	209	VS
	B	1.080	0.2769			



**Table 8 PROBABLE MODE OF ACTION OF DURVADI TAILA & PANCHVALKAL OINTMENT**

<i>Rasa</i>	<i>Guna</i>	<i>Karma</i>	
<i>Kashaya Rasa</i>	<i>Laghu , Ruksha</i>	<i>Sheeta, Kledashoshaka, Raktashodhaka, Kaphahara, VranaShodhana, VranaRopana</i>	<b><i>Vrana Shodhana</i></b>
<i>Tikta Rasa</i>	<i>Ruksha Guna</i>	<i>Sheeta, Krimighna, Shothaghna, Vishahara, Dahashamak, Raktshodhaka, Pitta-Kapha shaman</i>	
<i>Madhura Ras</i>	<i>Guru, Snigdha Guna</i>	<i>Balya, Varnya, Dhaturvardhaka, Prinana, Pushtikara, Vatahara</i>	<b><i>Vrana Ropana</i></b>

**Table 9 ROLE OF TAILA IN WOUND HEALING –**

<i>TILA TAILA</i>	
<i>Madhura Rasa</i>	<i>Balya, Dhaturvardhana</i>
<i>Guru, Suksma, Vyavayi Guna</i>	<i>Dhaturvardhana, Shodhaka, Sroto-Shodhaka</i>
<i>Karma</i>	<i>Twak prasadna, Vatahara, Vranaropana, Vrshya, Vranashodhana, Medhya, Sandhaneeya, Deepana, Balya, Caksusaya, Kesya, Garbhasaya shodhana</i>