ORIGINAL RESEARCH PAPER
Volume - 12 | Issue - 09 | September - 2023 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

AN INNOVATIVE METHOD OF KSHAR SUTRA LIGATION IN BHAGANDAR WITH INFANT FEEDING TUBE WITH GUIDE WIRE AS COMPARED TO COPPER PROBE

Ayurveda

Dr. Pranav Nandan Tripathi MS Scholar at ShalyaTantra Department, College of Ayurveda, Bharati Vidyapeeth Deemed (to be) University, Pune, Maharashtra, India.

Dr. Bharat Rokade Associate Professor at ShalyaTantra Department, College of Ayurveda, Bharati Vidyapeeth Deemed (to be) University, Pune, Maharashtra, India

ABSTRACT

Ayurveda promises a free, happy and long life. Of the eight branches of Ayurveda, each branch covers vast knowledge from basic concepts to important wellness strategies. Shalyatantra, a major branch of Astanga Ayurveda, is rich in many aspects of modern surgical concepts. This branch has great potential to solve many difficult and unresolved complex surgical problems. Acharya Sushruta is a pioneer in the field of surgery. Ayurvedic methods, especially the Kshara, are superior to modern treatments in terms of safety, ease, low cost, and fewer postoperative complications. Eshan karma has been mentioned throughout the classical literature for Bhagandar. Usually Eshan Karma [probe] is done with a copper metal probe. Here we are trying to invent a more innovative and cost effective method for Eshan Karma by tying Kshar Sutra with infant feeding tube with Guide wire in bhagandara.

KEYWORDS

INTRODUCTION

Surgery for anal fistula requires hospitalization, regional or general anesthesia, and routine postoperative care and carries a significant risk of recurrence (0.7 to 26.5%). It is associated with a high risk of incontinence (5 to 40%) . In most centres, ksharsutra insertion involves the use of a metal probe. Not only is this a painful procedure, but it is also more likely to cause a iatrogenic fistula due to treatment and impaired continence and sometimes requires general anesthesia. These disadvantages lead to low compliance and low acceptability for many patients.

MATERIAL AND METHOD

Material

- Infant feeding tube no. 6 impregnated with guide wire
- Malleable metallic probe(copper)

Method

Total 50 patients were selected on the basis of inclusion and exclusion criteria

- Selected patients will be divided in 2 groups
- Group A- Study group-Infant feeding tube impregnated with guide wire
- Group B-Control group-Malleable metal probe (Copper)

Method Of Selection Of Patients

Inclusion Criteria

- Low level fistula.
- Age- 18-60 years
- Selection of patients will be irrespective of gender, religion, socio-economical class

Exclusion Criteria

- High anal fistula
- Known case of ulcerative colitis, Crohn's disease.
- Uncontrolled diabetes
- Carcinoma

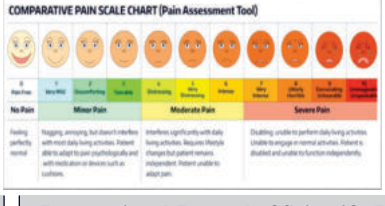
Diagnostic Focus And Assessment

Patients were subjected for routine assessment. Their haemogram,kidney function test, liver function test, ECG, urine routine exam and culture, X-ray chest were done.Fistulogram also was done wherever necessary.

Parameters Of Assessment-

Subjective Paramete

1. Pain:- Pain Will Be Calculated With Visual Analogue Scale.



Objective Parameters

1. Bleeding

	Grade
No Bleeding	0
Mild (Gauze piece wet 1cm in size)	1
Moderate (Gauze piece wet 2cm in size)	2
Severe (Gauze piece wet 3cm in size)	3
Very severe (Continuous &Profuse)	4

2. Time required for probing will be measured in minutes

Statistical Analysis

- Paired t- test, two sample t- test, Wilcoxon and Mann Whitney U test may be used for statistical analysis.

Operative Technique/Surgical Procedure

Although the primary technique to introduce ksharsutra is through the external opening using a metal probe to insert in the fistula through the external opening, we can use the infant tube (no.5 or 6) to include ksharsutra. . The patient is kept in the lithotomy position in a private environment with a good source of light. A generous amount of 2% xylocaine jelly is applied to the external opening and the entire infant feeding tube. A guide wire is inserted through the distal end of the infant's feeding tube, providing rigidity to the feeding tube. The proximal end is now inserted into the external opening. The infant feeding tube is passively pushed and threaded through the fistula. The inner opening is finally located and the tube is pulled out with the index finger. After the end of the infant tube came out through the internal opening, the ksharsutra was tied at the proximal end and then pulled over the other end . Finally, both ends of the ksharsutra are tied and the infant feeding tube is removed and the guide wire is removed.

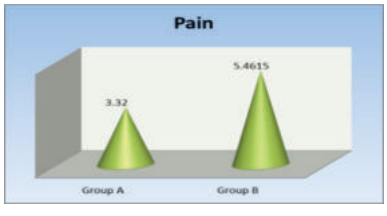
RESULT AND OBSERVATIONS

Cases

GROUPS	PATIENTS ENROLLED
Total patients	54
GROUP A	25
GROUP B	25

Dropped patients did not visit after investigations

Comparison Of Infant Feeding Tube Probing And Malleable Metal Probe(copper) On Pain In Ksharsutra Ligation For Fistula In ANO.

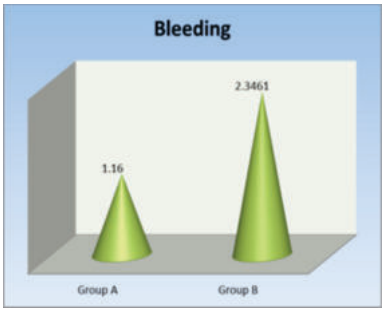


parameter	Group	Mean	SD	SE	t	P VALUE
pain	Group A	3.32	1.4353	0.2871	-5.7082	6.6E-07
	Group B	5.4615	1.2403	0.2433		

As p value<0.05 we found that there was statistical significant difference between Infant feeding tube probing and Malleable metal probe(Copper) on time for probing in Eshan karma for fistula in ano

Also as average seen from above table we get mean of Group A was less than Group B.hence we can say that time for probing found in Group A is less than Group B.

Comparison Of Infant Feeding Tube Probing And Malleable Metal Probe(copper) On Bleeding In Ksharsutra Ligation For Fistula In ANO.

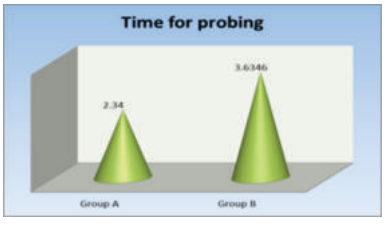


parameter	Group	Mean	SD	SE	t	P VALUE
bleeding	Group A	1.16	0.8505	0.1701	-4.993	7.9E-06
	Group B	2.3462	0.8458	0.1659		

As p value<0.05 we found that there was statistical significant difference between Infant feeding tube probing and Malleable metal probe(Copper) on bleeding in Eshan karma for fistula in ano

Also as average seen from above table we get mean of Group A was less than Group Hence we can say that bleeding found in Group A is less than Group B.

Comparison Of Infant Feeding Tube Probing And Malleable Metal Probe(copper) On Time For Ksharsutra Ligation For Fistula In ANO.



parameter	Group	Mean	SD	SE	t	P VALUE
time for probing	Group A	2.34	0.8746	0.1749	-4.789	1.6E-05
	Group B	3.6346	1.0446	0.2049		

As p value<0.05 we found that there was statistical significant difference between Infant feeding tube probing and Malleable metal probe(Copper) on time for probing in Eshan karma for fistula in ano

Also as average seen from above table we get mean of Group A was less than Group B.hence we can say that time for probing found in Group A is less than Group B

DISCUSSION

Pain

- Pain was found to be less in Ksharsutra ligation with infant feeding tube as compared to malleable metal probe.The probable reason could be the flexible nature of the infant feeding tube.

Bleeding

- The bleeding found during eshan karma with infant feeding tube is less than the bleeding with metal probe.The probale reason could be the flexible and soft nature of the infant feeding tube.

Time Taken In Eshan Karma

- Time taken with malleable metal probe in eshan karma is more as compared to infant feeding tube .The probable reason could be the rigid nature of the copper probe as compared to the flexible nature of infant feeding tube.

Formation Of False Tract

- Chances of false tract formation are more with malleable copper probe as compared to infant feeding tube due to its flexible and soft nature of infant feeding tube as compared to copper probe.

CONCLUSION

- The overall statistics shows that infant feeding tube impregnated with guide wire is more effective in eshan karma for fistula in ano as compared to malleable metal probe.
- No adverse effect was seen during the course of study, hence being cost effective can be effectively utilized.

REFERENCES

1. Pankaj S., Manoranjan S. Efficacy of Ksharsutra (medicated seton), therapy in the management of fistula-in-ano. World J Colorectal Surg. 2010;2(2) (Art. 6:01–10)
2. Panigrahi HK et al. Clinical evaluation of Ksharasutra therapy in the management of Bhagandara (fistula-in-ano)—a prospective study. 2009:28(3):29–35. [PMC free article] [PubMed]
3. Bhat Ramesh P. Anal fistula with foot extension—treated by Ksharasutra (medicated seton) therapy—a rare case report. Int J Surg Case Rep. 2013;4(7):573–576. doi: 10.1016/j.ijscr.2013.04.004. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
4. Shukla NK, Narang R, Nair NGK, Radhakrishna S, Satyavati GV. Multicentric randomized controlled clinical trial of Ksharasutra (ayurvedic medicated thread) in the management of fistula-in-ano. Indian J Med Res. 1991;94:177–185. [PubMed] [Google Scholar]
5. DwivediAmarprakash P. ADR Ksharsutra kit: breakthrough in the standardization of ksharsutra. Int J Res Ayurveda Pharm. 2013;4(2):304–306. doi: 10.7897/2277-4343.04246. [CrossRef] [Google Scholar]
6. Anil Kumar, Manoj Kumar, Abhijeet Kumar Jha,Bindey Kumar, and RekhaKumariThe Easiest Way to Insert Ksharsutra with the Help of an Infant Feeding Tube Instead of a Metallic Probe
7. Sushruta Samhita of Maharshi Sushrut Chikitsa Sthan; Volume-1 By Kaviraj Dr. Ambika dutta Shastri, Edited with Ayurveda-Tattva-Sandipika Hindi commentary, Forwarded By Dr. Pranajivana Manikchanda Mehta, Published by Chaukhambha Sanskrit Sansthan Varanasi,
8. Dr.Bharat .M. Rokade, Comparative study of standardised apamarga ksharsutra and traditional ksharsutra in the management of Bhagandara
9. Dr.Kalpana Rohtela ,Comparative study of honey based ksharsutra and snuhiksheer based ksharsutra in the management of bhagandar w.s.r. fistula in ano."