

Clinicle Trial on the Efficacy of Use of Kampillaka Taila in the Management of Parikirtika

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ABSTRACT

Fissure in Ano is encountered very commonly in day today practice scenario. This pain is a primary and disturbing feature among many disorders, Parikartika or anal fissure is one prime among them. Fissure in Ano is particularly a medico-surgical condition^[1] Parikartika being a vranalakshanyukta gudavikar, can be managed by some strong and well acting vranaropak dravyas. Acharya charak has explained some chief vranaropak dravyas in Vrana chikitsa adhyay of chikitsa sthan, Kampillak tail is one of them which is clearly referred to be having actions like vranaropana^[2] to which we look at it as a best and challenging opportunity to find out some better from it to cure the vrana formed in parikartika.

Keywords: Parikirtika lakshana, Samprapti, Chikitsa, use of Kampillaka taila parikirtika.

INTRODUCTION

Ayurveda has always insisted on maintenance of healthy state and equilibrium of dosh, dhatu, mala, agni along with relief from the diseases, if this equilibrium get disturbs, the state of sound health get disturbs and disease starts to occur^[3]. Parikartika, which is seen as a severe painful condition in the anal region has no direct references in the vedic scriptures. But Arshas which is Another Ano-rectal condition is mentioned in the vedas. In Ayurvedic texts, Parikartika is explained as an associated symptom of Arshas. So it is difficult to assume whether they had the knowledge of such a painful condition i.e. Parikartika but failed to mention it under a different heading is quite debatable. Excruciating cutting type of pain in and around all guda region, Basti Shiras and nabhi is termed as parikartika.

Nidana and Samprapti of Parikartika:

When vata covers faeces, the stool is constipated, patient suffers from severe pain and passes hard stool with difficulty and evacuation is delayed. This causes parikartana leading to parikartika. The intake of mudga, kodrava, chanaka, kareera etc. foods which are rooksha and water absorbent in nature will aggravate vata in its own seat (pakvashaya) which blocks the adhovaha strotas, dries them up and produce obstruction to the movement of faeces, flatus and urine.

That in turn leads to severe pain in abdomen, back, region of heart and flanks, cutting type of pain in rectum and thus parikartika^[4] In persons of predominantly of vata prakruti, due to dryness caused by consumption of Kashaya, katu, tikta, rooksha, sheeta, stale materials, dry vegetables, vallura (dry fish), pinyaka, kodrava, shyamaka, yava etc, as well as due to suppression of natural urges the aggravated vata reaches upwards and repelled by udanavayu reaching guda, settling there obstructs the passage of faeces, urine and thus produces udavarta. Clinical features being shoola, moorchchha, aadhmana, parikartika, which in turn give too much trouble. If a debilitated person having mridukoshta or mandagni is given with excess rooksha, teekshna, lavanayukta, medicines or rough takes such foods will vitiate pitta and vata and produces parikartika. ^[5] The pitta and vata of the body are conjointly aggravated by the application of a basti charged with extremely parching, hot and saline solutions which give rise to the distress known as Parikartika. ^[6]

Lakshanas:

The patient suffers from cutting type of pain with burning sensation in anus, penis, and neck of bladder, retention of flatus and relish for food vanishes. The patient feels as his nabhi, basti and guda being torn. Also, severe pain and slimy blood discharge are seen in parikartika. ^[7]

Samprapti Ghataka:

- DOSHA - Vata and Pitta
- DUSHYA - Twak, Rakta and Mamsa
- AGNI - Jatharagni
- AAMA - Tatjanya

- DHATWAGNI - Rakta and Mamsa
- STROTAS - Purishvaha, rakta and mamsavaha
- STROTODUSHTIPRAKAR - Sanga
- UDBHAVA STHAN - Pakwashaya
- SANCHAR STHAN - Gudagat sira
- VYAKTASTHAN - Gudanalika
- ROGAMARGA - Bahya
- SADHYASADHYATA - Kashta sadhya
- SWABHAV - Chirakaleena

DRUG REVIEW:

दूर्वास्वरससिद्धं वा तैलं कम्पिल्लकेन वा |
दार्वीत्वचश्च कल्केन प्रधानं व्रणरोपणम् ||९३||
येनैव विधिना तैलं घृतं तेनैव साधयेत् |
रक्तपित्तोत्तरं दृष्ट्वा रोपणीयं व्रणं भिषक् ||९४|| (Ch.Chi 25/93)

Here it applied for the management of wound in Parikartika. As per references of Kampillak taila in Charak Samhita, Kampillak is treated with tila taila to prepare Kampillak tail.

Contents of Kampillak tail : Kampillak churn Tila taila

1) Kampillak:-

Latin Name : Mallotus philippinensis Muell arg

Family : Euphorbiaceae

Rasa Panchaka^[8] :

Rasa (Taste) : Katu (Pungent)

Guna (Qualities): Laghu (Light for digestion), Ruksha (Dry in nature), Teekshna (Strong).

Veerya (Potency) : Ushna (hot)

Vipaka : Katu (undergoes Pungent taste after digestion)

Doshaghata: Kaphavaata shamak (reduces vitiated kapha and vaata dosha) Parts used : Glands and hairs of fruit.

Dosage : 1-3 gm.

Action and Uses: Kampillaka is Kaphavata shamak

• Local action (External): It is used as Kushthagna, Vranashodhak, Vranaropak. According to Acharya Charak, Kampillaka taila is one of the Pradhan Vranaropak i.e excellent is wound healing.

• Internal Action a) Digestive System : It is used as Purgative as well as deworming. Fruit gland of this plant is used for the treatment of Intestinal worms by mixing it with hot water and consuming. 50 | P a g e b) Urinary System : It is used for the treatment of breaking renal calculi (Ashmaribhedan) c) Haematogenic System : It acts as a blood purifier.

(Raktashodhak) d) Reproductive System : It is used in retention of foetus (Garbhnirodhak) e) On Skin : Decoction of bark of this plant is used to treat the eczema (Kushthaghna)

2) TILA (Sesamum indicum):

Latin Name : Sesamum indicum linn

Family : Pedaliaceae

Action and Uses^[9] :

Rasa : Madhur, Katu Anurasa : Kashaya, Tikta

Vipaka : Madhur

Veerya : Ushna

Guna : Guru, Snigdha

Doshaghata : Vaatshamak, Kaph-pitta prakopak

Local Use: It is used for Abhyang being Snehana, Vedanasthapana, Sandhaniya and Vrana shodhana – Ropana. It should be massaged in shirahshoola and Angamardas also in Ardita and in Pakshavadha after making siddha with Vataghna dravyas. Warm kalka should be applied as vedanasthapana in arshas. It is used for Parisheka, Avagaha and

Abhyanga etc. to give strength to the dhatus. Paste should be applied as Vrana shodhana and Ropana. A decoction of leaves or root is used to wash hairs and for application to head.

MATERIAL AND METHODOLOGY

Study Design:- Total 60 patients were selected according to Inclusion criteria and randomly grouped in 2 groups i.e Trial Group and Control Group with 30 Patients in each group. Group A was Trial group in which Kampillak tail was applied per rectum topically on the wound of parikartika. Group B was Control group in which Nifedipine (0.3% w/w) and Lignocaine (1.5% w/w) Ointment was applied on the wound of parikartika. Keen observations were done with the help of criteria of assessment on follow-up.

A. Study Type: Randomized Controlled Trial.

B. Study Duration: Study was carried out within 18 months duration, and Duration of Treatment was 15 days.

C. STUDY DETAILS- The whole study and concerned clinical part of work was carried out at Shalya tantra OPD and IPD of our college Dr. D.Y Patil college of Ayurveda and research Centre, Pimpri, Pune 18 Maharashtra state,

Method of selection of Study Subjects: -

1) Inclusion Criteria:

- a) Patients suffering from clinical signs and symptoms of Parikartika like gudadaha, kartanvat vedana or shool, raktstrav etc. were selected for this study.
- b) Patients of age group 20 – 65 years of both genders were selected.
- c) Patients were selected irrespective of sex, caste, religion and region.
- d) Group of patients who gave consent.

2) Exclusion Criteria:

- a) Fissure in Ano with other systemic disorders like Diabetes Mellitus, Hypertension, Tuberculosis, HIV, Australia Antigen Positive, other STD's Carcinoma, Ulcerative Colitis, were not taken for study.
- b) Fissure in Ano associated with other Ano rectal disorders like Haemorrhoids, Fistula in Ano, Pilonidal Sinus, Rectal Prolapse were excluded.
- c) Chronic fissure in Ano with anal spasm.
- d) Pregnant women's.
- e) Patients who were not willing to participate.

3) Withdrawal Criteria:

- a) Patients who developed any severe illness or complications during the study.
- b) Patients who did not attended regular follow ups or patients who did not followed prescribed medicines properly.

Operational Definitions:

The method of preparation of therapeutic tail by snehkalpana vidhi. It was prepared here by the herb Kampillaka along with til tail. Hence Tail obtained through this method is Kampillak Tail.

Preparation of Kampillak Tail:

Market packages of Kampillak churn and Til tail were purchased from reputed Ayurved aushadhalaya.

Method of Preparation of Drug:

Kampillak tail is mentioned in the treatment of Vrana as a Pradhan vranaropak by Acharya Charak in Vran Chikitsa Adhyay of Chikitsa Sthan.(Ch.Chi 25/93)

Kampillak taila was prepared by using standard ayurvedic method of Snehpak Kalpanas described by Sharangdhar in Ghruttaila Kalpana adhyaya

Sneha dravyas should be four times more than kalka dravyas and drava dravya (water, kwatha) should be four times more than sneha dravyas. These siddha Sneha's are used for external application.

Kampillak churna - 250 gm
 Til Tail - 1000 ml
 Water - 4000 ml

As per above procedure mentioned in Sharangdhar Samhita, 250 gm Kampillak, 1000 ml Til taila and 4000 ml water were used and Kampillak tail was prepared. Kampillak Churn being a shushka or dry powder, was mixed with some water to make it in kalka form as per Kalka Kalpana suggested by Acharya Sharangdhar. As per standard sneha Kalpana and Tail preparation vidhi, tail was prepared and confirmed by the tests explained by Acharya sharangdhar in his grantha regarding purity and authenticity of taila siddhi.

Agni Pariksha: If drops of siddha taila burn without chattering sound, it suggests that siddha taila doesn't contain any part of kwatha.

Phena Pariksha: During boiling when Phena (bubbles) appears, it indicates that taila is siddha and it is ready for use.

Gandhaja Varna Rasotpatti : Tails gets gandha, Rasa and Varna of medicine for which it was prepared.

Vartivat Sneha Kalka Pariksha : All these tests were applied during preparation of kampillak tail and thus reddish brown Kampillak tail with particular smell was prepared.

CLINICAL STUDY

Treatment Details:

GROUP A (TRIAL)

- 30 Patients of this group received Kampillak Tail for the treatment of Parikartika
- **Route of administration :** Per rectal topical application by cotton swab dipped in kampillak tail.
- **Duration of Treatment :** 15 days
- **Dose :** The dose of Kampillak tail was taken as per vrana or wound size and as required.
- **Time :** After defaecation in the morning and before bed time in the night.

GROUP B (CONTROL)

30 Patients of this group received market preparation of Ointment containing Nifedipine (0.3% w/w) and Lignocaine (1.5% w/w) for the treatment of Parikartika.

- **Route of administration:** Per rectal topical application by rectal applicator.
- **Duration of Treatment :** 15 days
- **Dose :** The dose of Nifedipine and Lignocaine Ointment was taken as per vrana or wound size and as required.
- **Time :** After defaecation in the morning and before bed time in the night.

METHODS OF DATA COLLECTION RELEVANT TO OBJECTIVES

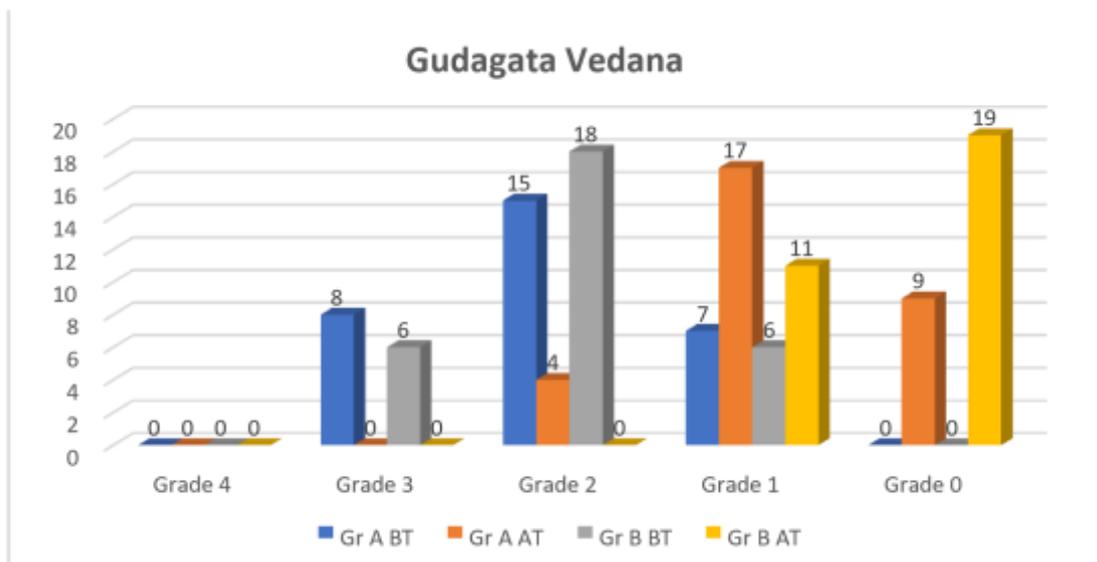
- Examination of all Patients was done thoroughly in follow ups on 1st, 5th, 8th, 12th and 15th day. As per findings all observations were noted in grade score system.
- **Changes in Gudagat Vedana (BT & AT) in both Groups**

Table No. 1 Shows Changes in Gudagat Vedana in both Groups

Grade	No of Patients				% of Patients			
	Group A		Group B		Group A		Group B	
	BT	AT	BT	AT	BT	AT	BT	AT
Grade 4	0	0	0	0	0	0	0	0

Grade 3	8	0	6	0	26.67	0	20	0
Grade 2	15	4	18	0	50	13.33	60	0
Grade 1	7	17	6	11	23.33	56.67	20	36.67
Grade 0	0	9	0	19	0	30	0	63.33
Total	30	30	30	30	100	100	100	100

Graph 1: Shows Changes in Gudagat Vedana in both Groups



It was observed that Gudagat Vedana has decreased more in Group B than in Group A. In Group A – Difference between BT symptoms score (61) and AT symptoms score (25) observed was 36. In Group B – Difference between BT symptoms score (60) and AT symptoms score (11) observed was 49.

A1. Grade difference wise changes in Gudagat vedana.

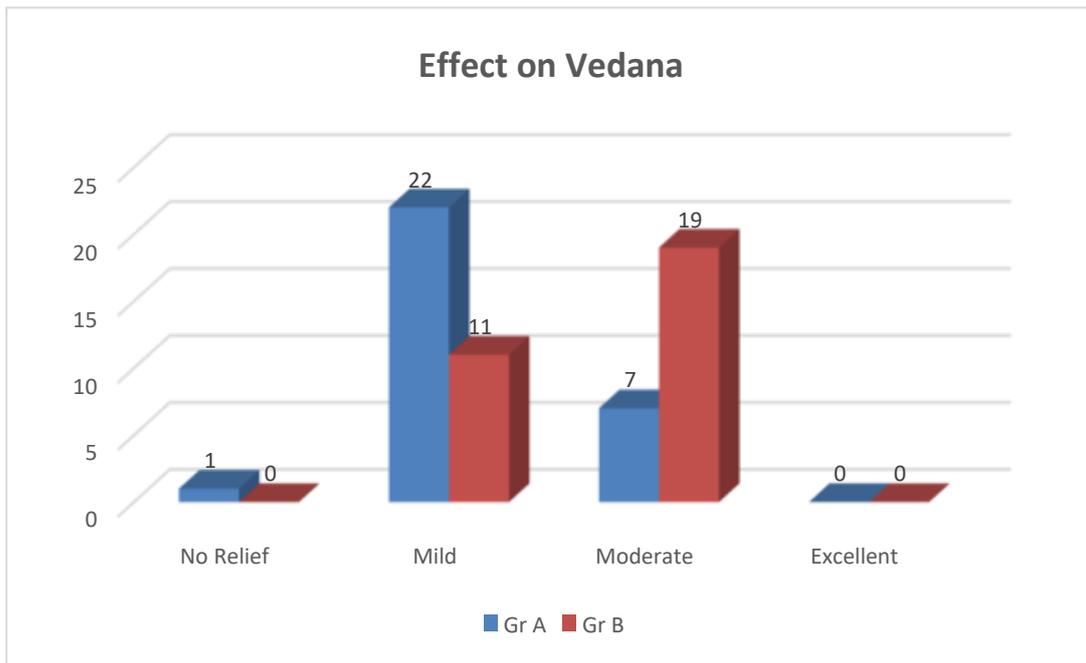
The Effect of Kampillak tail and Nifedipine Lignocaine ointment was observed on Gudagat Vedana of Parikartika by using gradation method. Table No. 2

Grade. Difference	Trial Group A		Control Group B	
	No. of Patients	Effect in %	No. of Patients	Effect in %
0	1	3.33	0	0
1	22	73.33	11	36.67
2	7	23.33	19	63.33
3	0	0	0	0
Total	30	100	30	100

Trial group: Effect of Kampillak taila on Vedana - 7 patients got Moderate relief, 22 patients got mild relief while 1 patient has no relief.

Control group: Effect of Nifedipine Lignocaine ointment on Vedana - 19 patients got Moderate relief and 11 patients got mild relief.

Graph 2: Graphical presentation of Effect on Vedana

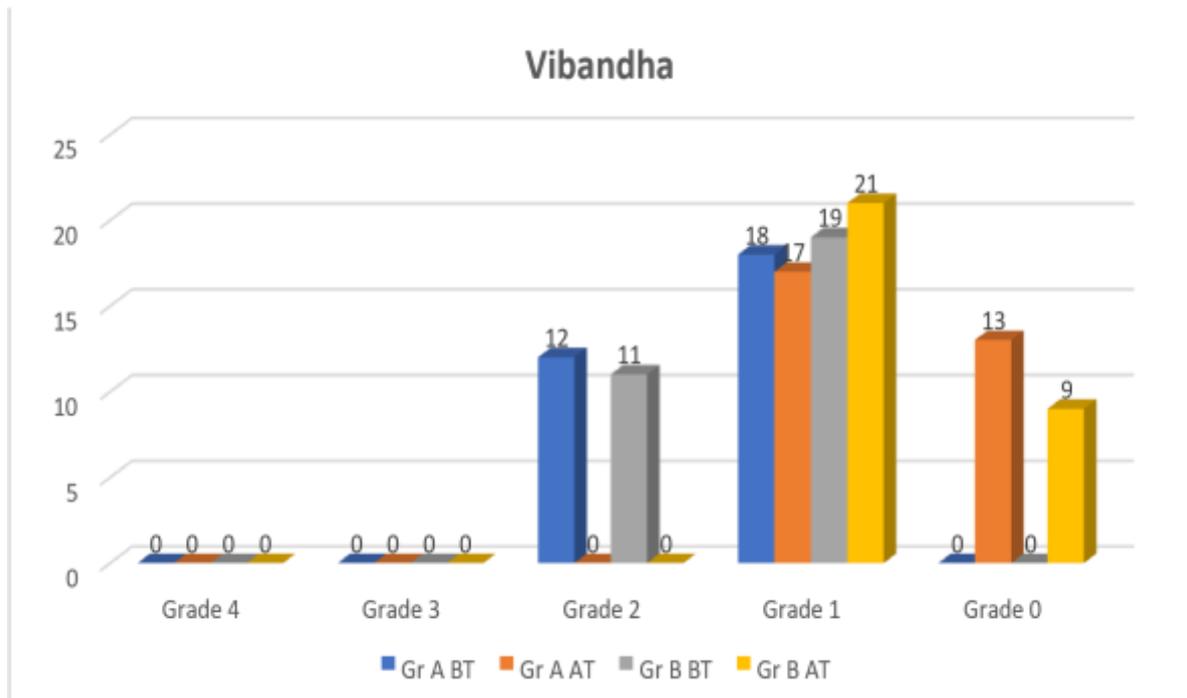


B) Changes in Vibandha (BT & AT) in both Groups

Table No. 3: Shows Changes in Vibandha in both Groups

Grade	No of patients				% of patients			
	Group A		Group B		Group A		Group B	
	BT	AT	BT	AT	BT	AT	BT	AT
Grade 4	0	0	0	0	0	0	0	0
Grade 3	0	0	0	0	0	0	0	0
Grade 2	12	0	11	0	40	0	36.67	0
Grade 1	18	17	19	21	60	56.67	63.33	70
Grade 0	0	13	0	9	0	43.33	0	30
Total	30	30	30	30	100	100	100	100

Graph 3: Shows Changes in Vibandha in both Groups



It was observed that Vibandha has decreased more in Group A than in Group B. In Group A Difference between BT symptoms score (42) and AT symptoms score (17) observed was 25. In Group B – Difference between BT symptoms score (41) and AT symptoms score (21) observed was 20.

B1 Grade Difference wise changes in Vibandha:

The Effect of Kampillak tail and Nifedipine Lignocaine ointment was observed on Vibandha of Parikartika by using gradation method.

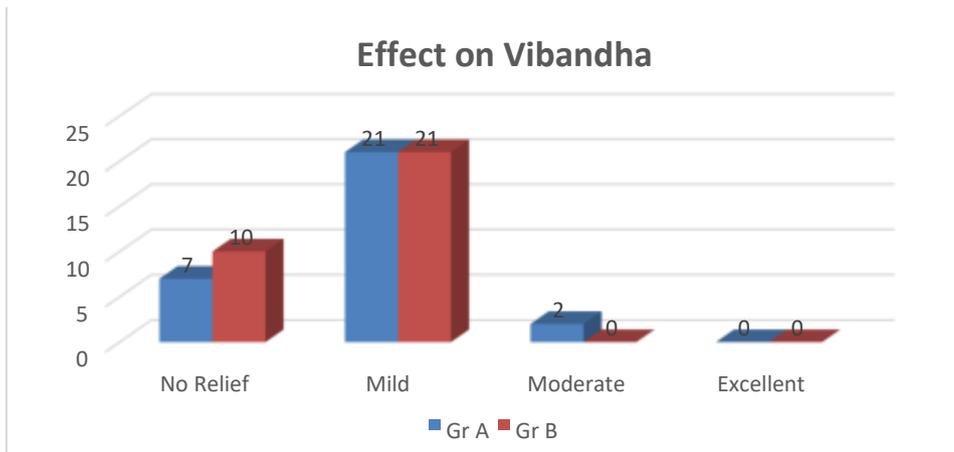
Table No. 4

Grade. Diff	Trial Group A		Control Group B	
	No. of Patients	Effect in %	No. of Patients	Effect in %
0	7	23.33	10	33.33
1	21	70	21	66.67
2	2	6.67	0	0
3	0	0	0	0
Total	30	100	30	100

Trial group: Effect of Kampillak taila on Vibandha - 2 patients got Moderate relief, 21 patients got mild relief while 7 patients have no relief.

Control group: Effect of Nifedipine Lignocaine ointment on Vibandha - 21 patients got Mild relief and 10 patients have no relief.

Graph 4: Graphical presentation of Effect on Vibandha

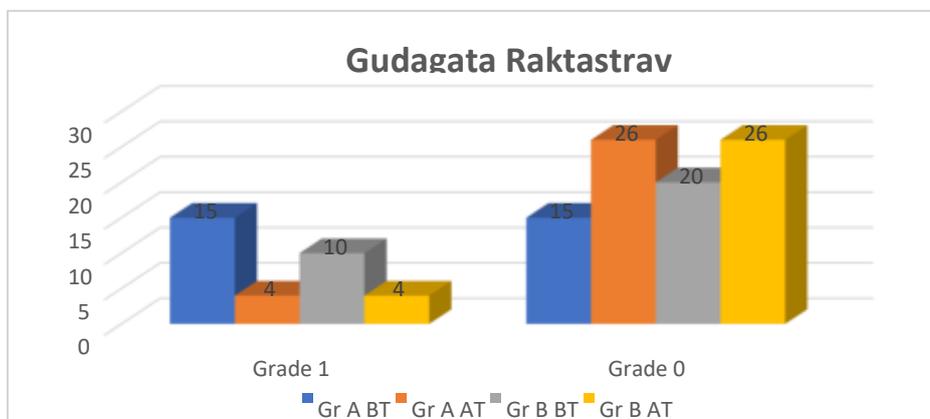


C) Gudagata Raktastrav (BT & AT) in both Groups

Table No. 5: Gudagata Raktastrav in both Groups

Grade	No of patients				% of patients			
	Group A		Group B		Group A		Group B	
	BT	AT	BT	AT	BT	AT	BT	AT
Grade 1	15	4	10	4	50	13.33	33.33	13.33
Grade 0	15	26	20	26	50	86.67	66.67	86.67
Total	30	30	30	30	100	100	100	100

Graph 5: Shows Changes in Gudagata Raktastrav in both groups



It was observed that Gudagata Raktastrav has decreased more in Group A than in Group B. In Group A Difference between BT symptoms score (15) and AT symptoms score (4) observed was 11. In Group B – Difference between BT symptoms score (10) and AT symptoms score (4) observed was 6.

C1 Grade difference wise changes in Raktastrav

The Effect of Kampillak tail and Nifedipine Lignocaine ointment was observed on Raktastrav of Parikartika by using gradation method.

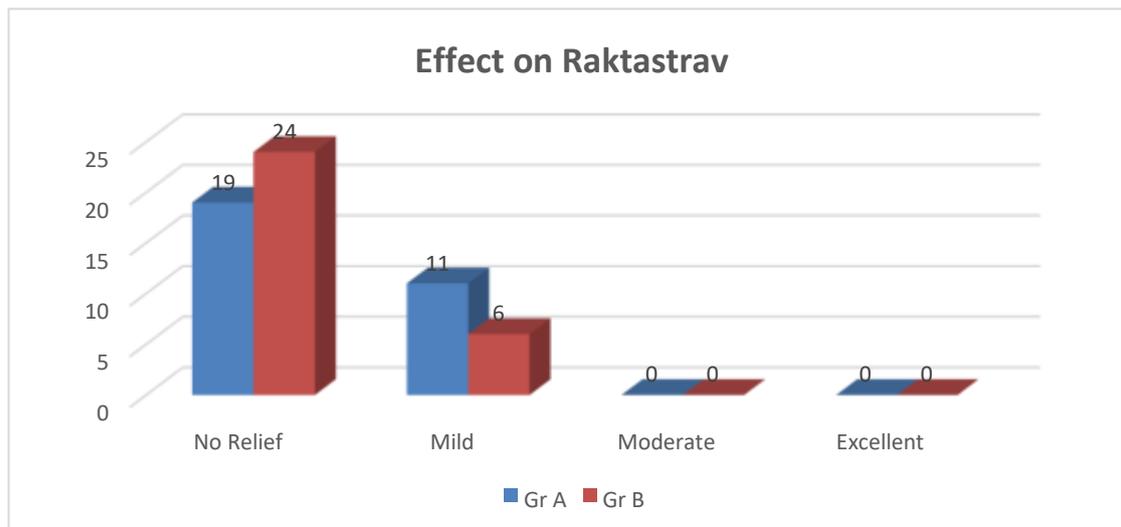
Table No. 6

Grade. Diff	Trial Group A		Control Group B	
	No. Patients	Effect in %	No. Patients	Effect in %
0	19	63.33	24	80
1	11	36.67	6	20
2	0	0	0	0
3	0	0	0	0
Total	30	100	30	100

Trial group: Effect of Kampillak taila on Raktastrav - 11 patients got Mild relief and 19 patients have no relief.

Control group: Effect of Nifedipine Lignocaine ointment on Raktastrav - 6 patients got Mild relief and 24 patients have no relief.

Graph 6: Graphical presentation of Effect on Raktastrav

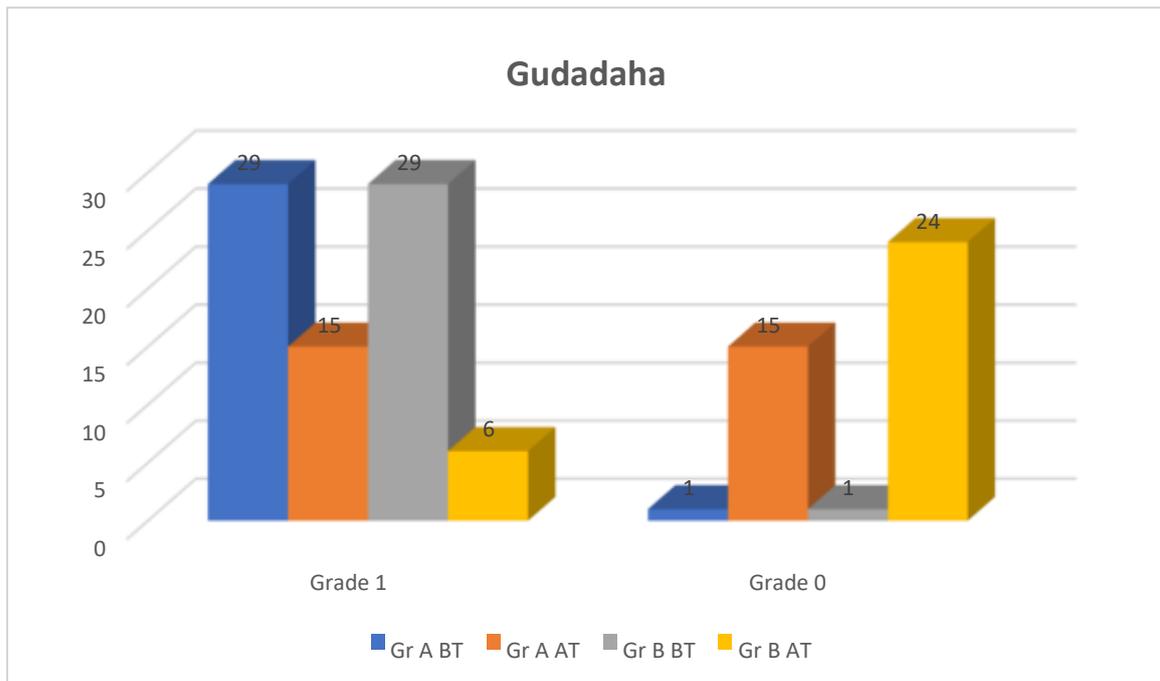


D) Gudadaha (BT & AT) in both Groups

Table No.7: shows changes in Gudadaha in both Groups

Grade	No of patients				% of patients			
	Group A		Group B		Group A		Group B	
	BT	AT	BT	AT	BT	AT	BT	AT
Grade 1	29	15	29	6	96.67	50	96.67	20
Grade 0	1	15	1	24	3.33	50	3.33	80
Total	30	30	30	30	100	100	100	100

Graph 7: Shows Changes in Gudadaha in both Groups



It was observed that Gudadaha has decreased more in Group B than in Group A. In Group A Difference between BT symptoms score (29) and AT symptoms score (15) observed was 14. In Group B – Difference between BT symptoms score (29) and AT symptoms score (6) observed was 23.

D1 Grade difference wise changes in Gudadaha

The Effect of Kampillak tail and Nifedipine Lignocaine ointment was observed on Gudadaha of Parikartika by using gradation method.

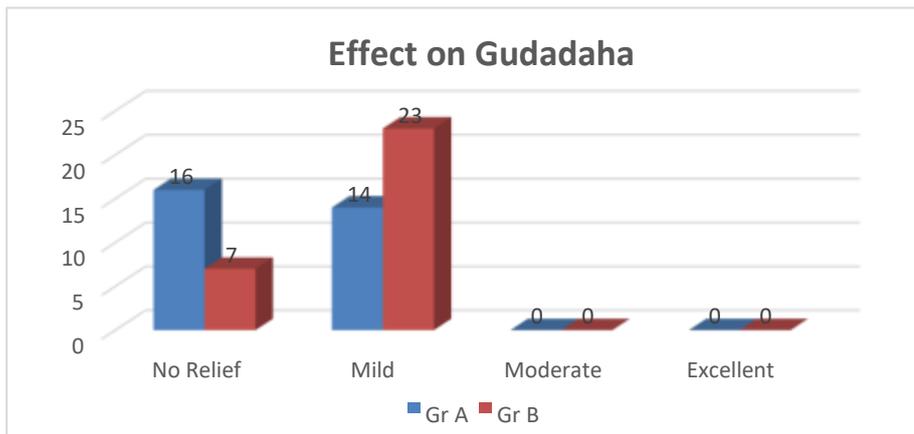
Table No. 8

Grade. Diff	Trial Group A		Control Group B	
	No. Patients	Effect in %	No. Patients	Effect in %
0	16	53.33	7	23.33
1	14	46.67	23	76.67
2	0	0	0	0
3	0	0	0	0
Total	30	100	30	100

Trial group: Effect of Kampillak taila on Gudadaha - 14 patients got Mild relief and 16 patients have no relief.

Control group: Effect of Nifedipine Lignocaine ointment on Gudadaha - 23 patients got Mild relief and 7 patients have no relief.

Graph 8- Graphical presentation of Effect on Gudadaha

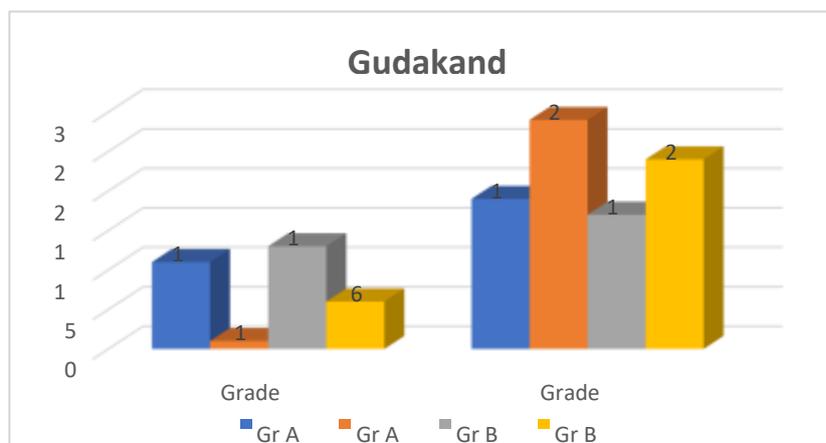


E) Guda Kandu (BT & AT) in both Groups

Table No. 9: shows changes in Guda Kandu in both Groups

Grade	No of patients				% of patients			
	Group A		Group B		Group A		Group B	
	BT	AT	BT	AT	BT	AT	BT	AT
Grade 1	11	1	13	6	36.67	3.33	43.33	20
Grade 0	19	29	17	24	63.33	96.67	56.67	80
Total	30	30	30	30	100	100	100	100

Graph 9: Shows Changes in Guda Kandu in both Groups



It was observed that Gudakandu has decreased more in Group A than in Group B. In Group A Difference between BT symptoms score (11) and AT symptoms score (1) observed was 10. In Group B – Difference between BT (13) and AT symptoms score (6) observed was 7.

E1 Grade difference wise changes in Gudakandu. The Effect of Kampillak tail observed on Gudakandu of Parikartika by using gradation method

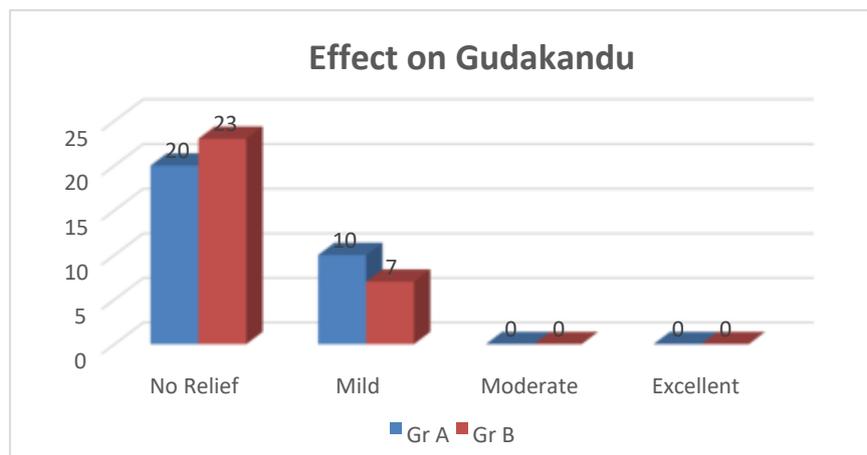
Table No. 10

Grade. Diff	Trial Group A		Control Group B	
	No. of Patients	Effect in %	No. of Patients	Effect in %
0	20	66.67	23	76.67
1	10	33.33	7	23.33
2	0	0	0	0
3	0	0	0	0
Total	30	100	30	100

Trial group: Effect of Kampillak taila on Gudakandu – 10 patients got Mild relief and 20 patients have no relief.

Control group: Effect of Nifedipine Lignocaine ointment on Gudakandu - 7 patients got Mild relief and 23 patients have no relief.

Graph 10: Graphical presentation of effect on Gudakandu

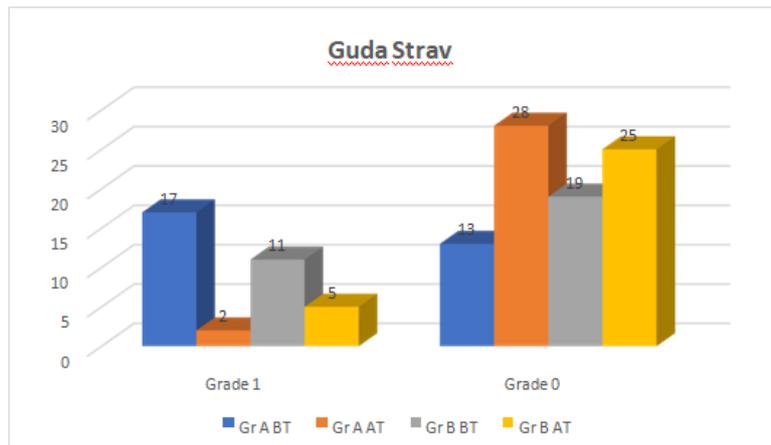


F) Changes in Guda Strav (BT & AT) in both Groups

Table No.11: Shows Changes in Guda Strav in both Groups

Grade	No of patients				% of patients			
	Group A		Group B		Group A		Group B	
	BT	AT	BT	AT	BT	AT	BT	AT
Grade 1	17	2	11	5	56.67	6.67	36.67	16.67
Grade 0	13	28	19	25	43.33	93.33	63.33	83.33
Total	30	30	30	30	100	100	100	100

Graph 11: Shows Changes in Guda Strav in both Groups



It was observed that Gudastrav has decreased more in Group A than in Group B. In Group A Difference between BT symptoms score (17) and AT symptoms score (2) observed was 15. In Group B – Difference between BT (11) and AT symptoms score (5) observed was 6.

F1 Grade difference wise changes in Gudastrav. The Effect of Kampillak tail observed on Gudastrav of Parikartika by using gradation method

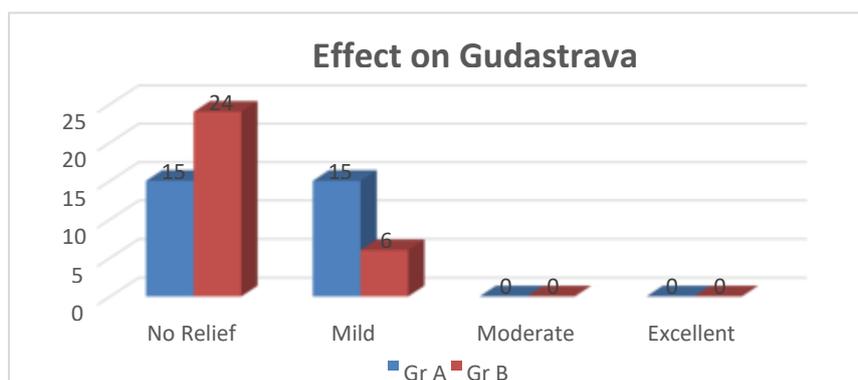
Table No. 12

Grade. Diff	Trial Group A		Control Group B	
	No. of Patients	Effect in %	No. of Patients	Effect in %
0	15	50	24	80
1	15	50	6	20
2	0	0	0	0
3	0	0	0	0
Total	30	100	30	100

Trial group: Effect of Kampillak taila on Gudastrav – 15 patients got Mild relief and 15 patients have no relief.

Control group: Effect of Nifedipine Lignocaine ointment on Gudastrav - 6 patients got Mild relief and 24 patients have no relief.

Graph 12: Graphical presentation of Effect on Gudastrava

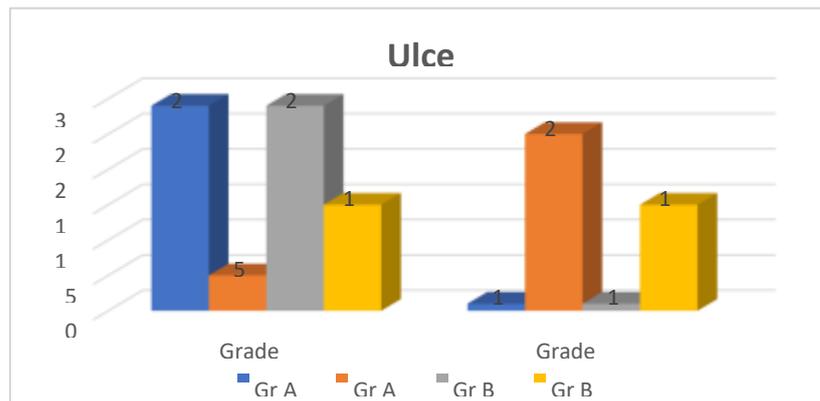


G) Changes in Ulcer (BT & AT) in both Groups

Table No.13: Shows Changes in Ulcer in both Groups

Grade	No of patients				% of patients			
	Group A		Group B		Group A		Group B	
	BT	AT	BT	AT	BT	AT	BT	AT
Grade 1	29	5	29	15	96.67	16.67	96.67	50
Grade 0	1	25	1	15	3.33	83.33	3.33	50
Total	30	30	30	30	100	100	100	100

Graph 13: Shows Changes in Ulcer in both Groups



It was observed that Ulcer has decreased more in Group A than in Group B. In Group A Difference between BT symptoms score (29) and AT symptoms score (5) observed was 24. In Group B – Difference between BT (29) and AT symptoms score (15) observed was 14.

G1 Grade difference wise changes in ULCER: The Effect of Kampillak tail observed on Ulcer of Parikartika by using gradation method.

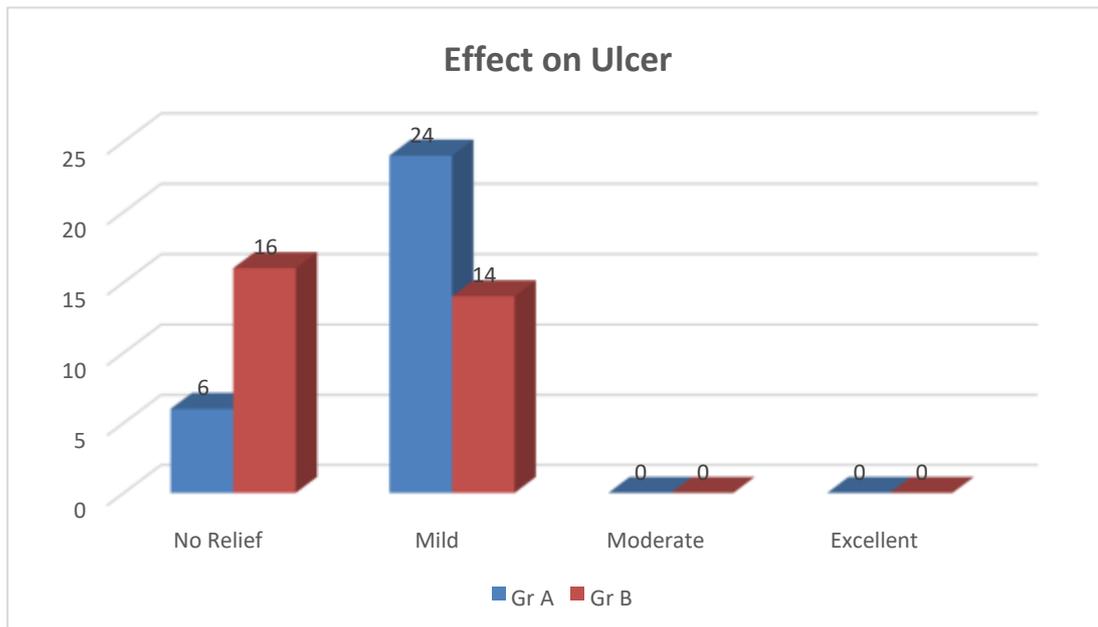
Table No. 14

Grade. Diff	Trial Group A		Control Group B	
	No. of Patients	Effect in %	No. of Patients	Effect in %
0	6	20	16	53.33
1	24	80	14	46.67
2	0	0	0	0
3	0	0	0	0
Total	30	100	30	100

Trial group: Effect of Kampillak taila on Ulcer – 24 patients got Mild relief and 6 patients have no relief.

Control group: Effect of Nifedipine Lignocaine ointment on Ulcer - 14 patients got Mild relief and 16 patients have no relief.

Graph 15: Graphical presentation of Effect on Ulcer



Statistical Analysis: In Group A and In Group B

Subjective Parameters (By Wilcoxon Signed Ranks Test) A) Gudagat Vedana

Table No. 15: Wilcoxon Signed Ranks Test: in Group A and in Group B

Group	BT/AT	N	Mean	Median	W	P
Group A	BT	30	2.033	2	435	< 0.0001
	AT	30	0.833	1		
Group B	BT	30	2	2	465	< 0.0001
	AT	30	0.367	0		

Group A

As value of p is less than 0.05, significant difference was observed between mean of BT and AT score in Gudagat Vedana symptom.

Hence it is concluded that Kampillak Taila is significantly effective to reduce Gudagat Vedana in Parikartika (Fissure in Ano).

Group B

As value of p is less than 0.05, significant difference was observed between mean of BT and AT score in Gudagat Vedana symptom. Hence it is concluded that Nifedipine+Lignocaine ointment is significantly effective to reduce Gudagat Vedana in Parikartika (Fissure in Ano).

B) Vibandha

Table No.16: Wilcoxon Signed Ranks Test: in Group A and in Group B

Group	BT/AT	N	Mean	Median	W	P
Group A	BT	30	1.4	1	276	<0.0001
	AT	30	0.567	1		
Group B	BT	30	1.367	1	210	<0.0001
	AT	30	0.7	1		

Group A

As value of p is less than 0.05, significant difference was observed between mean of BT and AT score in Vibandha symptom. Hence it is concluded that Kampillak Taila is significantly effective to reduce Vibandha in Parikartika (Fissure in Ano).

Group B

As value of p is less than 0.05, significant difference was observed between mean of BT and AT score in Vibandha symptom. Hence it is concluded that Nifedipine+Lignocaine ointment is significantly effective to reduce Vibandha in Parikartika (Fissure in Ano).

C) Gudagata Raktastrav

Table No. 17: Wilcoxon Signed Ranks Test: in Group A and in Group B

Group	BT/AT	N	Mean	Median	W	P
Group A	BT	30	0.5	0.5	66	0.001
	AT	30	0.133	0		
Group B	BT	30	0.333	0	21	0.0313
	AT	30	0.133	0		

Group A

As value of p is less than 0.05, significant difference was observed between mean of BT and AT score in Gudagata Raktastrav symptom. Hence it is concluded that Kampillak Taila is significantly effective to reduce Gudagata Raktastrav in Parikartika (Fissure in Ano).

Group B

As value of p is less than 0.05, significant difference was observed between mean of BT and AT score in Gudagata Raktastrav symptom.

Hence it is concluded that Nifedipine + Lignocaine ointment is significantly effective to reduce Gudagata Raktastrav in Parikartika (Fissure in Ano).

D) Gudadaha

Table No. 18: Wilcoxon Signed Ranks Test: in Group A and in Group B

Group	BT/AT	N	Mean	Median	W	P
Group A	BT	30	0.967	1	105	0.0001
	AT	30	0.5	0.5		
Group B	BT	30	0.967	1	276	< 0.0001
	AT	30	0.2	0		

Group A

As value of p is less than 0.05, significant difference was observed between mean of BT and AT score in Gudadaha symptom. Hence it is concluded that Kampillak Taila is significantly effective to reduce Gudadaha in Parikartika (Fissure in Ano).

Group B

As value of p is less than 0.05, significant difference was observed between mean of BT and AT score in Gudadaha symptom. Hence it is concluded that Nifedipine + Lignocaine ointment is significantly effective to reduce Gudadaha in Parikartika (Fissure in Ano).

E) Guda Kandu

Table No. 19: Wilcoxon Signed Ranks Test: in Group A and in Group B

Group	BT/AT	N	Mean	Median	W	P
Group A	BT	30	0.367	0	55	0.002
	AT	30	0.033	0		
Group B	BT	30	0.433	0	28	0.0156
	AT	30	0.2	0		

Group A

As value of p is less than 0.05, significant difference was observed between mean of BT and AT score in Guda Kandu symptom. Hence it is concluded that Kampillak Taila is significantly effective to reduce Guda Kandu in Parikartika (Fissure in Ano).

Group B

As value of p is less than 0.05, significant difference was observed between mean of BT and AT score in Guda Kandu symptom. Hence it is concluded that Nifedipine+Lignocaine ointment is significantly effective to reduce Guda Kandu in Parikartika (Fissure in Ano).

F) Guda Strav

Table No.20 : Wilcoxon Signed Ranks Test: in Group A and in Group B

Group	BT/AT	N	Mean	Median	W	P
Group A	BT	30	0.567	1	120	<0.0001
	AT	30	0.067	0		
Group B	BT	30	0.367	0	21	0.0313
	AT	30	0.167	0		

Group A

As value of p is less than 0.05, significant difference was observed between mean of BT and AT score in Guda Strav symptom. Hence it is concluded that Kampillak Taila is significantly effective to reduce Guda Strav in Parikartika (Fissure in Ano).

Group B

As value of p is less than 0.05, significant difference was observed between mean of BT and AT score in Guda Strav symptom. Hence it is concluded that Nifedipine + Lignocaine ointment is significantly effective to reduce Guda Strav in Parikartika (Fissure in Ano).

G) Ulcer

Table No.21: Wilcoxon Signed Ranks Test: in Group A and in Group B

Group	BT/AT	N	Mean	Median	W	P
Group A	BT	30	0.967	1	300	< 0.0001
	AT	30	0.167	0		
Group B	BT	30	0.967	1	105	0.0001
	AT	30	0.5	0.5		

Group A

As value of p is less than 0.05, significant difference was observed between mean of BT and AT score in Ulcer symptom. Hence it is concluded that Kampillak Taila is significantly effective to reduce Ulcer in Parikartika (Fissure in Ano).

Group B

As value of p is less than 0.05, significant difference was observed between mean of BT and AT score in Ulcer symptom. Hence it is concluded that Nifedipine + Lignocaine ointment is significantly effective to reduce Ulcer in Parikartika (Fissure in Ano).

STATISTICAL ANALYSIS: COMPARISON GROUP A AND GROUP B:

Subjective Parameters (By Mann Whitney’s U Test)

A) Gudagat Vedana

Table No.22: Mann Whitney’s Test: Comparison Group A and Group B

Group	N	Mean difference of	Mean Rank	U	P	Result
Group A	30	1.2	24.31	264.5	0.0056	Significant
Group B	30	1.633	36.68			

As value of p is less than 0.05, significant difference was observed between the mean of difference of Group A and Group B in Gudagat Vedana symptom. Mean difference of Group B is more than that of Group A. Hence it is concluded that Nifedipine+Lignocaine ointment is significantly effective than Kampillak Taila to reduce Gudagat Vedana in Parikartika.

B) Vibandha

Table No.23: Mann Whitney’s Test: Comparison Group A and Group B

Group	N	Mean of difference	Mean Rank	U	P	Result
Group A	30	0.833	32.66	385	0.328	Not Significant
Group B	30	0.667	28.33			

As value of p is higher than 0.05, no significant difference was observed between the mean of difference of Group A and Group B in Vibandha symptom. Mean difference of Group A is more than that of Group B. But it is not more than observed by chance. Hence it is concluded that Kampillak Taila and Nifedipine + Lignocaine ointment both are equally effective to reduce Vibandha in Parikartika (Fissure in Ano).

C) Gudagata Raktastrav

Table No 24: Mann Whitney’s Test: Comparison Group A and Group B

Group	N	Mean of difference	Mean Rank	U	P	Result
Group A	30	0.367	33	375	0.257	Not Significant
Group B	30	0.2	28			

As value of p is higher than 0.05, no significant difference was observed between the mean of difference of Group A and Group B in Gudagata Raktastrav symptom. Mean difference of Group A is more than that of Group B, but it is not

more than observed by chance. Hence it is concluded that Kampillak Taila and Nifedipine + Lignocaine ointment both are equally effective to reduce Gudagata Raktastrav in Parikartika (Fissure in Ano).

D) Gudadaha

Table No.25: Mann Whitney’s Test: Comparison Group A and Group B

Group	N	Mean of difference	Mean Rank	U	P	Result
Group A	30	0.467	26	315	0.0422	Significant
Group B	30	0.766	35			

As value of p is less than 0.05, significant difference was observed between the mean of difference of Group A and Group B in Gudadaha symptom. Mean difference of Group B is more than that of Group A. Hence it is concluded that Nifedipine + Lignocaine ointment is significantly effective than Kampillak Taila to reduce Gudadaha in Parikartika (Fissure in Ano).

E) Guda Kandu

Table No.26: Mann Whitney’s Test: Comparison Group A and Group B

Group	N	Mean of difference	Mean Rank	U	P	Result
Group A	30	0.333	32	405	0.498	Not Significant
Group B	30	0.233	29			

As value of p is higher than 0.05, no significant difference was observed between the mean of difference of Group A and Group B in Guda Kandu symptom. Mean difference of Group A is more than that of Group B, but it is not more than observed by chance. Hence it is concluded that Kampillak Taila and Nifedipine + Lignocaine ointment both are equally effective to reduce Guda Kandu in Parikartika (Fissure in Ano).

F) Guda Strav

Table No. 27: Mann Whitney’s Test: Comparison Group A and Group B

Group	N	Mean difference of	Mean Rank	U	P	Result
Group A	30	0.5	35	315	0.041	Significant
Group B	30	0.2	26			

As value of p is less than 0.05, significant difference was observed between the mean of difference of Group A and Group B in Guda strav symptom. Mean difference of Group A is more than that of Group B. Hence it is concluded that

Kampillak Taila is significantly effective than Nifedipine + Lignocaine ointment to reduce Guda strav in Parikartika (Fissure in Ano).

G) Ulcer

Table No. 28: Mann Whitney’s Test: Comparison Group A and Group B

Group	N	Mean of difference	Mean Rank	U	P	Result
Group A	30	0.8	35.5	300	0.0246	Significant
Group B	30	0.467	25.5			

As value of p is less than 0.05, significant difference was observed between the mean of difference of Group A and Group B in Ulcer symptom. Mean difference of Group A is more than that of Group B.

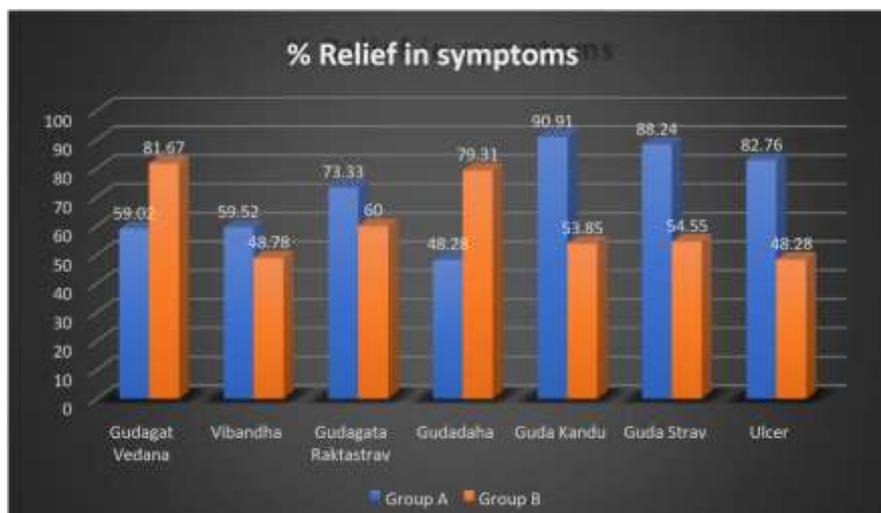
Hence it is concluded that Kampillak Taila is significantly effective than Nifedipine + Lignocaine ointment to reduce Ulcer in Parikartika (Fissure in Ano).

According to % Relief in Symptoms

TABLE NO.29: % RELIEF IN SYMPTOMS OF BOTH GROUPS

Sr. No.	Symptoms	% Relief	
		Group A	Group B
1	Gudagat Vedana	59.02	81.67
2	Vibandha	59.52	48.78
3	Gudagata Raktastrav	73.33	60
4	Gudadaha	48.28	79.31
5	Guda Kandu	90.91	53.85
6	Guda Strav	88.24	54.55
7	Ulcer	82.76	48.28
	Average % Relief	71.72	60.92

Graph 16: % Relief in Symptoms of both groups



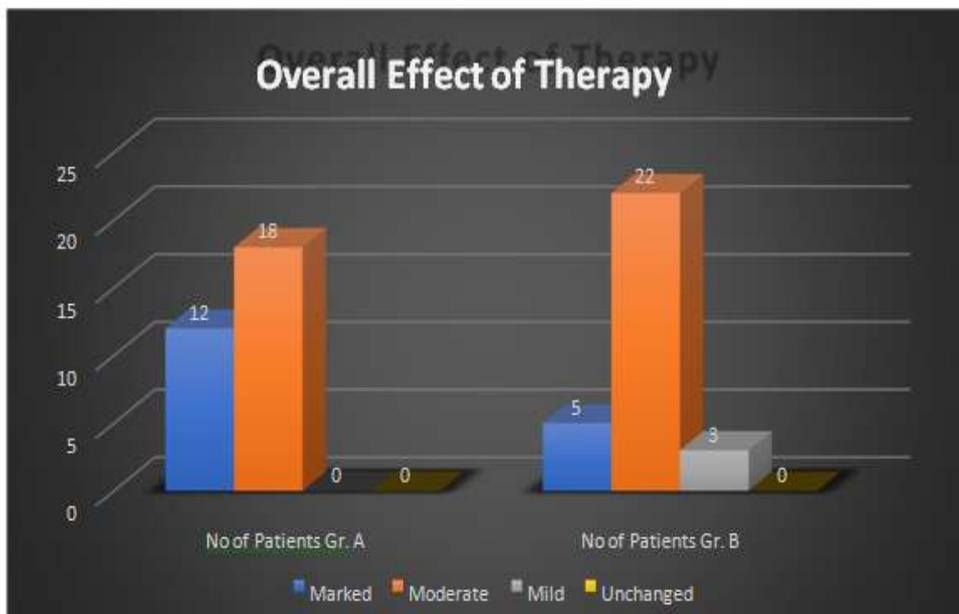
OVERALL EFFECT OF THERAPY

According % Relief

Table No.30: Overall Effect of Therapy according % Relief

Sr. No.	Criteria	Improvement Grade	No. of patients	
			Gr. A	Gr. B
1	75% to 100%	Marked	12	5
2	50% to 75%	Moderate	18	22
3	25% to 50%	Mild	0	3
4	00% to 25%	Unchanged	0	0

Graph 17: Overall Effect of Therapy according % Relief



DISCUSSION

While evaluating the overall effect of therapy in both the groups by both the drugs, it was observed that in Trial Group A out of 30 patients, 12 patients have got marked results, 18 patients have got moderate results and none were those who got mild effect as well Nobody was there who was unchanged.

Whereas, in Control Group B out of 30 patients 5 patients have got marked results, 22 patients have got moderate results and 3 patients have got mild effect and Nobody was there who was unchanged.

CONCLUSION

This study reveals that Kampillak Tail is equally effective as Nifedipine and lignocaine Ointment in management of Parikartika for said duration but in case of Healing criteria of Vrana or Ulcer of Parikartika and gudagat strav, Kampillak Tail, is found more effective than Nifedipine and lignocaine Ointment.

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