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Research Article

AN ANALYTICAL STUDY OF HISTOPATHOLOGICAL FINDINGS OF 100 CASES OF FISTULA-IN-ANO

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ABSTRACT

Fistula-in-ano is one of the most difficult diseases confronted in ano-rectal patients in Shalyatantra OPD. Sushruta described *Bhagandara* along with its etiology, clinical presentation and treatment. The description of different types of *Bhagandara* (fistula-in-ano) are at par with the aetiopathogenesis of Fistula-in-ano of modern medical science. It is a very complicated condition arising out of various causes like pyogenic, tubercular, lymphogranuloma inguinale, inflammatory bowel diseases like Crohn's disease, ulcerative colitis etc. Identification of the aetiopathological factor is necessary for the success of treatment of fistula-in-ano. Histopathological study of tissue from tract of fistula-in-ano is an useful diagnostic tool for assessing the underlying pathology. In this study we use the benefits of histopathological examination from the primary site of the disease to detect the basic etiology.

100 cases diagnosed as fistula-in-ano attending Shalya OPD, Government Ayurvedic College Hospital were randomly selected for a period of one year i.e., 2016-2017. After necessary investigations, tissue is collected from the primary site of fistulous tract during primary threading for *Kshar Sutra* therapy, in OT under local anaesthesia and sent for histopathological examination.

The results of the above study were tabulated and lots of cases other than pyogenic cause were detected. The data were analysed with standard statistical methods. Without histopathological examination it is not possible to detect the underlying cause of fistula-in-ano.

KEYWORDS: Histopathological study, Fistula-in-ano, Tubercular, Crohn's disease.

INTRODUCTION

Fistula-in-ano is a very common disease attending anorectal OPD worldwide with multiple etiopathological factors. Most of Fistula-in-Ano are crypto glandular in origin, but specific infections such as tuberculosis, actinomycosis, lymphogranuloma inguinale, Inflammatory bowel disease, trauma, foreign bodies have also been recognized as etiological factors.

To understand and treat the disease fistula-in-ano, identification of the causative factors are mandatory which requires proper evaluation.

In Ayurveda, the description of disease Fistula-in-ano mimic the description of different types of *Bhagandara* due to different causative factors like *Vata, Pitta, Kapha* etc. or combination of factors. In Sushrut Samhita, different modalities of treatment of *Bhagandara* are described according to etiological classification.

In present era it is understood that fistula-in ano is a presentation of a group of diseases like pyogenic, tubercular, inflammatory bowel disease, malignant diseases, foreign bodies etc.

AIM OF THE STUDY

Evaluation of the basic cause of fistula-in-ano in 100 cases based on histopathological study.

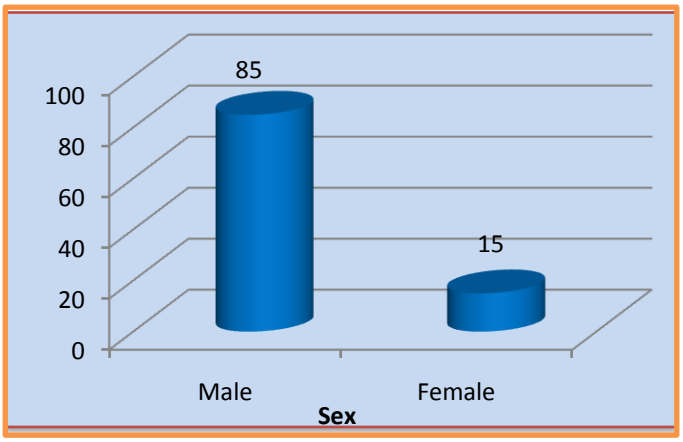
MATERIAL & METHODS

- 100 cases of fistula-in-ano operated for primary threading for *Kshar Sutra* Therapy under local anaesthesia are randomly selected irrespective of age, sex, religion from Shalyatantra OPD of Government Ayurvedic College, Guwahati.
- Tissue collected from the primary site of fistulous tract was sent for histopathological examination.
- HPE was done for each and every case along with pus culture and sensitivity.
- Routine investigations were done in all patients along with chest X-Ray.
- In clinically doubtful cases for Inflammatory Bowel diseases, colonoscopy and colonoscopic biopsy was undertaken.
- These 100 cases were treated under the department of Shalya Tantra according to findings of investigation reports.
- Detailed grouping of the findings of HPE were recorded and analyzed to understand the basic cause of Fistula-in-ano in this series of study.

- Exclusion & inclusion criteria is not applicable in this study, as this study is a randomized statistical analysis.

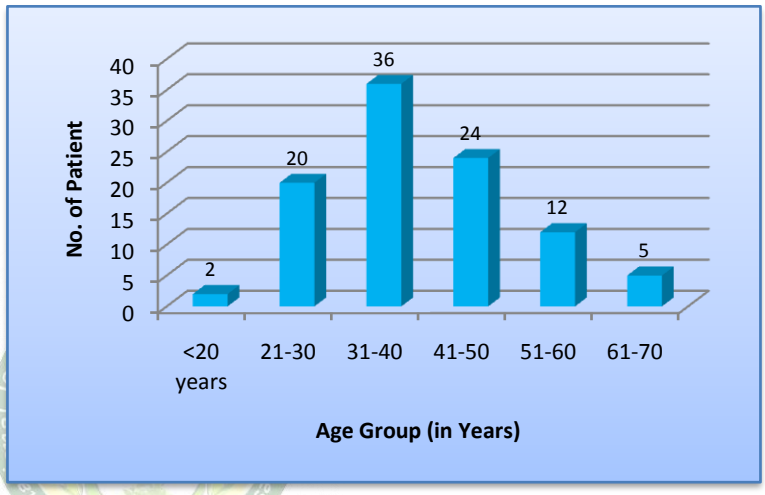
1. Distribution of Patients according to Sex

Sex	Percentage
Male	**85%**
Female	**15%**



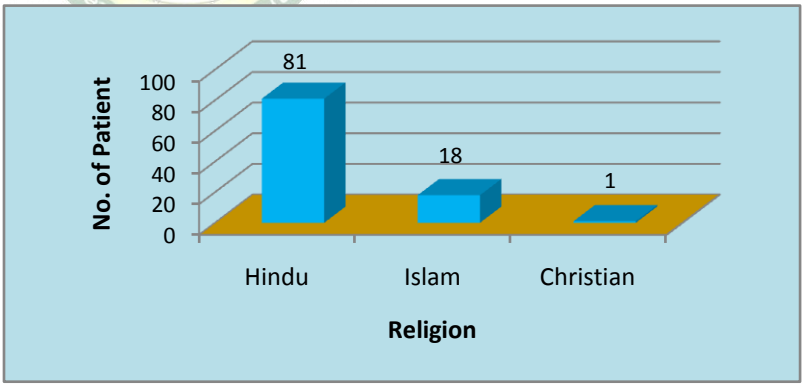
2. Distribution of Patients according to Age

Age Group (in years)	Percentage
<20 years	2
21-30	20
31-40	36
41-50	24
51-60	12
61-70	5
71-80	1



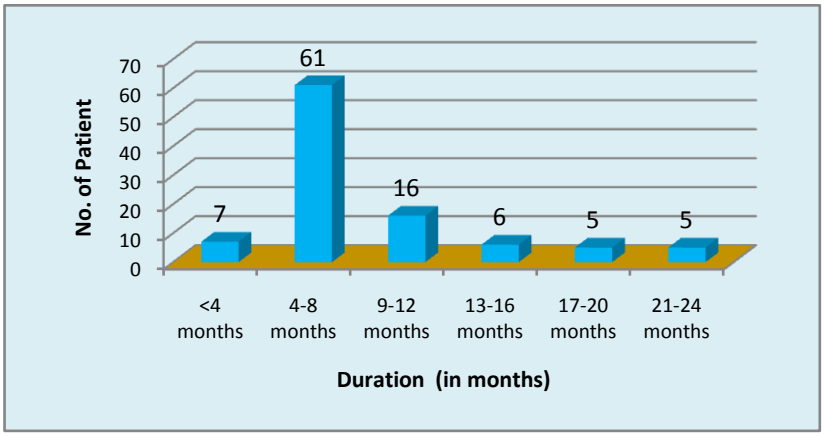
3. Distribution of Patients according to Religion:

Religion	Percentage
Hindu	81 %
Islam	18 %
Christian	1 %



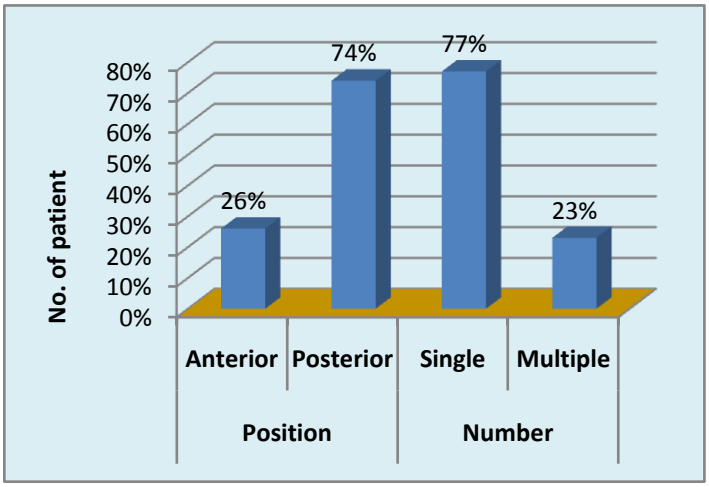
4. Distribution of Patients according to Duration

Duration (in months)	Percentage
<4 months	7
4-8 months	61
9-12 months	16
13-16 months	6
17-20 months	5
21-24 months	5



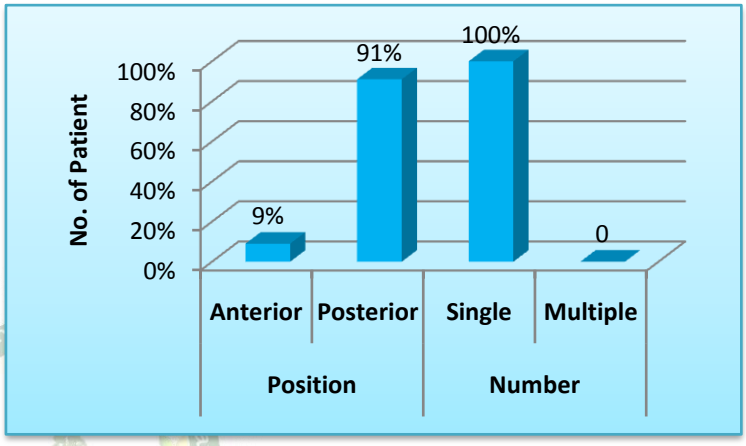
5. Distribution of Patients according to External Opening:

Position		Number	
Anterior	Posterior	Single	Multiple
26%	74%	77%	23%



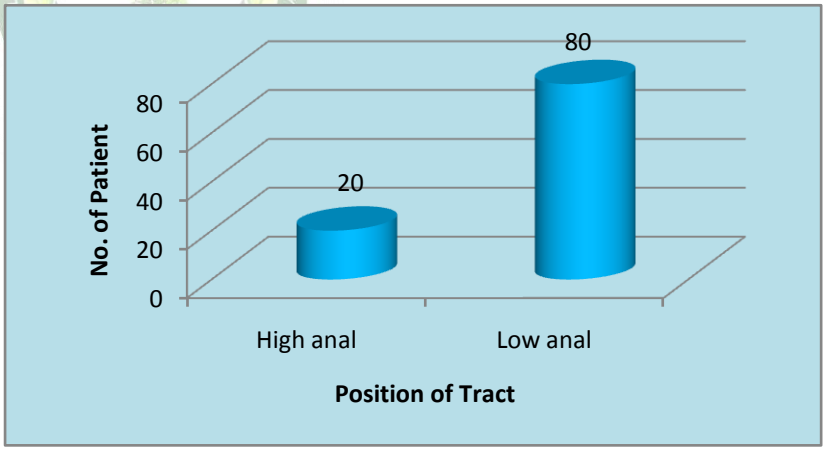
6. Distribution of Patients according to Internal Opening:

Position		Number	
Anterior	Posterior	Single	Multiple
9%	91%	100%	0



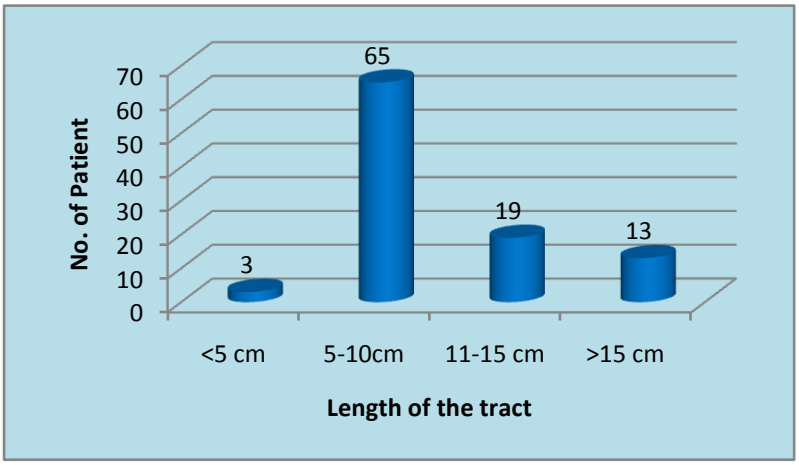
7. Distribution of Patients according to Position of Tract:

Position of Tract	Percentage
High anal	20
Low anal	80



8. Distribution of Patients according to Length of the Tract:

Length of the tract	Percentage
<5 cm	3
5-10cm	65
11-15 cm	19
>15 cm	13



9. Distribution of Patients according to Pus Culture & Sensitivity report upto 48 hours

Pus C & S	Percentage
Sterile	69%
Pseudomonas	11%
Staphylococcus	11%
Streptococci	9%

10. Distribution of Patients according to Cases of recurrent & non-recurrent fistula in ano

Rate	Percentage
Recurrent	17%
Non recurrent	83%

HISTOPATHOLOGICAL REPORT FINDING:

Cryptoglandular fistula-in-ano	Fragments of fibroadipose and muscle tissue with mild lymphocytic infiltrate.
Tubercular fistula-in-ano	Infiltration by lymphocytes, plasma cells, polymorphs, and numerous histiocytes in clusters and few langhan's type of giant cells.
Inflammatory bowel disease (ulcerative colitis)	Architectural distortion, shortening of crypts, variation in size and shape of crypts, increase in chronic inflammatory cells in the lamina propia.

TUBERCULAR FISTULA-IN-ANO

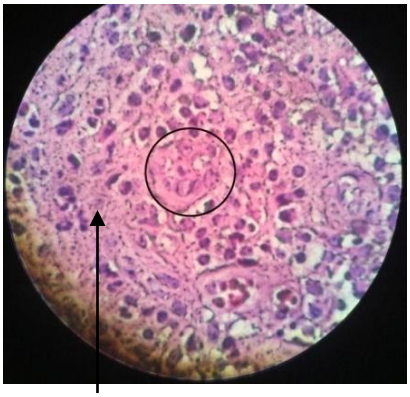


Fig. 100 x
Langhan's giant cell

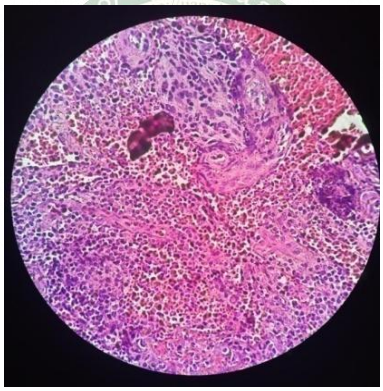


Fig. 40 x
Necrosis mononuclar infiltration plasma cells

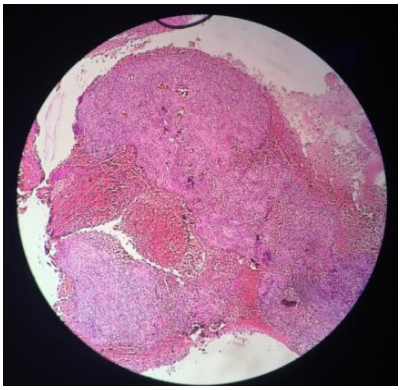


Fig. 10 x

Cryptoglandular Fistula-In-Ano

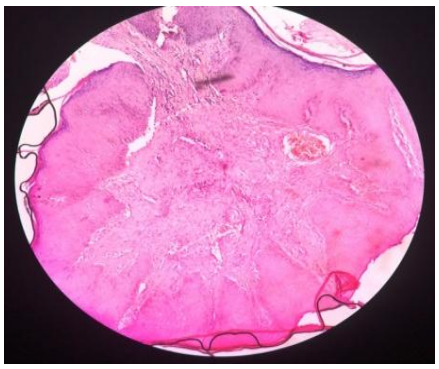


Fig. 10 x

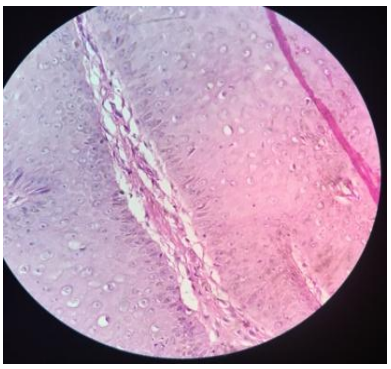


Fig. 40 x Columnar epithelial cells

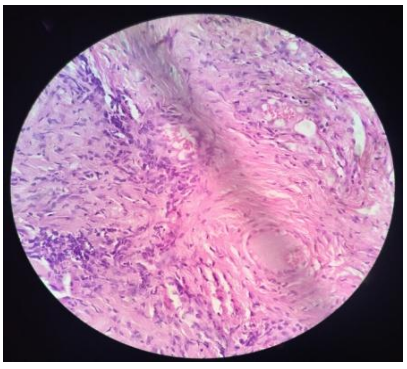


Fig. 40 x Squamous cells

RESULT & DISCUSSION

- Out of 100 patients majority were males (85%). The median age was 36 years ranging from 15-80 years.
- Different types of bacteria like pseudomonas 11%, staphylococcus 11% streptococci 9% and sterile 69% were found in the pus culture and sensitivity reports of fistula-in-ano in this study.
- Incidence of low anal fistula strikingly high (80%) in comparison to high anal fistula (20%).
- In this study 88 percent cases were of pyogenic origin, 11 percent cases of tubercular origin and 1 percent case of ulcerative colitis.

Only 1 percent case were diagnosed with ulcerative colitis as prevalence of this is not very common in the country.

- Eighty three percent of the cases were non-recurrent. The number of recurrent cases of fistula in ano were 17% which were previously treated elsewhere and 6% of the recurrent cases were of tubercular origin.
- Against the common belief of multiple opening in tubercular fistula-in-ano, in this study all the 11 tubercular fistula had single external opening and without any pulmonary cause or presence of tuberculous foci elsewhere in the body. Also constitutional symptoms like low grade fever, anorexia and weight loss were not present in these cases. In all the biopsy positive cases anti-tubercular treatment was started.
- No malignancy cases were reported in this study. This might be explained by the fact that malignancy is already diagnosed because of its clinical features before development of fistulous communication at later stage.

CONCLUSION

- As in this study we got 12 percent cases of fistula-in-ano of non-cryptoglandular origin which was only diagnosed by HPE, so without histopathological examination fistula-in-ano should not be treated. Tubercolosis is the often neglected cause of anorectal sepsis which leads to recurrence of anal fistula and much can be inferred from the clinical presentation of doubtful cases. Apart from histopathology, chest X-ray is helpful in cases of past history of pulmonary tubercolosis.
- In the case of ulcerative colitis, on proctoscopic examination frank mucus discharge was seen, also patient giving history of morning spurious diarrhoea, confirmed by colonoscopy.
- All the centres where *Ksharsutra* is practiced for fistula-in-ano must be equipped with expert hand and facility of state of the art.
- There should be strict guideline for the specialist of *Kshara-sutra* therapy to go through basic investigations including HPE.

REFERENCES

1. Sabiston Text book of Surgery, The Biological Basis of Modern Surgical Practice, Vol-I & II, Courtsey M. Towansend. JR, MD R. Danill Beauchamp, MD B. Mark Evers, MD Kenneth L. Mattox, MD 19th edition.
2. Kshara Sutra Therapy in Fistula –In-Ano and other Ano-Rectal Disorders, edited by- S.K. Sharma, K.R. Sharma, Kulwant Singh, published by- Rashtriya Ayurveda Vidyapeeth.
3. Susruta Samhita of Maharshi Susruta, By Kaviraj Ambika Datta Sastri, Publisher-Chaukhamba Sanskrit Sansthan, Edition-Reprint on 2010
4. Bailey & Love's Short Practice of Surgery, Norman S. Williams, Christopher J.K. Bulstrode, P Ronan O'connell, Edition: 25thedition.
5. Robbin's and Cotran Pathologic Basis of Disease, published by Elsevier, 7th edition.
6. Textbook of Pathology by Harshamohan, published by Jaypee Brothers Medical Publishers (P), 6th edition.

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Conflict of interest: None Declared

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