"NEW HORIZON OF TREATMENT FOR COMPLEX FISTULA IN ANO"

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ABSTRACT-

Background- Fistula in ano is a surgical disease of anorectal disorders. Fistula in ano may be simple or complex in nature, it depends on its pathway of tracts as well as internal opening of fistula. But treatment modalities are surgical at now. Simple/ low anal fistula is easy to treat with simple fistulotomy or seton without any complication while complex fistula in ano is difficult to treat because of associated post-operative complications. Although many newer techniques are available like LIFT, VAAFT, Fibrin glue, Advancement flap technique etc. But when we treat the complex fistula in ano with IFTAK procedure than there is minimal or negligible rate of complication with minimal pain and early cure.

Material and Method – IFTAK-(interception of fistulous tract and application of kshar sutra) is a technique in which we make a window either ante anal (anterior) or post anal (posterior) depends on crypt involvement at intersphincteric plane. The application of *Ksharsutra* (medicated seton) from part of interception to crypt involvement.

Result- Interception of fistulous tract and application of *Ksharsutra* is an modified *ksharsutra* technique. IKTAK Procedure is time taken but minimal or negligible rate of incontinence, recurrence and cost effective.

Keywords- complex fistula in ano, IFTAK Procedure, *ksharsutra* etc.

INTRODUCTION-

Anal Fistula is a chronic epithelized tract in between two epithelial surface i.e. one at anal canol or rectum and another at perianal skin [1]. An anal fistula can be defined as a narrow tunnel with two openings i.e. internal and external. Its internal opening is present in the anal canol or rectum and its external opening in the perianal skin near the anus.[2] Anal fistulae generally seen in those people in which previous history of anal abscess present. They can form when anal abscesses do not heal properly.[3]

The incidence of a fistula-in-ano developing from an anal abscess ranges from 26% to 38%. [4, 5] A research study showed that the prevalence of fistula-in-ano is 8.6 cases per 100,000 population. In men, the prevalence is 12.3 cases per 100,000 population, and in women, it is 5.6 cases per 100,000 population. The male-to-female ratio is 1.8:1. The mean patient age is 38.3 years. [6]

Generally Fistula in Ano do not harm or lethal for life but because of pain, irritating discharges and difficulty in sitting makes the person becomes mentally disturbed and They have faced many problem with his routine job. Because of these patients always wear pad from fear of staining of cloth and get mentally disturb to doing proper work at office & interact with society.

Fistula in ano is widely prevalent and numerous concoctions are tried for its management. However none of them could provide solace to the suffering mankind.

Bhagandara (fistula in ano) is a disease that exists since the early days of evolution of humans. In India, the disease was known from very early days. However *Vedic* era gives no clear information about the disease but *Samhitas* [7]and *Puranas* do have abundant evidences.

Agnipuran are first ancient literature, which mentioned *Bhagandara* as a disease has clear-cut description and management of the *Bhagandara.*

Sushrata, father of Indian Surgery was the first person to describe in detail the aetiology, pathology, varieties and surgical management of the disease. His experience and knowledge of limitations of treatment made him term *Bhagandara* (fistula in ano) as a *Mahagada*.[8]

Acharya Sushruta has described the *Bhagandara* (fistula in ano) in separate chapter of *Nidan Sthan*. He has described five types of *Bhagandara* (fistula in ano) i.e *Shatponak (vataj*), *Ushtragreev (pittaj*), *Parisravi (kaphaj), Shambukavart (sannipattaj) and Unmargi (Agantuj) [9].*

Our great Indian surgeon *Sushruta's* also told about treatment modalities for *Bhagandara* (fistula in ano) like surgical, cauterization, medical as well as para-surgical (*Kshar* therapy)[10]. *Ksharsutra* therapy in fistula in ano is an parasurgical procedure. *Ksharsutra* Therapy is applicable for management of all types of *Bhagandara* (fistula in ano).

***Ksharsutra* therapy-**

Ksharsutra therapy is an simple**,** old, safe and minimal invasive Para surgical method of Ancient Science. *Ksharsutra* therapy is practicing in Banaras Hindu University since 1965 for treatment of simple as well as complex fistula in ano with great success rate. *Ksharsutra* is an medicated linen thread helps in both cutting as well as drainage of fistulous tract. The cutting and healing of fistulous tract takes place simultaneously. Therefore the possibility of damage to anal sphincter is less. The chances of incontinence is also practically nil. It is a cost effective. It is day care procedure. The hospitalization is not required in most of the patient. *Ksharsutra* therapy can be performed in local anaesthesia. During the course of treatment patient remain ambulatory and can perform routine daily work activities normally. The Procedure of *ksharsutra* therapy is same as Seton application. The recurrence rate of *ksharsutra* therapy is 4% [11,12]. The incontinence of feaces and flatus is not associated with this therapy. The application of

Kharsutra is easy procedure. The changing of *ksharsutra* from old one to new is painless and opd procedure.[13]

Complex Fistula in Ano-

According to *Ayurveda* classification of Fistula in ano, *Shatponak Bhagandara* is that in which multiple external openings and discharges are present[14]. The *Ushtragreev Bhagandara* is that in which tract become semi horse shoe shaped or horse shoe shape[15]. The *Parisravi Bhagandara* is that in which thick pus continuously discharge and associated with abscess cavity[16]. The *Shambukavart Bhagandara* is that in which tract become spiral in snail shell[17]. The *Unmargi Bhagandara* is that in which involvement of levator ani and other muscles [18]. All above described *Bhagandara* comes under the classification of complex fistula in ano except *parisravi Bhagandara*.

Many definitions exist for a "complex" anal fistula. In 1961, Dr. Parks divided fistulas into intersphincteric, trans sphincteric, suprasphincteric, and extrasphincteric[19].The Standards Committee for the American Society of Colon and Rectal Surgeons (ASCRS) published practice parameters for the management of perianal abscess and fistula-in-ano in 2011,[20] in which they define "simple" fistulas as those which involve less than 30% of the external sphincter that are intersphincteric or low trans sphincteric. "Complex" fistulas are those which have with more muscle involvement, or anterior fistulas in female patients, as well as recurrent fistulas, and those associated with preexisting fecal incontinence, inflammatory bowel disease, or radiation[20] .

One of the most clinically useful classification systems for perianal fistulas (by the American Gastroenterological Association) divides them into simple and complex.

Simple fistulas are low anal fistula - i.e. they affects a small (or sometimes none) portion of the sphincter complex. These fistulas include superficial, low intersphincteric or low trans-sphincteric fistulae. In addition, they have only single tract which communicate between the anal canal & perianal skin and is not associated with inflammatory bowel disease, radiation or involving any other organs.

complex fistulas are anatomically higher in nature: they affetcs significant portions of the sphincteric muscles, Usually they have multiple tracts, involve other organs and may be associated with radiation or inflammatory bowel disease. Recurrent fistulas are also included in complex fistula in ano.

IFTAK (interception of fistulous tract with application of *Ksharsutra*)[21]

The present novel technique IFTAK (interception of fistulous tract with application of *Ksharsutra*) is an modified *Ksharsutra* therapy. This technique is being practiced for complex fistula in ano in Banaras Hindu University, Varanasi, Uttar Pradesh, India since 2007. IFTAK technique is based on the park's concept of cryptoglandular origin of fistula in ano. The main aim of this technique is to eradicate infected anal crypt at the pectinate line using a *Ksharsutra* (medicated seton) without laying open the tract & without harm to sphincter muscles.

Pre-operative Measures-

Pre-operative measures are includes Routine blood investigations, Viral markers, Radiological investigations i.e. X-ray Fistulogram, colonoscopy, pre-operative manometry and more advanced investigations for diagnosis are MRI pelvis, TRUS.

Diet - Patient is kept 'nil orally' before surgery.

Anesthesia- IFTAK Procedure is best performed in local anesthesia. In local anesthesia easily identified more tender point i.e. infected crypt.

Position of patient during surgery

For IFTAK Procedure lithotomy position is most ideal and comfortable. Patient is made lie on a OT table ; the anal region facing the light source and the hip is raised.

Preparation of effected part

The effected part is painted with betadine solution and covered with sterile cut sheet.

Main Operative Procedure-

The aim of this technique is that interception of fistulous tract at intersphincteric plane and application of *Ksharsutra* to eradicate the infected crypt without any damage of sphincter.

In this technique make an window between external and internal sphincter at either site 6 O'clock or 12 O'clock depends on site of infected crypt. Through this window reach at proximal part of fistulous tract and done interception of tract. Than application of *Ksharsutra* (medicated seton) is done from site of interception to the infected crypt in anal canol. By this technique convert the complex nature of fistula in ano to simple one.

IFTAK technique is basically follow the Park's concept of crypto glandular origin of fistula in ano. The basis of this technique is to eradicate the infected anal crypts at the pectinate line by using a *Ksharsutra* (medical Seton) without laying open of the tract distal to the site of interception[21].

For better understanding, this procedure can be defined in three steps-

Stage 1: Identification of infected anal crypt.

Stage 2: Make an window at intersphincteric plane and interception of proximal part of fistulous tract from infected crypt and separated the fistulous tract from distal tract.

Stage 3: Application of Ksharsutra from site of interception to infected anal crypt.

Stage 4: The distal tract is cleaned through external opening with the help of scoop.

Post-Operative Management-

- In post-operative period, drainage of pus should be proper from window site.

- Advice daily two times Seitz bath with simple tap water for cleaning of wound.
- Daily dressing with normal saline and betadine is advocated.
- For combat the constipation, advice Isabgoal powder 2TSF HS with luke warm water or milk.
- To promote the healing and reduce pain, oral *Shigru Guggulu* 2 tab BD is adviced.
- Changing of *Ksharsutra* (i.e. changing of old *Ksharsutra* to new one) is done at every 7 days of interval by rail-road technique[22] .
- After completion of therapy, performed post- operative manometry to access any loss of sphincter tone is done or not by this technique.

Advantages of IFTAK Technique

- This technique has highest success rate to treat the complex fistula in ano.
- Almost negligible recurrence rate.
- Early return to normal activity to patient.
- No any need of hospitalization.
- This procedure is convert the complex type fistula in to simple one.
- Easily performed in local anesthesia.
- There is no any incontinence like fecal or flatus incontinence.
- This technique is cost effective

CONCLUSION-

IFTAK technique is an ambulatory and modified *Ksharsutra* therapy. This technique has highest success rate with minimal complication. This technique is effective for complex fistula in ano. This technique is also used for cosmetically purpose and no harm to sphincteric muscles. The second step of IFTAK Procedure is blind procedure, that's why, this technique should be performed by experienced full hands. So operating the complex fistula in ano by this technique is safe, fast recovery, cost effective and no recurrence.

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