



A Randomized Comparative Clinical Study Of Krishna Tila Taila Pichu And Jatyadi Taila Pichu In Management Of Parikartika With Special Reference To Acute Fissure In Ano

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INTRODUCTION

Ayurveda is the definition that implies the knowledge of life or the knowledge by which life may be prolonged. This is ancient science of life that has survived into modern times by its unique and therapeutic modalities. The health of an individual depends solely on its diet and life style. Our lifestyle is changing, so as nature, which has great reflection on our health and wealth. In the present era, changing lifestyle such as sedentary lifestyle, increased stress, improper dietary habits, various lifestyle disorders are increasing day by day. This leads to agnimandya, which is the main cause of all the diseases, out of which *parikartika* is the commonest one.

The earliest reference of '*Parikartika*' is available from Sushruta Samhitha (1500 B.C). Description about *Parikartika*¹ is also available in all Brihatrayees and laghutrayees. *Parikartika* is referred in Brihatrayees not an independent disease but as a complication of Bastikarma and Virechana (vyapath)². Sushruta specifies that for virechana vyapath it is the guda *parikartika* and for vamana it is kantikshanana. .kashyapa preview of garbhini chikista³ .the In *Parikartika* due to nidana, aggravated vata attains upward movement and obstruction by udanavayu, reaches Guda and obstructs the passage of faeces producing severe pain, burning sensation, bleeding per anum etc. which is very much suggestive of clinical features of Fissure-in-ano as per modern science when it is limited to anal region.

Fissure-in-ano is a commonly encountered anorectal condition in current day to day practice. About 35-45% of a population suffers from proctologic pathologies at least once in their life. Anal fissure

comprises of 15-20 % of ano-rectal disorders and it is characterized by excruciating pain during and after defecation upto to 30 min, bleeding per anum with spasm of anal sphincter⁽⁵⁾. Pain may be such severe that patient may avoid defecation for many days until it becomes inevitable. This leads to hardening of the stools, which further tear the anoderm during defecation.

Acute Fissure-in-Ano is a most painful condition and generally it takes 14-18 days to heal and even with the use of stool softeners and application pichu . yet, some fissures persist for more than 4 weeks and considered as chronic ones which show reluctance to heal.

Fissure-in-ano is a surgical condition. Medical management is said to be conservative and surgical intervention is the ultimate choice in the chronic ulcers.

Medical treatment for acute Fissure-in-ano is supplementation of oral pain killers in the form of NSAID'S, stool softeners, soothing ointment, topical anaesthetics and self dilatation (using anal dilators) on medical advice.

Surgical management includes Lord's anal dilatation, sphincterotomy, fissurectomy, anal advancement flap⁽⁶⁾.

All these treatment procedures of modern system of medicine have drawbacks.

- Prolonged administration of NSAID may suppress the symptom and causes gastric irritation.
- Application of the soothing ointment produces sufficient relaxation of the sphincter, but causes significant delay in the fissure healing and recurrence rate is 50% in this particular method of management.
- Topical anaesthetics and steroids reduce blood flow to the area thus interfere with wound healing. Often these ointments are combined with a small amount of steroids to reduce inflammation. The prolonged use of which result in the thinning of anoderm (atrophy), which makes it more susceptible to trauma and result in wound.
- Botulin toxin injection is very expensive and by using this leads to weakness of sphincter muscles with the varying degrees of incontinence.
- In the surgical treatment complication being haematoma, abscess formation, recurrent ulcer formation and persistent mucosal discharge. Most of the methods of treatment are expensive and requires long stay in hospital. Lord's anal dilatation procedure which is associated with the risk of transient fecal incontinence also.

Though current surgical prevalence has made enormous progress, certain diseases seem to be mock the progress achieved, calling for innovative techniques for their management. One such disease is Fissure-in-Ano with either recurrences or to additional troubles after conventional surgery.

Fissure-in-ano is common in youngsters with change of diet and in women after child birth. During pregnancy, very less medications and purgatives are prescribed and surgeries are usually avoided. This again leads to a pit hole in the management technique of Fissure-in-ano demanding for an applicable therapy even during pregnancy⁶.

So an alarming rise in the incidence of the disease Fissure-in-ano and no known satisfactory remedies are evolved so far. It is important to find out a suitable solution, with better results.

Parikartika affects a large number of populations; hence a quick and easy remedy for this condition is the need of hour. *Parikartika* is treated with internal medications and local applications formulated using madhura, sheeta, snigdha dravyas. Local therapies in the form of Anuvasana basti, Picchabasti, madhura, kashaya dravya siddha basti, taila poorana, lepa, pichu dharana are given prime importance in the management.

For *Parikartika*, Acharyas have described treatments, both local as well as systemic but now here given a description of surgical management. It seems in this regard that they didn't consider it to be a disease complication of any significance which required surgical intervention.

To overcome all these problems and to prevent surgical intervention, the present study was planned to evolve an effective treatment by Ayurvedic approach. In Ayurvedic management snigdha, madhura, sheeta dravya sevana, application of krishna tila taila pichu^[7] with jatyadi taila pichu^[8] and many other medical lines of treatment has been explained in ayurveda^[9]. Hence in this study an attempt was made to evaluate the efficacy of Krishna tila taila pichu and compare the same with Jatyadi taila pichu which has been proven and established in healing in ano^[10] by previous studies.

SOURCE OF DATA :

- **Literary Source :**

All available classical, modern literatures and contemporary texts including the websites about the disease and procedures were reviewed and documented for the intended Study.

- **Sample Source :**

1. Patients were selected from OPD and IPD of B.L.D.E.A'S A.V.S Ayurveda Mahavidyalaya Hospital & Research Center Vijaypur.
2. Special Medical Camps and other referrals.

- **Drug Source :**

1. Raw drugs were properly identified, selected and purchased from the local market with the help of dept. of Dravya guna.
2. Krishna tila taila and Jatyadi Taila were prepared according to classical method in pharmacy attached to the PG studies Department of Rasashastra and Bhaishajya Kalpana, B.L.D.E.A's .A.V.S.Ayurveda Mahavidyalaya Hospital & Research Center Vijaypur.

- **Method of collection of data: -**

A) **Study Design** – A Randomized Comparative clinical study.

B) **Sample Size** – Minimum 40 clinically diagnosed patients of Parikartika fulfilling the Inclusion criteria were selected for comparative clinical study. They were assigned into two equal groups, A and B for the study where group A is treated with Krishna tila taila pichu and group B is treated with Jatyadi Taila pichu.

C) Diagnostic Criteria: -

Signs & symptoms of Parikartika (Acute Fissure-in-ano) such as:

- Pain in anal region
- Constipation
- Bleeding per anum i.e, stools streaked with blood
- Burning sensation in anal region

D) Inclusion Criteria :-

- Patients having classical features of Fissure-in-ano namely excruciating pain in anal region during and after defecation, bleeding per anum, constipation, burning sensation, presence of sphincter spasm and with a longitudinal ulcer in the anal region were selected.
- Acute solitary fissures were included.
- Patients suffering from parikartika as per Ayurvedic classics were selected.

E) Exclusion Criteria :-

- Patient suffering from any other ano rectal disease
- Patient suffering from multiple fissure in ano
- Patients with chronic fissure in ano, Ca-rectum, Ca-anus, fistula in- ano or haemorrhoids
- Patients with infectious diseases HIV and HBsAg-Positive Patient.
- Patient suffering from systemic disorder such as Diabetes, Tuberculosis, etc

PROCEDURE:

Group A: Per anal insertion of Krishna Tila Taila Pichu

Poorva Karma:

Sitz bath with luke warm water for fifteen minutes.

Pradhan Karma: Patient made to lie in lithotomy position. The perineal area is cleaned with antiseptic solution under aseptic precautions and then Krishna Tila Taila Pichu prepared by sterile gauze of 1 inch x 1 inch size is inserted into the anal region .

Paschat Karma: Patient advised to rest in comfortable position for 30 minutes at hospital

Group B: Per anal insertion of Jatyadi Taila Pichu

Poorva Karma:

Sitz bath with luke warm water for fifteen minutes.

Pradhan Karma:

Patient made to lie in lithotomy position. The perineal area is cleaned with antiseptic solution, under aseptic precautions and then Jatyadi Taila Pichu prepared by sterile gauze of 1 inch x 1 inch size is inserted into the anal region.

Paschat Karma: Patient advised to rest in comfortable position for 30 minutes at hospital.

Patients of both groups were advised for Sitz bath with luke warm water two times a day and 12 grms of triphala choorna orally with luke warm water at bed time.

Interventions adopted in both the Groups

GROUP	DIAGNOSIS	TREATMENT	DURATION
A	Acute Fissure- in -ano	Krishna tila taila pichu	Once daily for 7 days
B	Acute Fissure-in-ano	Jatyadi taila pichu	Once daily for 7 days

Duration of Pichu kept:

Patient of both groups are advised to retain the pichu in situ for two hours.

Duration of Treatment: Seven days

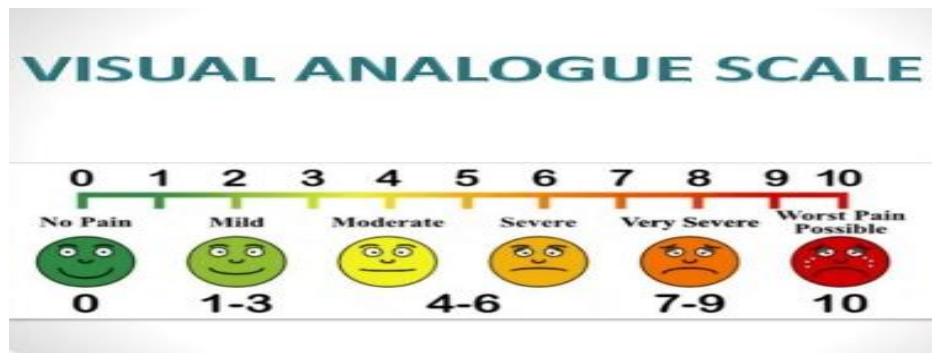
Follow up: weekly once, upto 2 months.

Assessment Criteria: Effect of treatment was assessed on the basis of changes in the parameters before and after treatment in both the groups

Subjective Parameters:-.**1. Pain**

- 0 -No pain,
- 1 - Mild pain [1-3]
- 2 - Moderate pain [4-6]
- 3 - severe pain [7-10]

Pain score done according to VAS scale



2. Bleeding per anum

- 0- No bleeding
- 1- Blood streaks on faecal matter
- 2- Bleeding during defecation
- 3- Bleeding during and after defecation

3. Burning sensation

- 0- no burning sensation
- 1- burning sensation during defecation
- 2- burning sensation present upto 30min after defecation
- 3- burning sensation present more than 30min after defecation

4. Tenderness

- 0- No tenderness
- 1- Mild tenderness
- 2- Moderate tenderness
- 3- Severe tenderness

5. Itching

- 0 - Absent
- 1 - Present

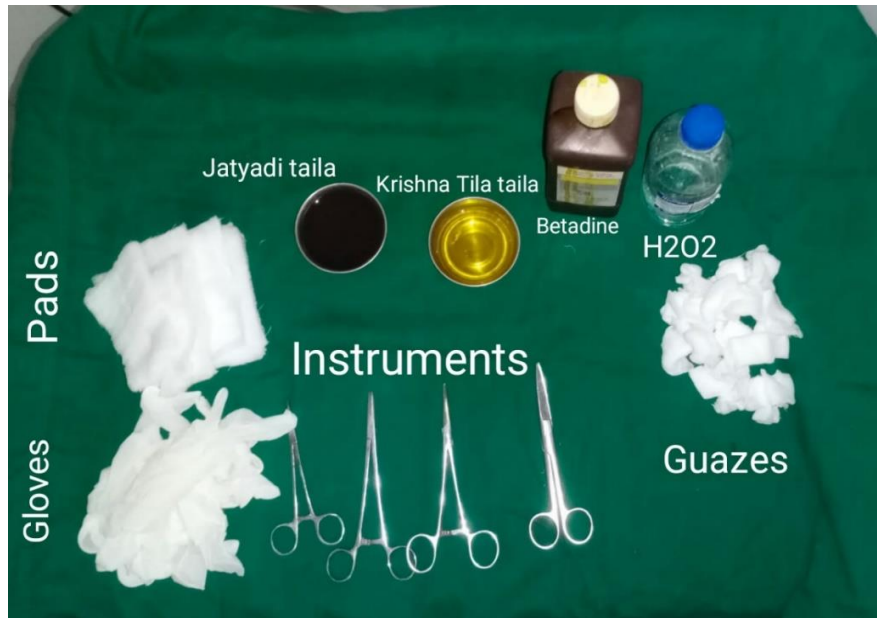
Objective Parameters: -

1. Ulcer:

- 0 - Absent
- 1 - Present

2. Spinster Spasm

- 0 - Normal tonicity
- 1 – Hyper tonicity



Picture showing materials required for picu

RESULTS

In this study total 40 patients of Parikartika were randomly selected and assigned in two groups. 20 Patients were in group A while 20 were in group B. Each patient was observed thoroughly and noted. The observations were recorded and necessary charts and graphs were made.

Table No. 1: Effect of treatments on pain within the groups

Groups	Pain		Mean difference	In %	Friedman Test	P value
	Mean	±SD				
KRISHNA TILA TAILA PICHU						
Day 0	2.85	0.366			40.000	0.0001*
Day 4	1.65	0.489	1.2	42.0%		
Day 8	0.15	0.366	2.7	95%		
JATYADI TAILA PICHU						
Day 0	2.85	0.366			40.000	0.0001*
Day 4	1.75	0.444	1.1	39%		
Day 8	0.40	0.503	2.45	86%		

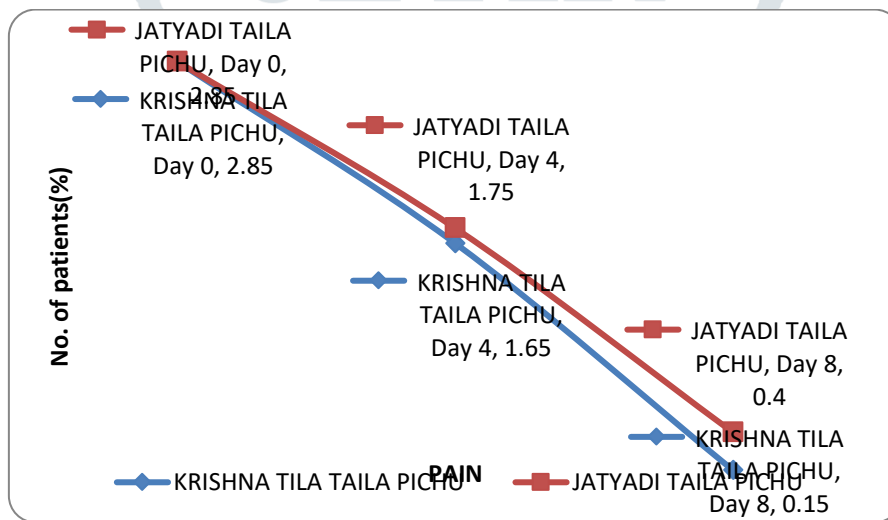
*:Statistically significant

Effect on Pain in Group A

An assessment of Pain in patients of *Parikartika* before and after the treatment in Group-A statistical analysis showed that the mean score at day 0 which was 2.85 before the treatment was reduced to 0.15 after the treatment on day 8 with 95% improvement. Analysis of this data shows statistically highly significant improvement with p value 0.0001. and (F-40.000)

Effect on Pain in Group B

An assessment of Pain in patients of *Parikartika* before and after the treatment in Group-B statistical analysis showed that the mean score at day which was 2.85 before the treatment was reduced to 0.40 after the treatment on day 8 with 86% improvement. Analysis of this data shows statistically highly significant improvement with p value 0.0001 and F-40.000



Effect of treatments on Bleeding per anum within the groups

Groups	Bleeding		Mean difference	In %	Friedman Test	P value
	Mean	±SD				
KRISHNA TILA TAILA PICHU						
Day 0	2.15	0.366			40.000	0.0001*
Day 4	1.10	0.308	1.05	49.0%		
Day 8	0.00	0.000	2.15	100%		

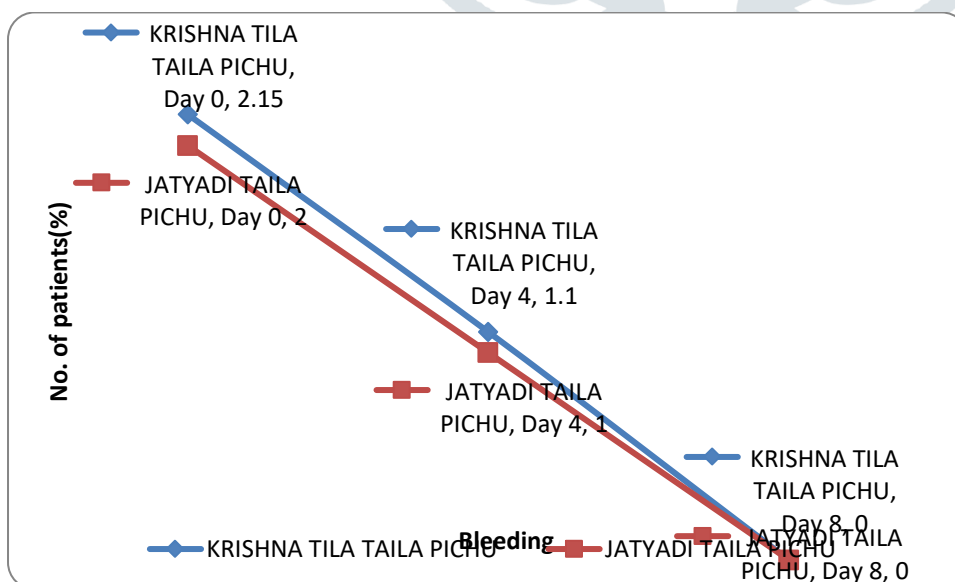
JATYADI TAILA PICHU						
Day 0	2.00	.000			40.000	0.0001*
Day 4	1.00	.000	1.0	50%		
Day 8	0.00	.000	2.00	100%		
*:Statistically significant						

Effect on Bleeding per anum in Group A

An assessment of Bleeding in patients of *Parikartika (Fissure-in-Ano)* before and after the treatment in Group-A was assessed and analyzed statistically. The mean score at day 0 which was 2.15 before treatment reduced to 0.00 after the treatment on day8 with 100% improvement. Analysis of this statistically data shows highly significant improvement with p value 0.0001 and F-40.000.

Effect on Bleeding per anum in Group B

An assessment of Bleeding in patients of *Parikartika (Fissure-in-Ano)* before and after the treatment in Group-B was assessed and analyzed statistically. The mean score on day 0 which was 2.00 before treatment reduced to 0.00 after the treatment with 100% improvement. Analysis of this data shows statistically highly significant improvement with p value 0.0001 and F-40.000.



Effect of treatments on Burning sensation within the groups

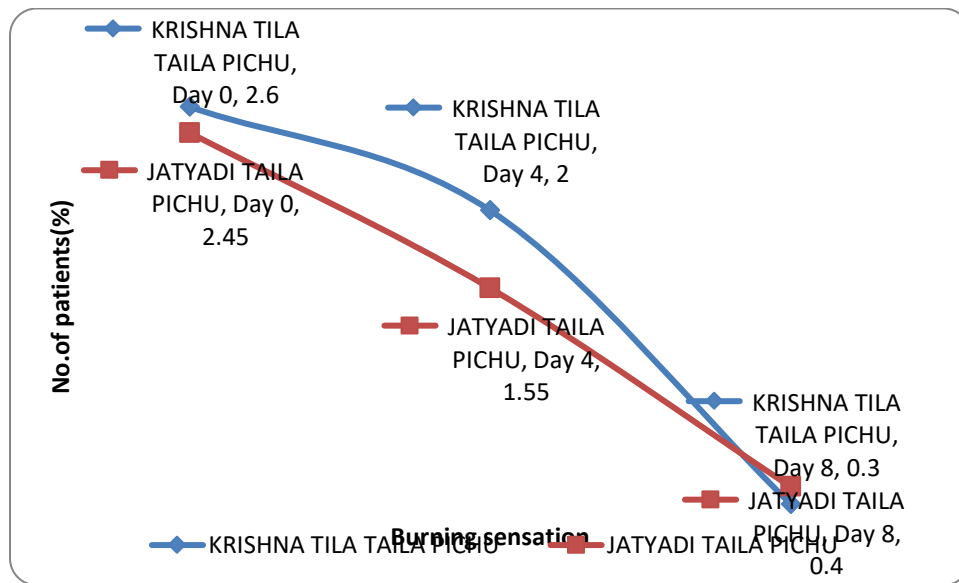
Groups	Burning sensation		Mean difference	In %	Friedman Test	P value
	Mean	±SD				
KRISHNA TILA TAILA PICHU						
Day 0	2.60	0.681			34.462	0.0001*
Day 4	2.00	0.324	0.14	2.0%		
Day 8	0.30	0.470	1.0	86%		
JATYADI TAILA PICHU						
Day 0	2.45	0.605			38.519	0.0001*
Day 4	1.55	0.510	0.9	37%		
Day 8	0.40	0.205	2.05	84%		
*:Statistically significant						

Effect on Burning Sensation in Group A

An assessment of Burning sensation in patients of *Parikartika (Fissure-in-Ano)* before and after the treatment in Group-A was assessed and analyzed statistically. The mean score on day 0 which was 2.60 before treatment reduced to 0.30 after the treatment on day 8 with 84% improvement. Analysis of this data shows statistically highly significant improvement with p value 0.0001 and F-34.462.

Effect on Burning Sensation in Group B

An assessment of Burning sensation in patients of *Parikartika (Fissure-in-Ano)* before and after the treatment in Group-B was assessed and analyzed statistically. The mean score which was 2.45 before treatment reduced to 0.40 after the treatment with 84% improvement. Analysis of this data shows statistically highly significant improvement with p value 0.0001 and F-38.519. Further the particulars are tabled below in Table No.09 and graphically represented in figure:09



Effect of treatments on itching within the groups

Groups	Itching		Mean difference	In %	Friedman Test	P value
	Mean	±SD				
KRISHNA TILA TAILA PICHU						
Day 0	0.90	0.308			34.000	0.0001*
Day 4	0.00	0.000	0.9	100.0%		
Day 8	0.00	0.000	0.9	100.0%		
JATYADI TAILA PICHU						
Day 0	1.00	0.324			37.379	0.0001*
Day 4	0.05	0.224	0.95	95%		
Day 8	0.00	0.000	1.00	100%		
*:Statistically significant						

Effect on Itching in Group A

An assessment of itching in patients of *Parikartika (Fissure-in-Ano)* before and after the treatment in Group-A was assessed and analyzed statistically. The mean score on day 0 which was 0.90 before

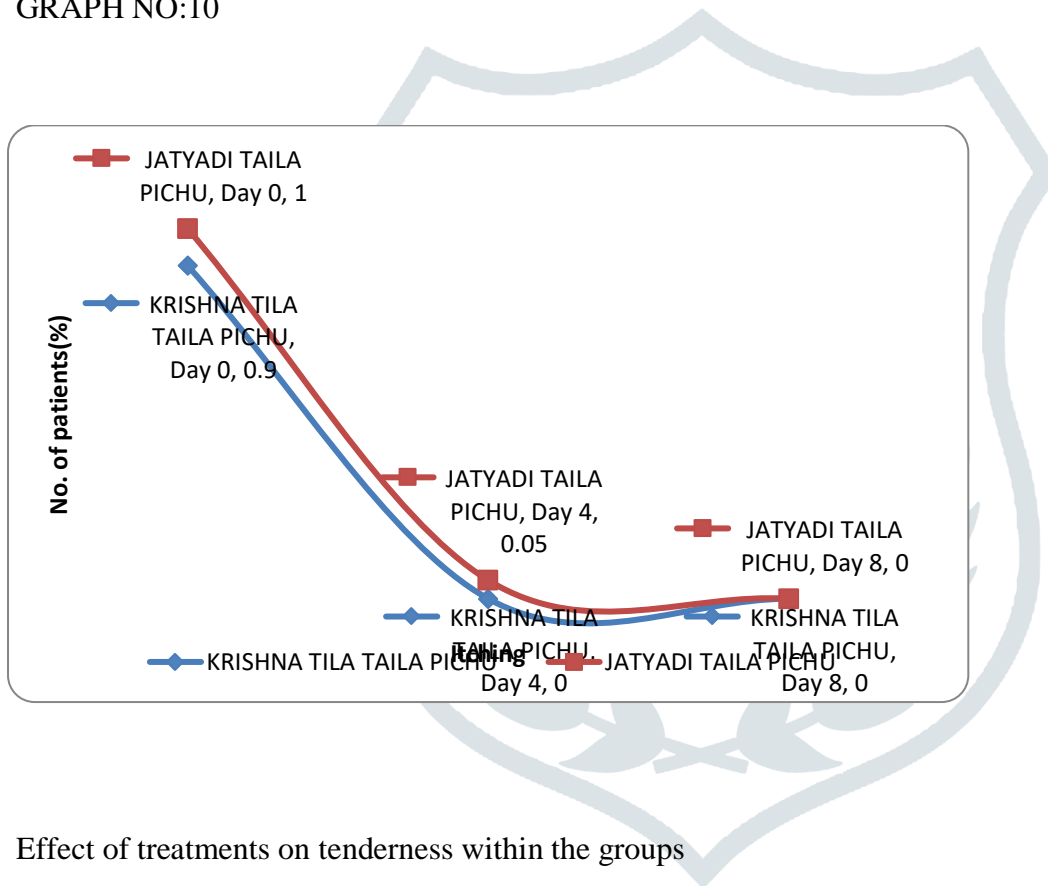
treatment reduced to 0.00 after the treatment on day 8 with 100% improvement. Analysis of this data shows statistically highly significant improvement with p value 0.0001 and F-36.000.

Effect on Itching in Group B

An assessment of itching in patients of *Parikartika (Fissure-in-Ano)* before and after the treatment in Group-B was assessed and analyzed statistically. The mean score which was 1.00 before treatment reduced to 0.00 after the treatment on day 8 with 100% improvement. Analysis of this data shows statistically highly significant improvement with p value 0.0001 and F-37.379.

Further the particulars are tabled below in Table No.10 and graphically represented in figure:10

GRAPH NO:10



Effect of treatments on tenderness within the groups

Groups	Tenderness		Mean difference	In %	Friedman Test	P value
	Mean	±SD				
KRISHNA TILA TAILA PICHU						
Day 0	1.25	0.639			36.000	0.0001*
Day 4	0.25	0.550	0.9	85.0%		
Day 8	0.10	0.308	0.9	95%		

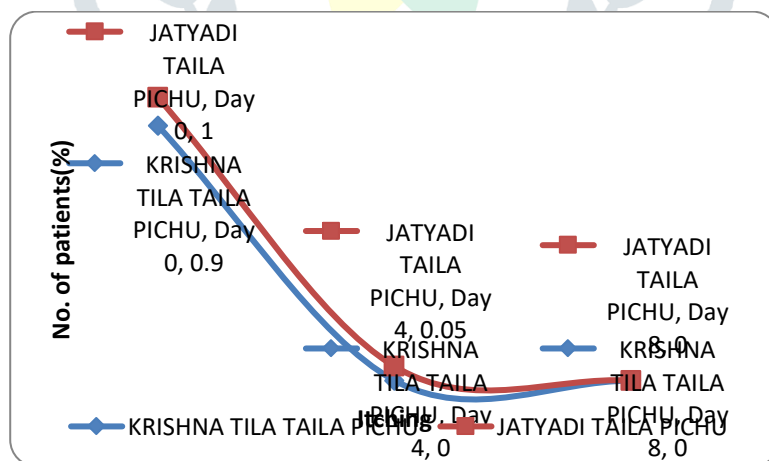
JATYADI TAILA PICHU						
Day 0	2.00	0.324			37.379	0.0001*
Day 4	0.95	0.224	0.07	95%		
Day 8	0.15	0.000	0.05	100%		
*.:Statistically significant						

Effect on tenderness in Group A

An assessment of **tenderness** in patients of *Parikartika (Fissure-in-Ano)* before and after the treatment in Group-A was assessed and analyzed statistically. The mean score on day 0 which was 1.25 before treatment reduced to 0.15 after the treatment on day 8 with 100% improvement. Analysis of this data shows statistically highly significant improvement with p value 0.0001 and F-34.000.

Effect on tenderness in Group B

An assessment of **tenderness** in patients of *Parikartika (Fissure-in-Ano)* before and after the treatment in Group-B was assessed and analyzed statistically. The mean score which was 2.00 before treatment reduced to 0.15 after the treatment on day 8 with 100% improvement. Analysis of this data shows statistically highly significant improvement with p value 0.0001 and F-37.379.



Effect of treatments on ulcer healing within the groups

Groups	Ulcer		Mean difference	In %	Friedman Test	P value
	Mean	±SD				
KRISHNA TILA TAILA PICHU						
Day 0	1.00	0.000			30.100	0.0001*
Day 4	0.55	0.510	0.45	45.0%		
Day 8	0.00	0.000	1.0	100%		
JATYADI TAILA PICHU						
Day 0	0.95	0.224			34.111	0.001*
Day 4	0.10	0.308	0.24	90%		
Day 8	0.05	0.224	0.9	95%		
*:Statistically significant						

Effect on Ulcer healing in Group A

An assessment of ulcer healing in patients of *Parikartika (Fissure-in-Ano)* before and after the treatment in Group-A was assessed and analyzed statistically. The mean score on day 0 which was 1.00 before treatment reduced to 0.00 after the treatment on day 8 with 100% improvement. Analysis of this data shows statistically highly significant improvement with p value 0.0001 and F-30.100.

Effect on Ulcer healing in Group B

An assessment of ulcer healing in patients of *Parikartika (Fissure-in-Ano)* before and after the treatment in Group-B was assessed and analyzed statistically. The mean score which was 1.00 before treatment reduced to 0.00 after the treatment on day 8 with 100% improvement. Analysis of this data shows statistically highly significant improvement with p value 0.0001 and F-34.111.

Further the particulars are tabled below in Table No.12 and graphically represented in figure:12

GRAPH:12

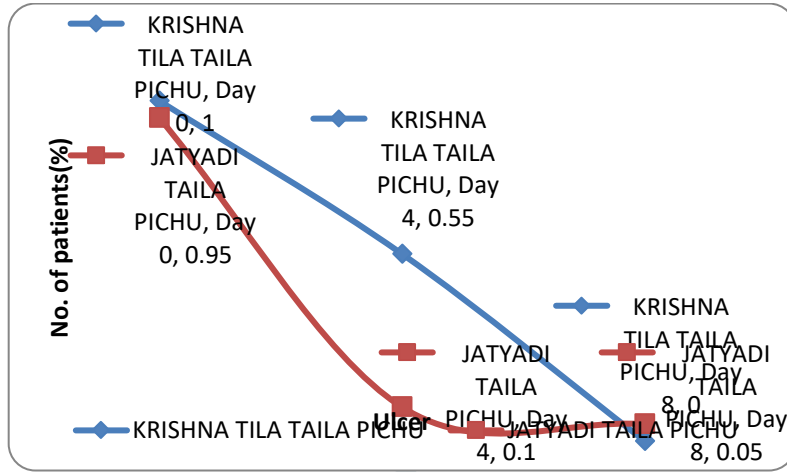


Table: 13

07. SPHINCTER SPASM

Effect of treatments on Spincter spasm within the groups

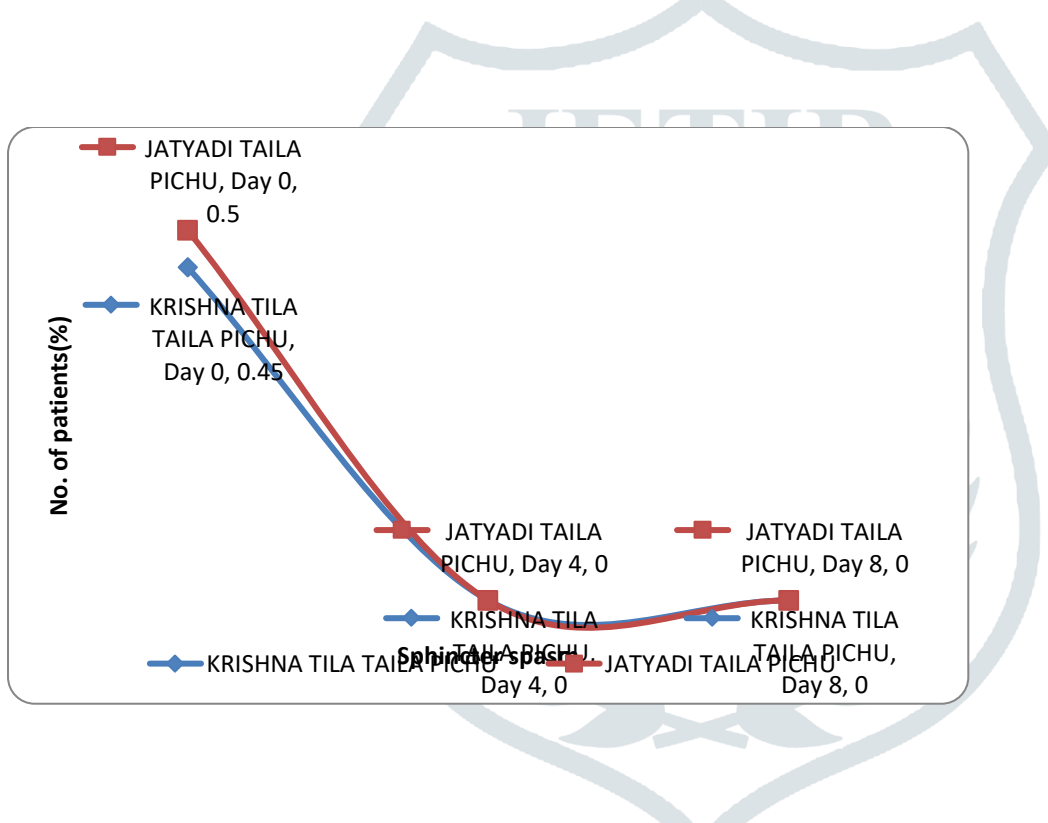
Groups	Spincter spasm		Mean difference	In %	Friedman Test	P value
	Mean	±SD				
KRISHNA TILA TAILA PICHU						
Day 0	0.45	0.510			18.000	0.0001*
Day 4	0.00	0.000	0.45	100.0%		
Day 8	0.00	0.000	0.45	100.0%		
JATYADI TAILA PICHU						
Day 0	0.50	0.513			20.000	0.0001*
Day 4	0.00	0.000	0.50	100%		
Day 8	0.00	0.000	0.50	100%		
*:Statistically significant						

Effect on Spincter spasm in Group A

An assessment of Spincter spasm in patients of *Parikartika (Fissure-in-Ano)* before and after the treatment in Group-A was assessed and analyzed statistically. The mean score on day 0 which was 0.45 before treatment reduced to 0.00 after the treatment on day 8 with 100% improvement. Analysis of this data shows statistically highly significant improvement with p value 0.0001 and F-18.000

Effect on Spincter spasm in Group B

An assessment of spincter spasm in patients of parikartika (fissure-in-ano) before and after the treatment in group-b was assessed and analyzed statistically. the mean score which was 0.50 before treatment reduced to 0.00 after the treatment on day 8 with 100% improvement. analysis of this data shows statistically highly significant improvement with p value 0.0001 and F 20.000.

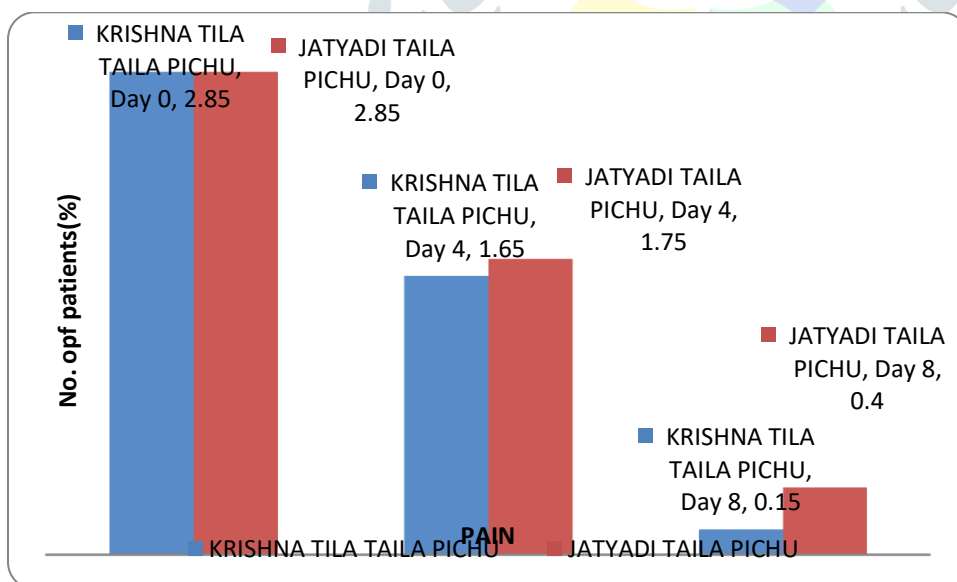


Comparison of pain between krishna tila taila pichu and jatyadi taila pichu

Comparison of PAIN between groups						
PAIN	Mean	±SD	Mean difference	In %	Mann Whitney U test	P value
Day 0						
Krishna taila pichu	2.85	0.366	0	0%	200.000	1.000
Jatyadi taila pichu	2.85	0.366				

Day 4						
Krishna taila pichu	1.65	0.489	0.1	8%	180.000	0.496
Jatyadi taila pichu	1.75	0.444				
Day 8						
Krishna taila pichu	0.15	0.366	0.25	63%	150.000	0.080
Jatyadi taila pichu	0.40	0.503				
Statistically Insignificant						

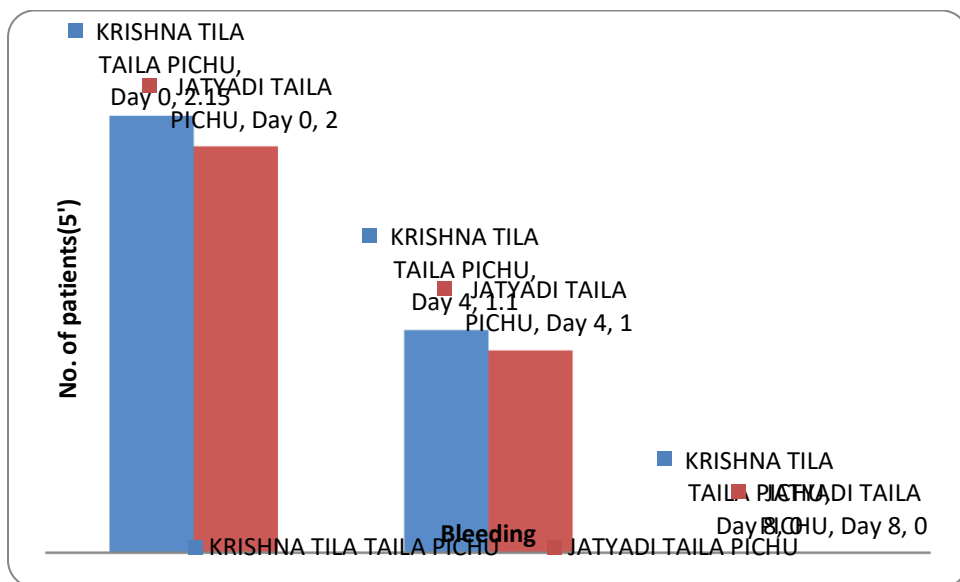
An assessment of Pain in patients in between a Group-A and Group-B before, during and after the treatment was done and statistical analysis showed that the difference between the Groups is statistically insignificant with p value 0.080 and Mann Whitney U test value of 150.



comparison of bleeding between krishna tila taila pichu and jatyadi taila pichu

Comparison of Bleeding between groups						
BLEEDING	Mean	±SD	Mean difference	In %	Mann Whitney U test	P value
Day 0						
Krishna taila pichu	2.15	0.366	0.15	7%	170.000	0.075
Jatyadi taila pichu	2.00	0.000				
Day 4						
Krishna taila pichu	1.10	0.308	0.1	9%	180.000	0.152
Jatyadi taila pichu	1.00	0.000				
Day 8						
Krishna taila pichu	0.00	0.000	0	00%	200.000	1.000
Jatyadi taila pichu	0.00	0.000				
*Statistically Insignificant						

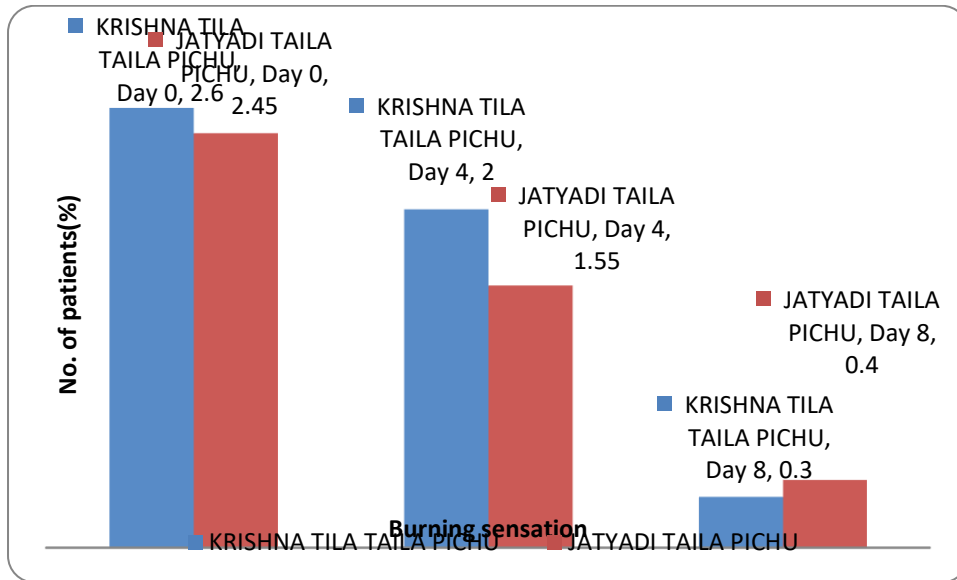
An assessment of Bleeding in patients in between a Group-A and Group-B before, during and after the treatment was done and statistical analysis showed that the difference between the Groups is statistically insignificant with p value 1.000 and Mann Whitney U test value of 200.



Comparison of burning sensation between krishna tila taila pichu and jatyadi taila pichu

Comparison of Burning sensation between groups						
Burning sensation	Mean	±SD	Mean difference	In %	Mann Whitney U test	P value
Day 0						
Krishna taila pichu	2.60	0.681	0.15	6%	167.000	0.303
Jatyadi taila pichu	2.45	0.605				
Day 4						
Krishna taila pichu	2.00	0.324	0.45	23%	114.500	0.003*
Jatyadi taila pichu	1.55	0.510				
Day 8						
Krishna taila pichu	0.30	0.470	0.1	25%	180.000	0.513
Jatyadi taila pichu	0.40	0.503				
*Statistically In significant						

An assessment of Burning sensation in patients in between a Group-A and Group-B before, during and after the treatment was done and statistical analysis showed that the difference between the Groups is statistically insignificant with p value 0.513 and Mann Whitney U test value of 180.

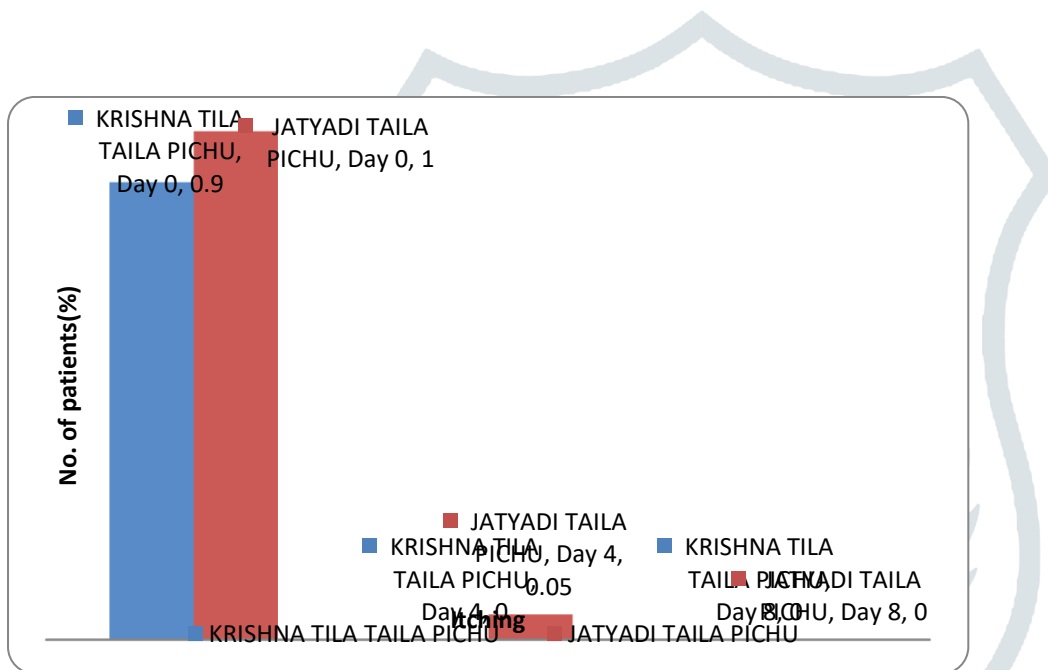


Comparison Of Itching Between Krishna Tila Taila Pichu And Jatyadi Taila Pichu

Comparison of Itching between groups						
Itching	Mean	±SD	Mean difference	In %	Mann Whitney U test	P value
Day 0						
Krishna taila pichu	0.90	0.308	0.1	10%	181.000	0.323
Jatyadi taila pichu	1.00	0.324				
Day 4						
Krishna taila pichu	0.00	0.000	0.05	100%	190.000	0.317
Jatyadi taila pichu	0.05	0.224				
Day 8						

Krishna taila pichu	0.00	0.000	0	0%	200.000	1.000
Jatyadi taila pichu	0.00	0.000				
Statistically Insignificant						

An assessment of Itching in patients of Group-A and Group-B before, during and after the treatment was done and statistical analysis showed that the difference between the Groups is statistically insignificant with p value 1.000 and Mann Whitney U test value of 200.

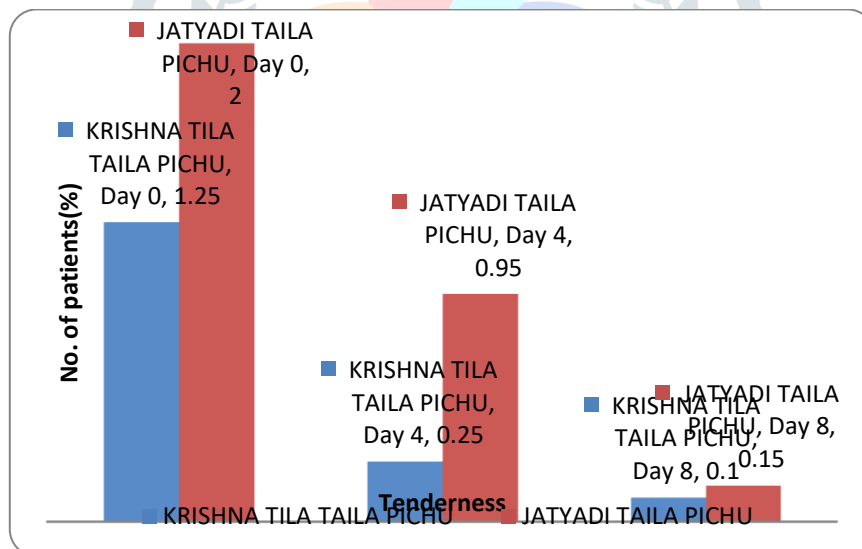


Comparison of tenderness between krishna tila taila pichu and jatyadi taila pichu

Comparison of Tenderness between groups						
Tenderness	Mean	±SD	Mean difference	In %	Mann Whitney U test	P value
Day 0						
Krishna taila pichu	1.25	0.639	0.75	60%	73.000	0.001*
Jatyadi taila pichu	2.00	0.459				

Day 4						
Krishna taila pichu	0.25	0.550	0.7	74%	74.500	0.001*
Jatyadi taila pichu	0.95	0.510				
Day 8						
Krishna taila pichu	0.10	0.308	0.05	33%	190.000	0.637
Jatyadi taila pichu	0.15	0.366				
*Statistically Insignificant						

An assessment of Tenderness in patients of Group-A and Group-B before, during and after the treatment was done and statistical analysis showed that the difference between the Groups is statistically insignificant with p value 0.637 and Mann Whitney U test value of 190.



Comparison of Ulcer between krishna tila taila pichu and jatyadi taila pichu

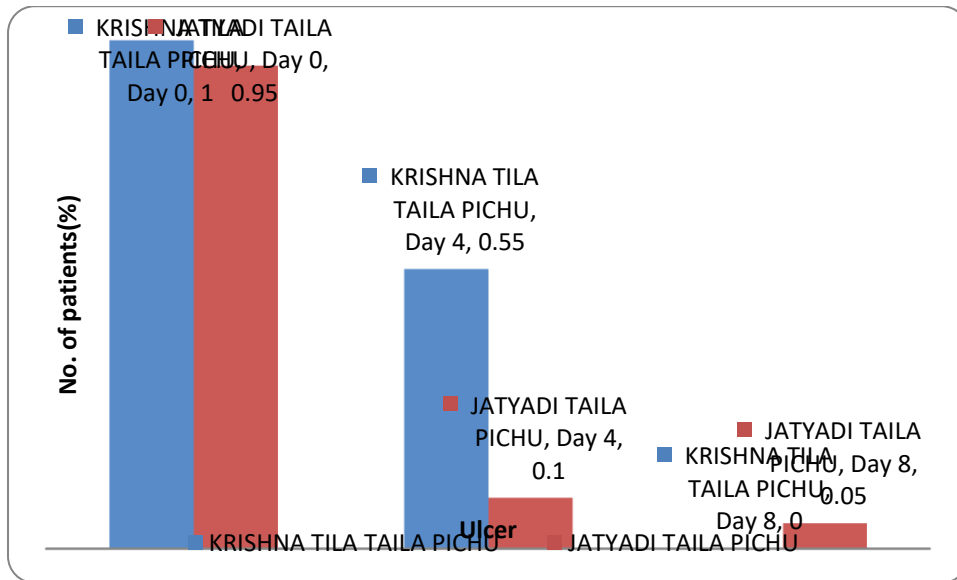
TABLE:19 Comparison of ulcer between krishna tila taila pichu and jatyadi taila pichu

Comparison of Ulcer between groups						
Ulcer	Mean	±SD	Mean difference	In %	Mann Whitney U test	P value
Day 0						
Krishna taila pichu	1.00	0.000	0.05	5%	190.000	0.317
Jatyadi taila pichu	0.95	0.224				
Day 4						
Krishna taila pichu	0.55	0.510	0.45	8%	110.000	0.003*
Jatyadi taila pichu	0.10	0.308				
Day 8						
Krishna taila pichu	0.00	0.000	0.05	100%	190.000	0.317
Jatyadi taila pichu	0.05	0.224				
*Statistically In significant						

An assessment of Ulcer in patients of Group-A and Group-B before, during and after the treatment was done and statistical analysis showed that the difference between the Groups is statistically insignificant with p value 0.317 and Mann Whitney U test value of 190.

The details are shown with statistical data in Table No.19 and graphically represented in graph .19

GRAPH: 19



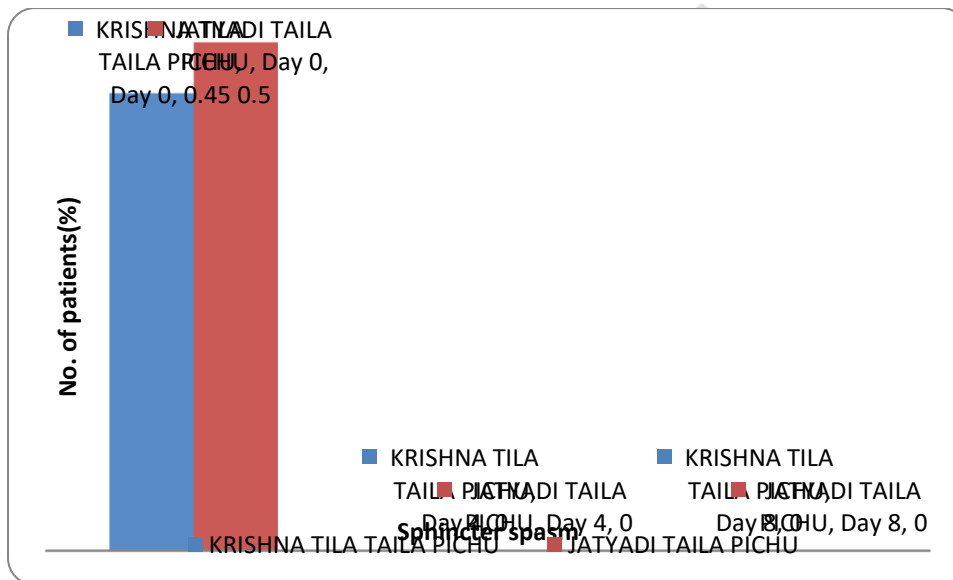
Comparison of sphincter spasm between krishna tila taila pichu and jatyadi taila pichu

Comparison of Sphincter spasm between groups						
Sphincter spasm	Mean	±SD	Mean difference	In %	Mann Whitney U test	P value
Day 0						
Krishna taila pichu	0.45	0.510	0.05	10%	190.000	0.755
Jatyadi taila pichu	0.50	0.513				
Day 4						
Krishna taila pichu	0	0	0	00%	200.000	1.000
Jatyadi taila pichu	0	0				
Day 8						
Krishna taila pichu	0	0	0	0%	200.000	1.000

Jatyadi taila pichu	0	0			
*Statistically Insignificant					

An assessment of Sphincter spasm in patients of Group-A and Group-B before, during and after the treatment was done and statistical analysis showed that the difference between the Groups is statistically insignificant with p value 1.000 and Mann Whitney U test value of 200.

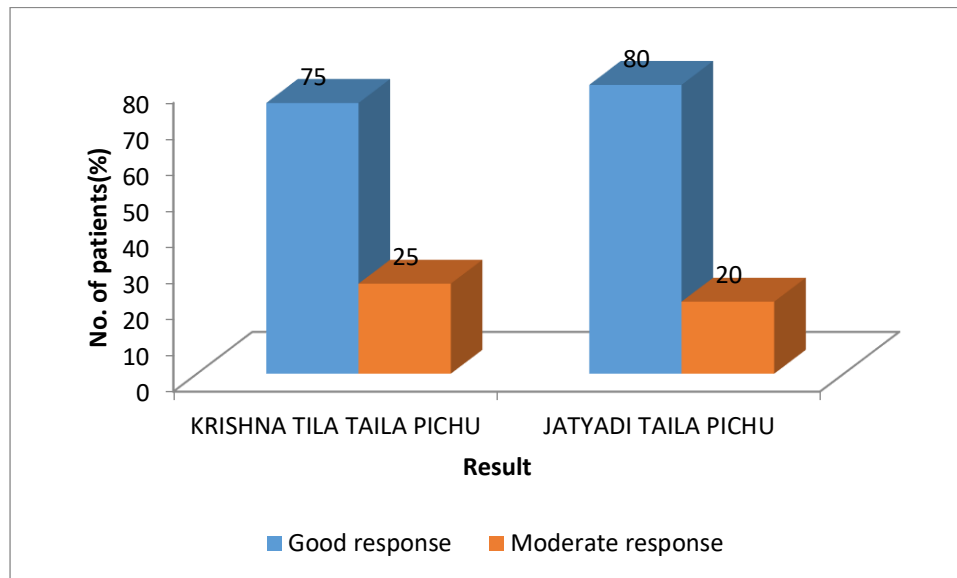
The details are shown with statistical data in Table No.20 and graphically represented in graph .20



Response	KRISHNA TILA TAILA PICHU		JATYADI TAILA PICHU	
	No. of Patients	Percentage	No. of Patients	Percentage
Good response	15	75.0	16	80.0
Moderate response	5	25.0	4	20.0
Poor Response	0	0	0	0
No Response	0	0	0	0
Total	20	100.0	20	100.0

Out of 20 patients in Group A : 15 patients (75%) showed Good response & 5 patients (25%) showed Moderate response and no patients showed Poor response or No Response.

Out of 20 patients in Group B : 16 patients (80%) showed Good response & 4 patients (20%) showed Moderate response and no patients showed Poor response or No Response.



Overall Results in both Groups:

After considering all the changes in parameters of both the groups and statistical analysis, the overall result in Group A(Krishna tila taila pichu) was 96.57% and in Group B (Jatyadi taila pichu) was 95%.

DISCUSSION

1. Pain-

Shoola in *Parikartika* is mainly due to vata dosha aggrevation and as per modern science, pain is due to inflammation and sphincter spasm. Hence rujahara, vatanulomana, analgesic, anti-inflammatory properties of *krishna tila taila pichu* helps in reducing the pain by decreasing the anal canal pressure and hypertonicity of sphincter muscles when it is applied in the form of pichu.

krishna tila taila pichu is procedure insertion in anal region daily for 7 days. By this vata dosha shamana occurs and there by pain decreases.

2. Burning sensation-

Daha in *Parikartika* is mainly due to increased Pitta dosha, Hence Pittahara & Dahashamaka properties of *krishna tila taila* helps in reducing burning sensation.

3. Bleeding per anum

Raktasrava in *Parikartika* is mainly due to increased pitta dosha and presence of vrana in gudapradesha and as per Modern science in Fissure-in-ano due to straining for constipated hard stools a longitudinal ulcer or tear in lower anal canal forms, from there passing streaks of blood seen in stools. Hence Pittahara and Vranahara properties of *krishna tila taila* helps in controlling bleeding per anum.

4. Itching -

Kandu was seen in almost all the patients of *Parikartika* in both the groups.

It was observed that both the treatments provided 100% results in relieving itching.

5. Tenderness

Patients on tenderness in anal region were asked to follow a pathya ie. daily intake of fibre rich food and plenty of fluids to improve digestion and regularize bowels. Triphala choorna was advised to take one karsha daily at bedtime after food, which helps in easy evacuation of bowels due to its mrudu virechaka property.

5. Ulcer-

Presence of Vrana in Gudapradesha is a feature of *Parikartika*. As per modern science in Fissure-in-ano due to straining for constipated hard stools a longitudinal ulcer or tear in lower anal canal forms by rupturing the one of the anal valve. Hence Vranaropaka property of *krishna tila taila pichu* helps in healing of ulcer.

krishna tila taila is administered in the form pichu daily, by that medicaments cover the ulcer surface with snigdha dravya, by which the wound contamination with faecal matter is avoided and this may enhance healing process.

6. Sphincter spasm-

This Sphincter spasm can be attributed to vata dosha aggravation. As per Modern science, Constipation mainly leads to ulcer following pain which finally ends up in sphincter spasm as the lower anal canal is supplied with the same somatic nerves which supply the sphincter muscles. So, any irritation to the lower part of anal canal will cause these sphincters to go into spasm. Hence *krishna tila taila* administered warmly in the form of pichu insertion in anal region for 7 days. By this daily lubrication of ano-rectal route, anal canal pressure reduced. Hence we can expect anal spasm to be relieved by this treatment.

Probable mode of action of *krishna tila taila pichu*

krishna tila taila pichu. is mentioned by Acharya Sushruta as a best Vranaropaka, Hence it is taken for the treatment of *Parikartika* (Fissure-in-ano) by considering Gudagata vrana. which can be administered more conveniently

Parikartika is due to pittam and vata dosha, krishna tila taila pichu. has pittahara property & also vatanulomana action when it is administered in the form of pichu thus reduces doshas pathology.

Rujahara, Vatanulomana, Analgesic, Anti-inflammatory properties of drug helps in reducing the pain by decreasing the anal canal pressure and hypertonicity of sphincter muscles when it is administered in the form of pichu and pittahara qualities reduces burning sensation and bleeding.

As krishna tila taila pichu. is a liquid form, made it varthi and administered which lubricates the anal canal and provides a smooth evacuation of stools & resting pressure in the anal canal decreases by decreasing the hypertonicity of sphincter muscles. and proper blood supply will help in proper nourishment of tissue thereby helps in healing.

Antimicrobial activity of krishna tila taila. might have helped to fight against infection and promoting rapid healing of ulcer.

After application pichu medicaments cover the ulcer surface with snigdha dravya, by which the wound contamination with faecal matter is avoided and this may enhance healing process.

Krishna tila taila has Kaphahara property, by this pruritis-ani and discharge, if present associated with Fissure-in-ano it will going to cured.

The high success rate of results obtained with may be due to the above mentioned factors.

Probable mode of action of Jatyadi Taila

Most of the ingredients of Jatyadi taila are having tikta, kashaya rasas & laghu, ruksha gunas.

Kashaya rasa : It does shoshana their by it might help in vrana ropana.

Tikta rasa : It does twak-mamsa sthreekarana & lekhana. It might help in increasing tensile strength of wound & removal of slough.

Katu rasa : It has vrana shodhana & avasadana properties.

Tutha : It is one among the ingredients of Jatyadi taila, having lekhana karma. So it may help in removal of slough. Even in current surgical practice copper sulphate is used in the removal of slough from the ulcers. So tuatha is one which may have such sort of action.

Tila taila : It is used in the preparation of Jatyadi taila. It has ushna, teekshna, madhura, vataghna, vyavayi, vikasi & sukshma gunas. When it is treated with drugs it takes the properties of those drugs. So it might help in reaching the minute channels by means of its sukshma, vyavayi, vikasi gunas & helps in reducing vedana. As Jatyadi taila includes the drugs which possess both shodhana & ropana qualities it helps in proper healing of dustha vrana.

Jatyadi taila has sheeta and dahashamaka. This property might have helped in relieving burning sensation. Since it has vranaropaka property the healing of fissure was possible. when Jatyadi taila given as a pichu helps in easy expulsion of pureesha and nourishes and cures disease caused by aggravated vata and pitta

dosha. The high success rate of results obtained with *Jatyadi taila pichu* might be due to above mentioned factors

CONCLUSION

- On the basis of location, nature of pathology and features, *Gudaparikartika* can be co-related to Fissure-in-ano.
- *Pichu* carried out in this study was based on classical references.
- Duration of the treatment was fixed considering the previous studies.
- The incidence was predominantly seen in the middle age group, precisely in the age between 31-50 years.
- No any adverse effects were observe in the any of the cases of either group.
- Improper diet regimen and stressful life is found to have a influenced the high incidence observed today.
- Passage of hard constipated stools is the first cause of tear in the lower anal canal which results in excruciating pain during and after defecation, the cardinal feature of Fissure-in-ano.
- Timely intake of fibre rich food and sufficient fluids with regular exercise will regularize the bowel and promotes easy evacuation of stools thus helps in healing of fissure.
- *Krishna tila taila* was found effective in relieving pain, burning sensation, bleeding and ulcer healing of Fissure-in-ano.
- The procedures in both the methods were same, i.e. *Pichu* which was simple, economical, free from side effects and did not require hospitalization and it could be carried out at OPD level itself.
- *Pichu* helps in relieving the sphincter spasm as there was retention of medicated; also its contact with the lesion was there for longer duration together helped in healing the fissure quickly. It lubricates the anal canal and provides easy evacuation of faeces and thus promotes healing of fissure.
- *Krishna tila taila pichu* was also found effective in relieving pain, burning sensation, bleeding and ulcer healing of Fissure-in-Ano.
- Management of the disease in both the groups was efficacious. Management of *Parikartika* by *krishna tila taila pichu* was found to be highly significant statistically with p value of 0.0001 and management of *Parikartika* by *Jatyadi taila pichu* was also found to be highly significant statistically with p value of 0.0001.
- However the difference in the efficacies of both the groups was not significant.
- Both the methods of treatment have proved to be effective in the management of *Parikartika*. But comparatively *Jatyadi taila pichu* had slight better results.

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