

**A COMPARATIVE STUDY TO EVALUATE THE EFFICACY OF
PATOLADI YOGA GHRITA PICHU AND DHANWADI GHRITA PICHU
IN THE MANAGEMENT OF PARIKARTIKA WITH SPECIAL
REFERENCE TO ACUTE FISSURE-IN-ANO****Dr. S. Tameem Ansari*¹, Dr. Shivalingappa J. Arakeri², Dr. Mohasin Kadegaon³ and Dr. Geetanjali Hiremath⁴**¹Final Year PG Scholar, Department of Shalyatantra, Taranath Government Ayurvedic Medical College, Ballari (Karnataka, India).²Professor, Department of Shalyatantra, Taranath Government Ayurvedic Medical College, Ballari (Karnataka, India).³Assistant Professor, Department of Shalyatantra, Taranath Government Ayurvedic Medical College, Ballari (Karnataka, India).⁴Assistant Professor, Department of Shalyatantra, Taranath Government Ayurvedic Medical College, Ballari (Karnataka, India).***Corresponding Author: Dr. S. Tameem Ansari**

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ABSTRACT

Acharya Sushruta is known as Father of Surgery. The branch *Shalyatantra* gained more popularity during *Sushruta's* period and the content of *Sushruta samhita* is mainly surgery. The disease *Parikartika* is considered as the complications of some diseases or procedures mainly as a *vaidyakrita vyapat* where pain considered as main feature. *Parikartika* can be correlated to Fissure-In-Ano. About 30-40% of the population suffers from proctologic pathologies at least once in their lives and incidence is 1 in 350. *Pichu* is one of the proven medical management for Acute Fissure-In-Ano. A randomized clinical comparative study was conducted on 40 patients of *Parikartika* were selected from OPD and IPD of Shalya Tantra of Taranath Government Ayurvedic Medical College & Hospital, Ballari. They were divided in to two groups. Patients of Group A were treated with *pichu* of *Patoladi yoga ghrita* and Group B with *Dhanwadi ghrita*. In the present study, the effect of treatment in both the groups showed statistically highly significant, and Non-significant in between two groups. Overall results of treatment in Group A are 81.8% and Group B is 91.9%. *Patoladi yoga ghrita Pichu* is less efficacious than *Dhanwadi ghrita Pichu* in the management of *Parikartika* with special reference to Fissure-In-Ano.

KEYWORDS: *Parikartika*, Acute Fissure-In-Ano, *Patoladi Yoga Ghrita*, *Dhanwadi ghrita*, *Pichu*.**INTRODUCTION**

The present century is known for lifestyle disorders. It may be because of changed to sedentary life style, change in climatic conditions, occupational stress, fast food culture etc leading to different diseases like obesity, diabetes, hypertension, hormonal disorders, IBS, constipation (indirectly leads to hemorrhoids, Fissure-In-Ano) etc. The description of Fissure-In-Ano (*Parikartika*) is available in all *Brihatrayees* and later period authors of *Ayurveda*.

Parikartika is referred in *Brihatrayees* not as an independent disease but as a complication of other diseases pertaining to anorectal region and considered mainly as a *vaidyakrita vyapat* where pain considered as main feature. The other symptoms include *Vedana* (pain), *Daha* (burning sensation), *Vibandha* (constipation) and *Vrana* (ulcer). This condition is very

much suggestive of the modern ailment Fissure-In-Ano when it is limited to anal region.

About 30-40% of the population suffers from proctologic pathologies at least once in their lives. The incidence of anal fissure is 1 in 350 adults of anorectal disorders.^[1] It is more common in women between 30-50 years of age, sometimes in children, rare in aged.^[2] Acute Fissure-In-Ano is characterized by excruciating pain during and after defecation, bleeding per anum with spasm of anal sphincter.

Fissure-In-Ano is a medico- surgical condition. Medical treatment for acute fissure is oral pain killers, stool softeners, soothing ointment and self dilatation (using anal dilators) on medical advice etc Surgical management includes lord's dilatation, sphincterotomy, fissurectomy, anal advancement flap etc and have its own adverse effects and complications.

Acharyas have recommended the use of *Madhura*, *Sheeta*, and *Snigdha dravyas* internally as well as locally.^[3] From the available explanations in the classics, we can infer that *Parikartika* is a *vrana lakshanayukta gudavikara*. Acharyas mentioned *Vrana shodhana* and *Ropana sneha Yogas* as an excellent *vrana ropaka*, *pitta vatahara*, *shoolaghna*, and *shothagna dravya*.

Pichu is a type of *bahya chikitsa* which means sponging, and the process involves a piece of sterile cotton wool or gauze piece dipped in warm medicated oil. This is applied over the affected area for treatment. This can be administered more conveniently and has an altogether better effect.

To overcome all these problems and to prevent surgical intervention, the present study is planned to evolve an effective treatment by *Ayurvedic* approach by application of *Pichu* with *Patoladi Yoga gritha* and *Dhanwadi gritha*. *Patoladi Yoga gritha Pichu* may be considered as one such treatment in *Ayurveda*. Which can overcome the above said lacunas, hence this study is taken up to explore the possibilities of *Patoladi Yoga gritha Pichu* as an effective, economical and short term treatment for acute Fissure-In-Ano as it is considered as best in wound healing (*Ropanam Param*) by *Acharya Vagbhata*.^[4] To establish the significance of the effect of *Patoladi yoga ghritha Pichu*, another study with *Dhanwadi ghritha*^[5] *Pichu* and its effect on *Parikartika* has also been taken up which has already been established with 85% of success rate from previous studies. Thus the topic is entitled as “**A comparative study to evaluate the efficacy of *Patoladi yoga ghritha Pichu* and *Dhanwadi ghritha Pichu* in the management of *Parikartika* with special reference to Acute Fissure-In-Ano**”.

OBJECTIVES

- To evaluate the efficacy of *Patoladi yoga ghritha pichu* in the management of *Parikartika*.
- To evaluate the efficacy of *Dhanwadi ghritha pichu* in the management of *Parikartika*.
- To evaluate the comparative effect of *Patoladi yoga ghritha pichu* and *Dhanwadi ghritha pichu* in the management of *Parikartika*.

MATERIALS AND METHODS

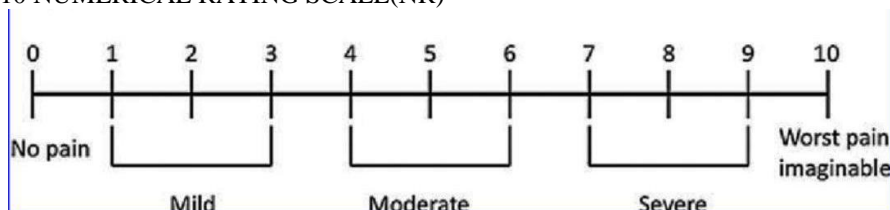
Drug source

Required raw materials for *patoladi yoga ghritha* and *dhanwadi ghritha* will be collected from authorised

Subjective parameters

a) Pain intensity

PAIN SCORE 0 -10 NUMERICAL RATING SCALE(NR)



sources in association with *dravya guna* staff. Necessary processing of raw materials and preparation for *patoladi yoga ghritha* and *dhanwadi ghritha* will be made in association with post graduate dept. Of *rasashastra* and *bhaishajya kalpana*, taranath govt. Ayurvedic medical college, Ballari.

Clinical source

A total of 40 patients of Acute Fissure-in-Ano of either sex will be selected from OPD and IPD of *Shalyatantra* dept., Taranath Government Ayurvedic Medical College and Hospital, Ballari.

Inclusion criteria

- Patients irrespective of sex, religion, occupation and economic status will be selected for the present study.
- Patients suffering from acute & solitary anal fissure with symptoms – Painful defecation, burning sensation, bleeding per anum, constipation.
- Patients between the age of 30-50 years.

Exclusion criteria

- Patients with systemic disorders like Tuberculosis, anemia, diabetes mellitus, hypertension, cardiac, renal disorders, ulcerative colitis, chronic and multiple anal fissure with inflamed sentinel tag, crohn’s disease and HIV.
- Patients with associated Anorectal diseases like Fistula-in-ano, Haemorrhoids, polyp and growth.

Diagnostic criteria: *Parikartika* with special reference to Acute Fissure-In-Ano confirmed by its signs and symptoms like,

Subjective Parameters

1. Pain in anal region
2. Burning sensation in anal region.
3. Bleeding per anum i.e, stools streaked with blood
4. Constipation

Objective parameters

1. Ulcer healing.

CRITERIA FOR ASSESSMENT

Assessment will be made with the following parameters.

b) Burning sensation– Patients are asked to time the duration of burning sensation after defecation.

No burning sensation -0

1-15mins -1

16-30min -2

31-60min -3

More than 60min -4

c) Bleeding per anum: Bleeding is seen as streaks over the stools or few drops on toilet pan in some cases. Grading will be done depending on presence or absence of bleeding.

Absent - 0

Present – 1

d) Constipation: This feature is graded based on consistency of stools.

Absent - 0

Present - 1

Objective parameters

a) Length of ulcer:

After gently parting the buttocks, the fissure will be visualized and the length of the ulcer was measured with a glass probe by keeping it over the ulcer. This will later measured in millimeters. Grading will made as follows.

Healed ulcer – 0

1 to 5mm – 1

6 to 10mm – 2

More than 10mm – 3

Investigations

The routine Haemological tests like Hb%, BT, CT, RBS, ESR, HIV 1&2 HBsAg and Urine routine are carried out to exclude any other pathology.

Study design

Group	No. Of Patients	Intervention	Duration
Group A	20	<i>Patoladi yoga ghrita pichu</i>	7 Days
Group B	20	<i>Dhanwadi ghrita pichu</i>	7 Days

Materials used in the study

Sterile surgical gloves (size 7)	Sufficient numbers
Sterile swabs	Sufficient numbers
Sterile gauze pieces	Sufficient numbers
Sterile <i>Pichu</i>	Sufficient numbers
<i>Patoladi Yoga Ghrita</i>	Sufficient quantity
<i>Dhanwadi ghrita</i>	Sufficient quantity
Luke warm water	Sufficient quantity
Sterile kidney tray	01
<i>Haritaki choorna</i>	Sufficient quantity
Lithotomy table	01
O T lamp	01



Procedure in Group A

On the night before the procedure each patient was advised to orally consume 1 *karsha* (12gms) of *Haritaki choorna* before dinner.

Poorva karma

The procedure was explained to the patient and written consent was obtained. Each day the procedure was conducted in the morning.

Pradhana karma

- Patient was lie down on the minor OT table in lithotomy position after exposing the anal region properly.
- The surrounding area of the anal region was cleansed with swab dipped in clean lukewarm water and the mopped dry with sterile gauze.
- Sufficient quantity of *Patoladi yoga ghrita* was taken in lukewarm condition in kidney tray and sterile *pichu* was dipped and inserted in anal canal gently.

Paschat karma

- Patient was advised to remain in the same position for 2 minutes and later he/she was allowed to wear his/her dress and sent back to attend his/her routine work. Patient was advised to remove the *pichu* when he feels to attend the toilet for defecation.
- The procedure was carried out once daily for 7days.
- The changes with the treatment were observed before treatment and on 2nd, 3rd, 4th, 5th, 6th, 7th day. These observations were recorded in the proforma of case sheet prepared for the study.
- In cases where total recovery was obtained, duration of 30 days was fixed and patients were advised to follow up once in fortnight to rule out any recurrence and the same was recorded in the proforma of the case sheet.
- The patients were advised Fiber rich diet, increased intake of fluids, and 12 grams of *Haritaki Choorna* at bed time with lukewarm water and Hot water sitz bath twice a day.

Procedure in Group B

Same above said procedure is repeated with *Dhanwadi ghrita Pichu*.

Observations: The present study revealed that the incidence of Acute Fissure-In-Ano is more common in the age group of 30-40 years (72.5%), 92.5% were male patients, 60% were Official, 70% were middle class patients, 95% were Hindu patients, 72.5% had moderate appetite, 72.5% were of mixed dietary habit, 80% had constipation, 77.5% had Posterior fissure.

RESULTS

The assessment subjective parameters like Pain, Burning sensation, Bleeding, Constipation, and objective parameters like Length of Ulcer were subjected to **Friedman test** to compare within the groups and **Mann Whitney U test** to compare the values between the groups and conclusions were drawn by using **SPSS stat software**.

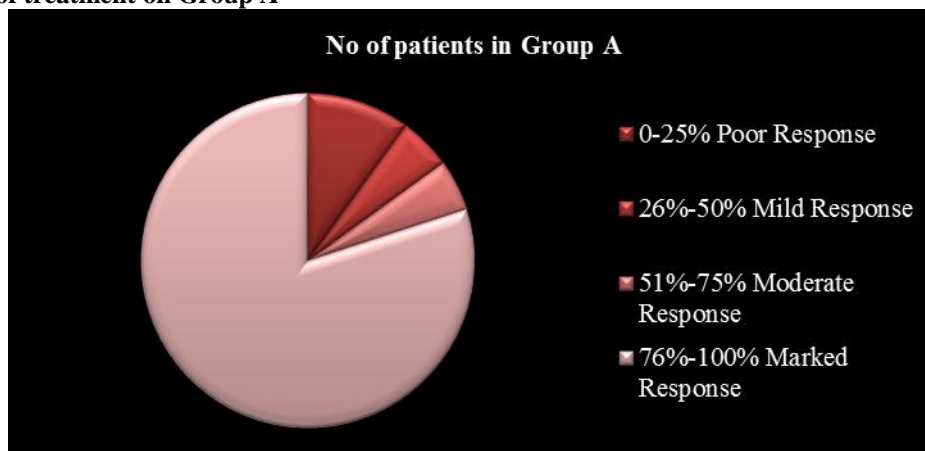
Comparative Results of Group A and Group B

Characteristics	GROUP A			GROUP B		
	Mean score		Percentage of Relief	Mean score		Percentage of Relief
	BT	AT		BT	AT	
PAIN	1.90	0.40	78.9%	1.4	0.15	89.28%
BURNING SENSATION	1.95	0.45	76.9%	1.55	0.15	90.32%
BLEEDING	0.60	0.10	83.33%	0.45	0.0	100%
CONSTIPATION	0.85	0.0	100%	0.80	0.0	100%
LENGTH OF THE ULCER	1.0	0.3	70%	1.0	0.2	80%

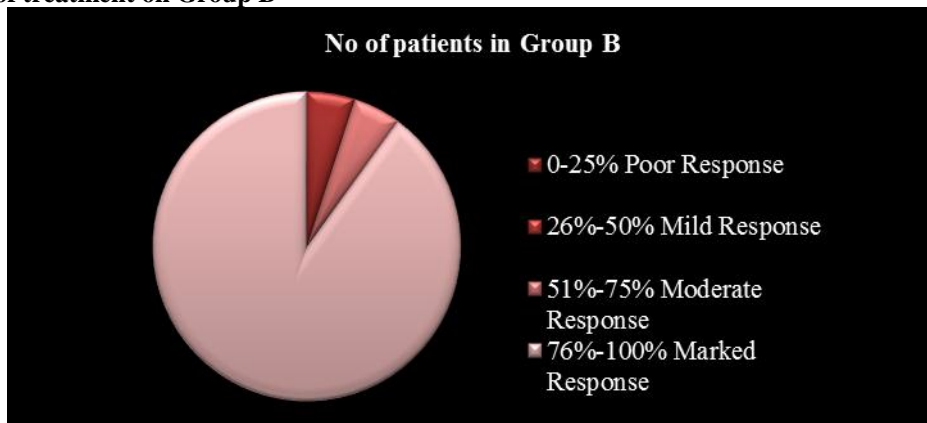
Overall effect of treatment on Group A & Group B

Effect of Treatment			
Class	Grading	No of patients in Group A	No of patients in Group B
0-25%	Poor Response	2	1
26%-50%	Mild Response	1	0
51%-75%	Moderate Response	1	1
76%-100%	Marked Response	16	18

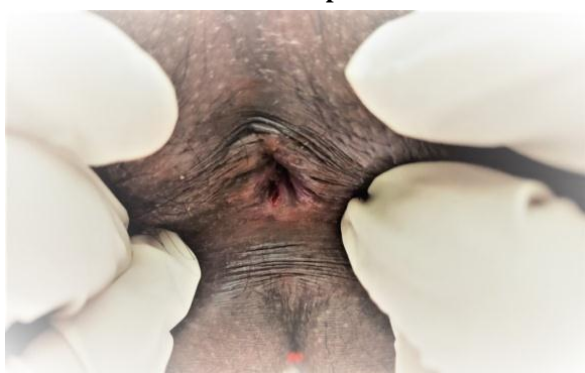
Overall effect of treatment on Group A



Overall effect of treatment on Group B



Results of treatment in Group A

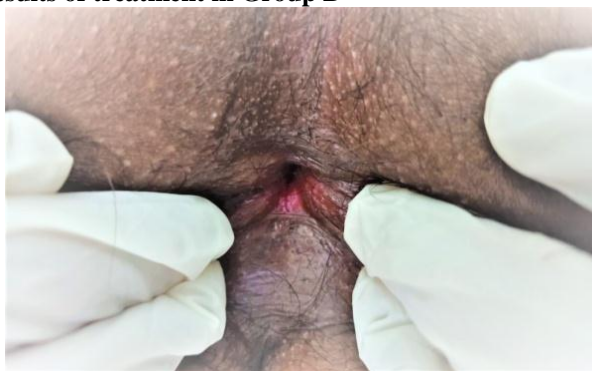


Before treatment



After treatment

Results of treatment in Group B



Before treatment



After treatment

DISCUSSION

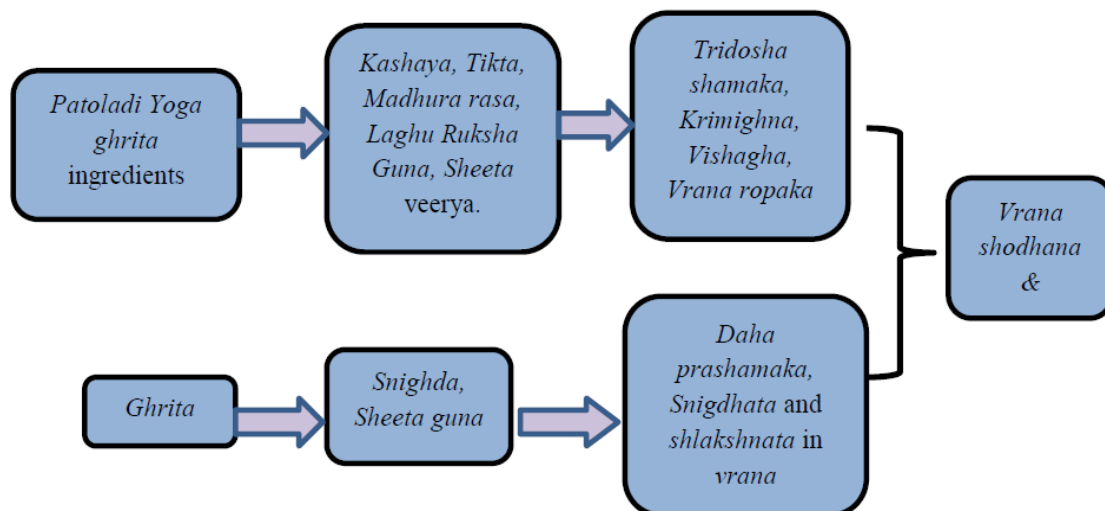
The word *Pari* when used as prefix it means ‘all over’ or every entity or every aspect or ‘whole.’ *Kartika* is derived from *krita* verb which means to cut and it is a noun form. Thus the word *Parikartika* means “to cut circumferentially” or “to cut all around.” It refers to a condition in which patient experiences a sensation of pain as if *Guda* is being cut around with scissors. This can be correlated to Acute Fissure-in-Ano.

Probable mode of action

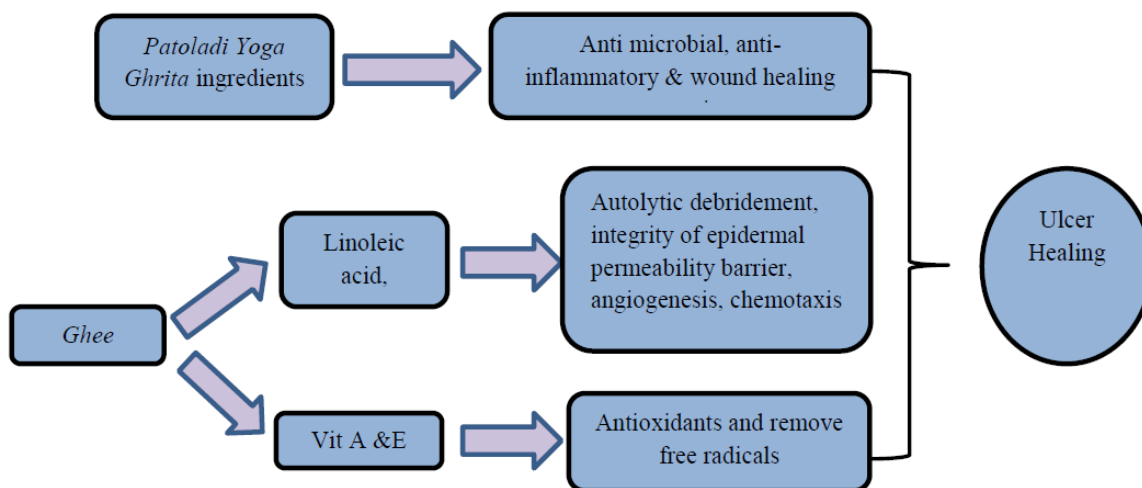
Patoladi Yoga Ghrita: The ingredients contain predominantly *Kashaya*, *Tikta rasa* and *Laghu*, *Ruksha gunayukta* counter more effectively the *Saama dosha*

vastha which is causative factor of acute inflammatory process having *Guru*, *Snighda*, *Sheeta*, *Manda gunas*. The infiltration of leucocytes and plasma proteins causes oedema and nerve irritation by pressure causes pain. As the inflammatory process is checked the pain reduces. The *Madhura rasa* along with *Sheeta veerya* and *Tridosha shamaka* properties helps in eliminating *Daaha* and *Vrana Sandhana* of ulcer in *Parikartika*. The *Krimighna*, *Vishaghna*, properties further prevents the Ulcer from being infected.

Mode of Action of Patoladi yoga ghrita according to Ayurveda



Mode of Action according to Ayurveda

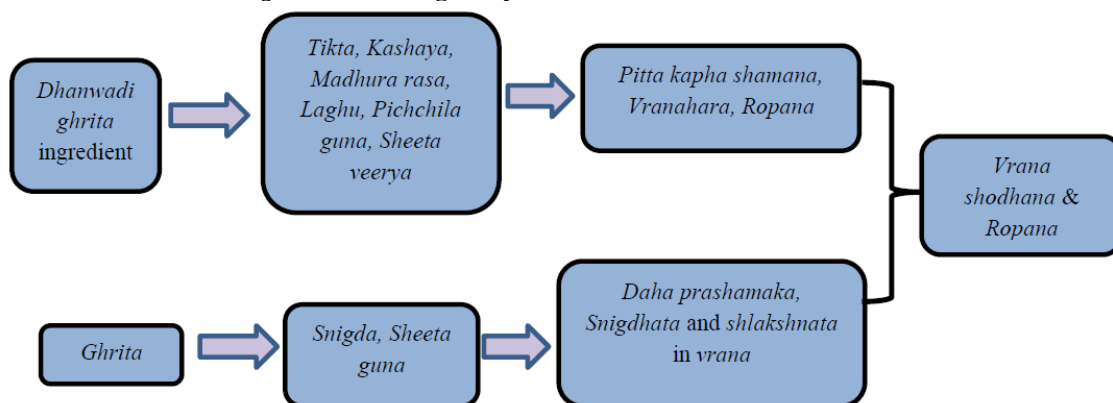


- *Ghrita* contains Poly unsaturated fatty acids among which linoleic and linolenic acids are important in terms of wound healing.
- **Chemotaxic role:** Linoleic acid plays an important chemotaxic role for microphages and it is fundamental in the expression of the components of the fibrinolytic system which regulates the production of collagenase.
- **Autolytic Debridement:** It contributes to the production of metallo proteins inducing granulation and accelerating the healing process.
- **Epidermal layer:** It is the lipid found in greatest quantities in the epidermal layer and helps to maintain its integrity and accelerates healing processes
- **Angiogenesis:** It acts as an important tissue restorer because it promotes angiogenesis by maintaining the moistness of the environment and accelerating the tissue granulation process. (The use of fatty acids in wound care: an integrative review of the Brazilian literature, <http://www.scielo.br/scielo>).

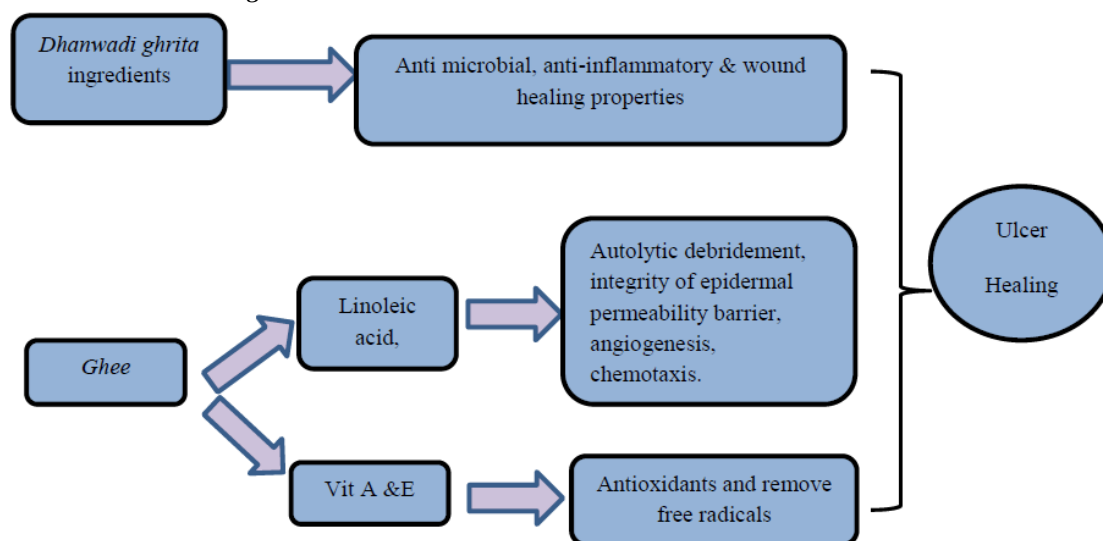
➤ By this we can infer the rationality behind the usage of *ghrita* in wound dressings by our *Acharyas*.

Dhanwadi ghrita: The ingredients contain predominantly *Kashaya, Tikta rasa* along with *Laghu guna* which do *Kapha-Pitta shamana* which neutralizes *Saama* condition of *Dosha avastha* which is the key factor for any inflammatory process thus reducing the pain. The *Pichchila guna* causes haemostatic and as it is *guru* in nature relieves *sankocha* (spasm) which is caused by *Laghu guna* of *Vata*. The *Madhura rasa* and *Kashaya rasa* along with *Pichchila guna* helps in the regeneration of tissue which leads to *Vrana sandhana* of ulcer in *Parikartika*.

Mode of Action of Dhanwadi ghrta according to Ayurveda



Mode of Action of Dhanwadi ghrta in modern science



- The *Haritaki choorna* (12gm) at bed time with Luke warm water which is *Kashaya rasa pradhana, Pancha rasa (Lavana varjita)* causes *Deepana, Anulomana* and *Tridosahara* in nature. This relieves the constipation which is the prime cause for *Parikartika*.
- The Luke warm water sitz bath gives combined effect of reducing the pain and relaxing the sphincter spasm.
- The *Pichu* is left at the place till next defecation so the absorption of drug will be for more time.

CONCLUSION

- ✚ The word *Parikartika* means “to cut circumferentially” or “to cut all around.” It refers to a condition in which patient experiences a sensation of pain as if *Guda* is being cut around with scissors. This can be correlated to *Fissure-In-Ano*.
- ✚ The disease is commonly seen in 3rd and 4th decade of life.
- ✚ The disease is not mentioned as a separate entity rather considered as a complication of *Vamana* and *Virechana*.
- ✚ The present study was conducted on 40 patients who were diagnosed with *Parikartika* (Acute Fissure-In-

Ano) were randomly divided into 2 groups. Patients of Group A were treated with *Patoladi yoga ghrta pichu* and Patients of Group B were treated with *Dhanwadi ghrta pichu*. Treatment was conducted for 7days for complete healing of ulcer.

- ✚ The effects of treatment in both the groups have shown statistically highly significant results (p value <0.001) in all assessment parameters. The effects of treatment in between the groups have shown statistically Non-significant.
- ✚ The percentage of improvement in Group A, on Pain is 78.9%, on Burning sensation is 76.9%, on Bleeding is 83.33%, on Constipation is 100% and on length of the Ulcer is 70%.
- ✚ The percentage of improvement in Group B, on Pain is 89.28%, on Burning sensation is 90.32%, on Bleeding is 100%, on Constipation is 100% and on length of the Ulcer is 80%.
- ✚ Overall results of treatment in Group A are 81.8% and in Group B it is 91.9%.

Based on the observations and results following hypothesis are accepted,

- *Patoladi yoga ghrta Pichu* is less efficacious than *Dhanwadi ghrta Pichu* in the management of *Parikartika* with special reference to *Fissure-in-Ano*.

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