EFFICACY OF \textit{KSHARASOOTRA} IN ARSHO- BHAGANDARA (PILES AND FISTULA-ANO) IN SINGLE SITTING-A CASE STUDY

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ABSTRACT

\textit{Ksharasootra} is being practiced from ancient times to global era for management of anoectal disorders in general and fistula as well as piles in particular. In anorectal disorder some cases have both piles and fistula-in-ano and at that time it is difficult to treat both diseases at same time which sometime leads to bad prognosis. In modern surgery it may escort to complications like stricture, post operative sepsis, recurrence, etc. But in Ayurveda the \textit{Ksharasootra} have potential to treat the piles and fistula in single sitting without complication. In this case report a 33 years old male patient visited in outpatient department of Shalya Tantra, IPGT&RA Hospital, Jamnagar for treatment of Arsha (Piles/hemorrhoids) and Bhagandara (Fistula-in-ano). Patient had complained of pain bleeding per anum, protrusion of piles since last one year. The symptom like pain with pus discharge from anterior perianal region was severe since last one week. After local PR examination case was diagnosed as Arshobhagandara that is Arsha (intero-external piles) at 3, 7 and 9 O’clock position and Bhagandara (fistula-in-ano) at 1 o’clock position. He was treated with Apamarga \textit{Ksharasootra} (medicated thread) ligation in piles and partial fistulotomy along with simultaneous \textit{Ksharasootra} application in fistula in single sitting. The ligated piles were cut through on 5th postoperative day and leads to the fresh wound. The \textit{Ksharasootra} in fistula was changed after every seventh day and simultaneous cutting and healing of tract taken place. The wound of piles and fistula track both healed within 2 months completely without complication. The adjuvant medications prescribed during post-operative period were sitz bath with \textit{Panchavalkal} decoction, 10 ml Jatyadi Taila instillation per rectum, and dressing with \textit{Panchavalkal} ointment. \textit{Triphala Guggulu} 1 gm three times a day was given with warm water for 2 months. This case demonstrated the advantages of \textit{Ksharasootra} in the management of piles and fistula at the same time.

KEYWORDS: Arsha, Bhagandara, Fistula-in-ano, Jatyadi Taila, Ksharasootra, Matra Basti, Panchavalkal, piles, \textit{Triphala Guggulu}.

INTRODUCTION

In Ayurveda, \textit{Arsha} (piles-in-ano) and Bhagandara (fistula-in ano) both diseases are considered under \textit{Ashtomahagada} (eight major diseases) due to bad prognosis and notorious nature. \cite{1} The etiology, symptoms and management were described vividly by Acharya Sushruta. Acharya Vagbhata described \textit{Arshobhagandara} is one kind of \textit{Bhagandara} in which \textit{Arsha} and \textit{Bhagandara} were seen in the same patient. The symptoms are painless drop wise bleeding, mild discomfort, constipation and protrusion of piles in late stage. In surgery, rubber band ligation, cryo surgery, infra red therapy, laser surgery, haemorrhoidectomy for hemorrhoids are available treatment options with their own limitations. \cite{2} Fistula-in-ano is part of the spectrum of peri-anal sepsis which generally developed after an ano-rectal abscess and cryptoglandular infection. Symptom includes pain, discharge, itching and social embarrassment. In surgery fistulectomy, fistulotomy, fibrin glue, fistula plug, Video Assisted Anal Fistula Treatment (VAALT) and Ligation of Inter-sphincteric Fistula Tract (LIFT) are surgical options as per the type of fistula. These surgeries are not free from complications like incontinence, sepsis and recurrences. \cite{3} Acharya Sushruta, mentioned local application of \textit{Kshara} on \textit{Arsha} (piles) and ligation or \textit{Ksharasootra} in \textit{nadvirana} (sinus), various tumors and tumor like lesions. \cite{4,5} Piles are the engorgement of veins and it is the pedicle like lesion so ligation can be done with \textit{Ksharasootra}.

In case of \textit{Bhagandara} (Fistula-in-ano) also Sushruta mentioned application of \textit{Kshara} (alkaline ash). \cite{6} Later on Chakrapani and Bhavamishra detailed the preparation and application of \textit{Ksharasootra} in \textit{Bhagandara} (Fistula-in-ano). \cite{7,8} In this study, a case of second degree intero-
external piles at 3, 7, 9 O’clock position and Bhandara (fistula-in-ano) was treated with Ksharasootra (medicated thread) ligation in piles and application in fistula in single sitting. The Snuli (Latex of Euphorbia nerifolia) based Ksharasootra was prepared by Apamarga Kshara (Ash of Achyranthus aspera Linn.), and turmeric powder (Curcuma longa Linn.) in surgical Barbour’s thread size 20 G as per Ayurved Pharmacopeia of India (API).[9]

CASE HISTORY
In this case report a 33 years old male patient visited in outpatient department of Shalya Tantra, IPGT&RA Hospital, Jamnagar for treatment of Arsha (Piles/hemorrhoids) and Bhandara (Fistula-in-ano). Patient had complained of pain-in-ano during defecation, bleeding per anum during defeation in drop vise manner, protrusion of piles during defeation which are self reducible since last one year. The symptom like pain with pus discharge from anterior perianal region was severe since last one week. On inspection external piles at 3 O’clock with bulging at 7 O’clock and 9 O’clock were seen and one external opening at 1 O’clock was noticed (Figure 1). In PR examination sphincter spasm, mild pain but a pit feels at 12 O’clock position. He was undergone proctoscopy examination for confirm diagnosis after performing HIV, VDRL, HBsAg investigation for blood. It was observed that there were 3 degree intero-external piles at 3, 7 and 9 O’clock position. He was investigated for Trans-Rectal-Ultrasound (TRUS) and 23mm long linear non-branching fistulous track was delineated in perianal region with external opening at 12 o’clock position in skin and internal opening at 12 o’clock position just proximal to the anal verge. Routine blood and urine examinations were done and found within normal range. There was no previous history of surgery and other illness. Hence the case was diagnosed as Arshobhandara that is Arsha (intero-external piles) at 3, 7 and 9 O’clock position and Bhandara (Anterior low anal fistula-in-ano) at 1 o’clock position. So patient was admitted in Shalya male ward for further management.

Methodology
Pre-operative
Patient was advised nil by mouth from 10:30pm in the previous day of surgery. Written inform consent was taken. The local part of patients was prepared. Proctolysis enema was given in early morning before procedure. Inj. T.T. 0.5cc IM and sensitivity test for inj. Xylocaine 0.1% ID was done.

Operative
In OT under spinal anesthesia, patient was laid down in lithotomy position, draping and painting was done. Four fingers anal dilation was performed by Lord’s procedure. First of all the intero-external pile mass at 3 O’clock was hold by piles holding forceps and transfixation and ligation was done at the base of pile’s pedicle by Ksharashootra. Same procedure was adopted for transfixation and ligation of piles situated at 7 and 9 O’clock position. External opening at 1 O’clock was made patent with probe and methylene blue dye was passed then the dye was came from 12 o clock position through anal canal and simultaneously collected posteriorly up to 4 O’clock position. That collected dye indicates that the cavity of the fistula was big. Probe was passed in posterior direction and laid open the cavity up to the dye was noted. Plain Barbour thread no-20 was applied at 1 O’clock to internal opening at 12 O’clock position (Figure 2). After proper haemostatic achieved the wound was packed with Betadine soaked gauze and T-bandage was applied.

Figure-1: Intero-external piles and external opening at 1 O’clock

Figure-2: Fistulotomy and Barbour linen in tract with Ksharasootra ligated piles

Post-operative
Patient was advised nil orally for six hours with head low position. Intravenous fluid of Ringer Lactate and Dextrose Normal saline one liter each was administered on day first. Liquids allowed after six hours. Injection ceftriaxone 1gm two times, intravenous ornidazole two times and injection diclofenac as per need was given for initial two days. Oral antibiotics and analgesic were continued for further 5 days. Along with this adjuvant medications like sitz bath/Avagaha swedan (warm water + Panchavalkala decoction) was advised for two times a day. 10 ml Jatyadi Taila instillation per rectum daily once, Eranda Bhrashta Haritaki 5 gm at bed time and
**RESULTS**

On post-operative 5th day the \textit{Ksharasootra} was twisted so necrosed piles sloughed out and fresh wound was observed. Dressing with \textit{Panchavalkal} ointment and \textit{mautra busti} by \textit{jatyadi toila} was continued for further 10 days. On the post-operative 11th day anal dilatation was started with anal dilator no. 4 lubricating with \textit{jatyadi ghrita}. On the 15th day wound was observed in healing stage and there was no sphincter spasm (Figure-3). On post-operative 21st day the post fistulotomy wound was healed completely without stricture or any complication. Old \textit{Ksharasootra} was changed on weekly interval by putting new \textit{Ksharasootra} in the fistular tract after applying 2% xylocaine jelly by railroad technique till complete cut through and healing of fistular tract is achieved. The length of \textit{Ksharasootra} thread was recorded to assess progress of cutting and healing on every change. Sitz bath, cleaning with \textit{Panchavaalkala} decoction and dressing with \textit{Panchavalkal} ointment continued along with \textit{Ksharasootra} change. Total 2 months were required for complete cutting and healing of fistular tract (Figure-4). The unit cutting time (UCT) of fistular tract case was 7.5 days per centimeter. Post-operative TRUS report shows 10mm long fibrous scar is seen in perianal region at 12 O’clock position, and no evidence of perianal abscess or Fistula at present. That indicates the fistulous tract and fistulotomy wound was healed complete with normal scar and fibrous tissue.

**DISCUSSION**

In this study, \textit{Ksharsootra} ligation in piles and \textit{Ksharasootra} threading was done in fistulous tract first time under spinal anaesthesia and kept in situ. \textit{Ksharasootra} was dislodged spontaneously after 5 days with necrosed piles. The length of \textit{Ksharasootra} which in fistular tract was noted and found decreased on every change which suggested the cutting of tract. The applied \textit{Kshara} on thread has anti-inflammatory and anti-microbial activity. Alkaline nature of \textit{Kshara} cauterizes dead tissue and facilitates cutting as well as healing. \cite{10} Due to alkaline pH of \textit{Ksharasootra} local infection was under control which helps to healing. The cutting is presumed by local action of \textit{Kshara}, \textit{snuhi} and mechanical pressure of tight \textit{Ksharshootra} knot during initial 1-2 days of its application which followed by healing in rest of the 5-6 days. The turmeric (\textit{Curcuma longa}) powder minimizes reaction of caustics and helped for healing of wound. \cite{11} \textit{Ksharasootra} has combined effect of all three drugs (\textit{Apamarga Kshara, Snuhi ksheera} and \textit{Haridra}) and said to be unique drug formulation for cutting and healing of fistular tract.

\textit{Panchavalkal} decoction and ointment has cleaning and wound healing properties respectively so it helped to kept wound clean and promoted healing. \cite{12,13} \textit{Jatyadi taila} has soothing and healing and \textit{Vatashaman} property which helped in \textit{Vatanuloman}, and healing. \textit{Eranda Bhrashtta Haritaki} helped in regular bowel movement. Hence there is definite role of adjuvant drug in early recovery within two Months. The fistulotomy wound, fistula tact and pile wound was healed completely.

**CONCLUSION**

This single case study revealed that interno-external piles and fistula can be manage by \textit{Ksharsootra} ligation in pile along with \textit{Ksharsootra} threading and fistulotomy in Fistula-in-ano. Post fistulotomy wound healed early with cleaning and dressing with \textit{Panchavalkal} decoction and ointment respectively. As this is a single case study so it required further study in more number of patients.

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**Triphala Guggulu** 500mg thrice in a day was prescribed from next morning.

**Do’s:-** From next day evening patient advised to take diets like green vegetables (spinach, methi, etc), milk, fruits (apple, chikoo, etc), rice, rooti and plenty of water.

**Don’ts:** Patient was advised not to consume non-vegetarian (meat chicken), spicy (excess chilley) and oily food, Junk foods (Pizza, samosa, etc), alcohol. He also advised to avoid long sitting and riding/travelling.

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REFERENCES
7. Sharma PV. Chakradata: Chikitsasthan. Arshachikitsapratkaranadhuyayam. 1\textsuperscript{st} ed., Varanasi: Chowkhambha Publisher., 2007; 87.