

1 **Two stage operative management of horseshoe fistula in ano – A case report**

2 **ABSTRACT:**

3 **Introduction:** Horseshoe fistula in ano presents unique clinical challenges due to its
4 involvement with the sphincter muscle and its intricate configuration. This condition may
5 result in anal sphincter incontinence and higher recurrence rates, making operational care
6 particularly demanding. This case report highlights the successful management of a complex
7 horseshoe fistula, emphasizing the operative strategy to preserve continence while achieving
8 complete healing. **Patient's Main Concerns and Clinical Findings:** The patient, a 30-year-
9 old male, presented to the *Shalyatantra* OPD with complaints of recurrent perianal boils,
10 pain, and pus discharge for one and a half months. Perianal examination revealed multiple
11 external openings bilaterally, and digital rectal examination indicated an internal opening at
12 the 6 o'clock position. Trans-rectal ultrasonography (TRUS) confirmed a horseshoe fistula
13 with a 15–16 cm long branching tract and external openings at 8, 4, and 2 o'clock positions,
14 with the internal opening located 10 mm proximal to the anal verge between 6 and 7 o'clock
15 positions. The case was classified as grade II according to the Pankaj Garg classification.

16 **Primary Diagnosis:** Horseshoe fistula in ano with grade II classification as per Pankaj Garg
17 system. **Interventions: Stage 1:** A patency test and probing were performed to confirm the
18 fistula's path and depth, followed by partial fistulectomy and strategic incisions. A simple
19 Barbour linen thread was used to maintain sphincter integrity and drainage. **Stage 2:** Six
20 weeks post-first-stage surgery, further steps were taken to reduce the number of *Ksharasutras*
21 and size of the wound. Wound management was carried out to promote healing and maintain
22 continence. Weekly changes of *Ksharasutra* were performed using the railroad technique.

23 **Outcomes:** The wound healed completely within nine weeks. Sphincter integrity was
24 preserved, and there was no incidence of incontinence. Minimal scarring was observed.

25 **Conclusion:** This case demonstrates that a structured two-stage operative approach for
26 horseshoe fistula in ano can effectively manage the condition, preserve sphincter function,
27 and minimize recurrence. The use of *Ksharasutra* in combination with staged surgical
28 intervention provides a successful and reliable treatment modality, highlighting the
29 importance of individualized care in complex fistula cases.

30

31 **Keywords:** *Bhagandara*, Horseshoe fistula, Incontinence, *Ksharsutra*, Two stage operation,
32 Case Study

33

34

35 Introduction

36 Fistula-in-ano is a chronic abnormal track lined by granulation tissue. It connects externally to
37 the perianal skin and internally to the anal canal or rectum. According to the crypto glandular
38 theory, fistula in ano is caused by the sudden bursting of an ano-rectal abscess.^[1] The primary
39 etiology of Horse-shoe fistula is an ischio-rectal abscess. Purulent discharge originating from
40 the ischio-rectal spaces passes through the sphincters and spreads towards the anterior and
41 lateral sides, affecting both the ischio-rectal fossa. This track is observed to have a
42 communication pathway located posterior to the anus, resembling the shape of a 'Horse pedal'
43 or a 'Horse-shoe'. In certain instances, two external openings are visible on both sides of the
44 perianal area, whereas the internal opening is located at the posterior midline (6 o'clock
45 position).^[2]

46 Ayurvedic texts extensively discuss this condition as *Bhagandara*. *Bhagandara*
47 (~fistula-in-ano) is considered one of the eight serious diseases, known as *Ashtamahagada*, due
48 to its notorious nature.^[3] The term *Bhagandara* (~fistula-in-ano) literally means *Darana*
49 (~splitting/piercing) around *Guda* (~anus), *Yoni* (~vagina), *Basti* (~urinary bladder). Initially,
50 it resembles a *Pidaka* (~boil), but when it bursts, it becomes manifest as *Bhagandara*
51 (~fistula-in-ano).^[4] Based on the signs and symptoms described in the literature, a horseshoe
52 fistula in ano can be associated with *Parikshepi Bhagandara*.^[5]

53 Conventional surgical treatment of simple fistulas is relatively safe and widely accepted in
54 clinical practice. In cases of complex fistula, treatment modalities include advancement flap
55 techniques, seton application, de-roofing, fistula plug, fistula-tract laser closure and video-
56 assisted anal fistula treatment. The ultimate aim of such treatment is complete eradication of
57 fistulous tract, should not compromise with the anal sphincters and prevention of recurrence.
58 Horseshoe fistula is complex due to sphincter involvement, operative surgery might lead to
59 compromised function of sphincter muscle. As the wound is placed in the anal area, it is more
60 prone to infection, hence takes considerable time to heal and the condition remains
61 troublesome. An operational technique often leads to problems such as recurrences and fecal
62 incontinence.^[6] Despite above mentioned multiple treatment approaches, seton application
63 has been widely accepted as it helps in slowly diving the tract and sphincter muscle by
64 preventing retraction of sphincter ends through its sphincter saving approach.^[7] In Ayurveda,
65 seton has been replaced through '*Ksharasutra*' application which act as seton along with
66 additional chemical actions locally. It is simple, minimally invasive, debride the unhealthy
67 tissue in the track and also helps in preservation of surrounding healthy tissues.^[8]

68 *Ksharasutra*, a cotton thread covered with the latex of *Snuhi* (*Euphorbia nerifolia* Linn.),
69 powder of turmeric (*Curcuma longa* Linn.), and *Apamarga Kshara* (alkaline powder of
70 *Achyranthes aspera* Linn). A study has been done in a large number of patients and
71 established the treatment as an effective, ambulatory, and safer alternative treatment for
72 patients with fistula in ano. ^[9] The effectiveness studies reported total recurrence rate of
73 5.88%. ^[10]

74 The Indian Council of Medical Research (ICMR) had validated this therapy and emphasized
75 that *Ksharasutra* is better than the conventional surgery in fistula in ano. ^[11] Every therapy
76 has its own limits. Application of *Ksharasutra* in cases with complex, posterior horseshoe
77 fistula when the length of track is approximately 15 – 16 cm is not only challenging in
78 discovering appropriate route of track but also entire therapy takes very much time to heal as
79 well. Hence, this type of situation can be treated with combination technique of surgery and
80 *Ksharasutra*.

81 In light of the aforementioned information, this study was designed to address the challenges
82 encountered in managing *Bhagandara*. The study utilized a combination of the traditional
83 *Ksharasutra* technique and a two-stage surgical method to effectively manage complex
84 posterior horseshoe-shaped fistula-in-ano.

85

86 **Patient Information**

87 A 30 year old male patient came to the outpatient department (OPD) of *Shalya Tantra*, with
88 complaints of multiple boils with pus discharge in perianal region and throbbing pain in ano
89 since 1.5 year. The patient was a cook by profession and does not have a history of any
90 addiction. Vitals were normal. He was incidentally diagnosed Type 2 diabetes mellitus during
91 pre op investigation and started Metformin 500mg once daily under prescription by
92 physician. No significant family and psychosocial history were found.

93

94 **Clinical Findings**

95 Peri-Anal Examination: On inspection, multiple external openings were noted on the perianal
96 region. Two external openings on the left side, one at 2 o'clock and second at 4 o'clock
97 position and a third external opening on the right side at 7 o'clock position. On palpation,
98 there was marked induration associated with tenderness in the course of tract involving post
99 anal space. On digital examination, internal opening was felt at 6 o'clock position and one
100 papilla was found at 9 o'clock position. On proctoscopic examination, internal opening was
101 seen at 6 o'clock and papilla at 9 o'clock.

102 Timeline

103 Timeline of the present case is depicted in table 1, table 2 and table 3.

104

105 Diagnostic Assessment

106 Investigations: Hematological, biochemical and urine investigations including bleeding time,
107 clotting time, blood count, blood urea, serum creatinine, random blood sugar, post prandial
108 blood sugar, HIV, HbsAg, VDRL, HCV and urine routine were done, PPBS was raised that
109 was 260 mg/dl, rest investigations were within normal limits. Patient was advised for Trans-
110 rectal-ultra-sonography (TRUS). TRUS showed 15 to 16 cm long horse-shoe shaped
111 branching fistula in perianal region with three external openings at 8 o' clock, 4 o' clock & 20'
112 clock positions & internal opening between 6 to 7 o'clock positions. Internal opening was 10
113 mm proximal to anal verge. Maximum width of the fistula was 7 mm. Maximum depth of the
114 fistula was 16 mm. Hence, based on clinical observations and TRUS, the case was diagnosed
115 as complex, trans-sphincteric and posterior horseshoe fistula in ano [Figure 1 and Figure 2].

116

117 Therapeutic Intervention

118 It is Two-stage surgery for horse-shoe fistula-in-ano.

119

120 Pre-Operative Procedure: After all routine investigation, physician's reference was taken.
121 Prior informed written consent was taken, xylocaine sensitivity test was done with Inj.
122 xylocaine 2% ID [1 ml diluted in 10 ml distilled water] and prophylactic dose of tetanus was
123 given through IM route. Part preparation was done. Proctolysis enema was given and patient
124 was advised nil by mouth (NBM) 12 hour before operation.

125

126 Operative Procedure: Pre and post-operative measures were adopted as per standard surgical
127 procedures. ^[12] After obtaining written informed consent, under aseptic precautions, spinal
128 anesthesia was given. Patient was made to lie in lithotomy position. Painting was done with
129 aseptic and antiseptic solution followed by sterile draping [Figure 3]. Patency test was done
130 from external opening at 7 o'clock to know the depth and direction of the track with betadine
131 and H₂O₂ solution which came out from internal opening at 6 o'clock. After identifying the
132 course of the track, probing was done from 7 o'clock and probe came out from internal
133 opening at 6 o'clock. Once the fistula tract was identified, incision was taken as a "T" portion
134 of the fistula tract within the deep post anal space and partial fistulectomy was carried out
135 through the posterior sphincter complex to the primary internal opening at 6 o'clock and

136 window was created at deep post anal space for draining of both the tracks. Simple plain
137 Barbour linen thread was kept to partial fistulectomy wound of the primary tract from 6
138 o'clock internal opening to window created at deep post anal space (internal to external track)
139 [Figure 4]. The simple plain Barbour linen thread allowed preservation of the external and
140 distal internal sphincter muscles overlying the primary fistula tract. Later the lateral
141 secondary openings at 7 and 5 o'clock were enlarged to allow curettage and adequate
142 drainage after performing an internal sphincterotomy over the primary fistula tract while
143 leaving sphincter complex intact may provide adequate eradication of the fistula while
144 preserving continence.

145 Again same simple plain Barbour linen thread was kept from external 7 o'clock to internal 6
146 o'clock (external to internal track). Then after probing was done from external opening at 5
147 o'clock, which came out from window at deep post anal space below 6 o'clock. Simple plain
148 Barbour linen thread was kept here, from 5 o'clock to window at deep post anal space below 6
149 o'clock (external to external track). Then syringing or patency test was done from 2 o'clock
150 external opening that collected in periphery. Probing was done from 2 o'clock to 5 o'clock.
151 Simple plain Barbour linen thread was kept from 2 o'clock to 5 o'clock (external to external
152 track). [Figure 4]. After identifying the course of all tracks, those were laid open, drained, and
153 high anal extension were scooped. Complete hemostasis was achieved. Sterile dressing was
154 done. 6 o'clock window was packed with sterile abgel. Patient was shifted to recovery room
155 with stable vitals.

156 Daily aseptic dressing with *Panchavalkala* ointment was performed. Patient was advised to
157 change *Apamarga Ksharasutra* after every 7 days. Then after 3 post op weeks, *Ksharasutra*
158 (external to external - at 2 to 5 o'clock) was removed [Figure 7].

159 After six weeks, the patient was again taken in the lithotomy position. After achieving
160 appropriate anesthesia, remaining space between partial fistulectomy wound (5 o'clock) to
161 window at deep post anal space (below 6 o'clock) was opened. Then *Apamarga Ksharasutra*
162 was replaced and tightened from 6 o'clock (internal opening) to below 6 o'clock window
163 [Figure 8]. Remaining wounds were packed with tight bandages.

164

165 Post-Operative Procedure: Daily aseptic dressing with *Thumari* ointment, *Avagaha* (~sitz
166 bath) with *Panchavalkala Kwatha* twice in a day, in morning after defecation and in the
167 evening were advocated. *Kanchanara Guggulu* 2 tablets (500 mg each) thrice in a day,
168 *Varunadi Kwatha* (20 ml) twice daily before meal, *Isabgol* husk (5 gm) at morning with
169 water were prescribed along with using of diclofenac sodium (SOS) if pain is complained.

170 The patient was assessed weekly for postoperative pain, discharge, and wound healing.
171 *Ksharasutra* were changed weekly by rail-road method and were tightened progressively to
172 cut through the track naturally. The patient was advised not to consume non vegetarian, spicy
173 - oily food, junk food, and alcohol. The patient was advised to avoid long sitting and riding or
174 travelling for the next one year. Complete recovery of the wound took place in about nine
175 weeks' time.

176

177 **Follow-Up and Outcome**

178 After nine weeks of treatment, all *Ksharasutra* were cut through and wounds were healed
179 completely with local application of *Ayurveda* formulations. [Figure 10]. The patient was
180 followed up for the next six months and no signs of recurrence or complications were noted.

181

182 **Discussion**

183 *Acharya Sushruta* advocated different treatment modalities to treat *Bhagandara* (~fistula-in-
184 ano) according to different types of *Dosha*. *Acharya Sushruta* mentioned that all types of
185 *Bhangadara* are difficult to treat.^[13] In modern surgery also, it is known for its callus nature
186 to cure and for its high recurrence rate with treatment like fistulotomy & fistulectomy. There
187 are different modalities available for fistula but horse shoe fistula is difficult due to high
188 recurrence rate. The ICMR (Indian Council of Medical Research) has been studied on
189 *Ksharasutra* in fistula-in-ano and concluded better than conventional
190 fistulectomy/fistulotomy with minimum recurrence rate.^[14]

191 This case is a posterior horseshoe-shaped fistula-in-ano having multiple openings on both
192 perianal region. Two external openings on the left side and a third external opening on the
193 right side involving both ischio-rectal fossae, with associated tenderness and marked
194 induration. Internal opening was in anal canal, midline posteriorly at 6 o'clock with the
195 length of both the track approximately 15 to 16 cm. The case was complex as there were
196 involvement of both internal and external sphincters. Although MRI is a gold standard
197 investigation in such kind of complex fistula to know the exact extension of tracks,^[15] TRUS
198 was advised as it is being a relevant, cost-effective investigation to diagnose and to assess the
199 result of surgery.^[16] These clinical findings were also supported by TRUS. As the case was
200 complex, surgical management was planned in two stages.^[17]

201 Horseshoe fistula is considered complex when it penetrates the conjoint longitudinal muscle
202 at posterior midline and extend upto deep post anal space. The management of this complex
203 horse shoe fistula is focused on adequate drainage of deep post anal space and to manage

204 cryptoglandular infection former and cutting the fistula track with preservation of sphincter to
205 heal the wound later. Garg grade I–II are simple fistulas and can be safely managed by
206 fistulotomy without any risk to continence whereas Garg grade III–V are complex fistulas
207 and fistulotomy should not be even attempted in these fistulas. ^[18]

208 This case was treated in two stages. Benefit of two stage surgery is that, it requires less
209 hospital stay. The patient can be ambulatory after 6 hours of surgery and postoperative
210 wound can will be less. Thus, daily routine of the patient can not hamper, and the patient can
211 live his normal social life as postoperative pain can also be minimal.

212 In this case study, an incision was made below 6 o'clock in deep post anal space to drain the
213 pus from both the lateral wings of fistula tract and partial fistulectomy were done in all 3
214 external openings. Once the pus was completely drained, further efforts were made towards
215 simultaneous cutting and healing of fistulous tract using *Ksharasutra* therapy. As
216 *Ksharasutra* were placed in the track, it cauterizes the unhealthy granulation tissue and drains
217 the debris from the track, which induces early healing by providing healthy environment for
218 the wound healing. *Ksharasutra* has cutting and draining properties. It also prevents damage
219 to the sphincter and treats the crypto glandular infection which leads to speedy recovery of
220 the disease. ^[19] *Ksharasutra* were changed after every week. The length of *Ksharasutra* were
221 noted and found decreased on every change which suggested the cutting of tract. The applied
222 *Kshara* on thread acts as anti-inflammatory and antimicrobial activity and renders chemical
223 cauterization of tissue by virtue of its alkaline nature which facilitates cutting and healing. ^[20]

224 After fistula surgery wound healing takes few weeks to months to heal completely due to
225 contamination of wound with feces and also due to chronic lifestyle disorders such as
226 diabetes, this may be contributing factor for occurrence of surgical wound dehiscence.
227 Careful postoperative care may improve wound healing and decrease the chance of
228 recurrence. To overcome this adverse effect, *Thumari Malahara* was used for post op
229 dressing of wound *Thumari* known as *Securinega Leucopyrus* is a potential drug for wound
230 healing. ^[21]

231 Internal medicines like *Kanchanara Guggulu* and *Varunadi Kwatha* were given. *Kanchanara*
232 *Guggulu* possess properties like *Deepana*, *Pachana*, *Vatta-Kaphashamaka*, *Shoth-hara*,
233 *Lekhana*, *Bhedana*, *shothhara*. ^[22] *Isabgol* is a bulking agent which has important role in
234 improving hygiene and decreasing discomfort with bowel movements. ^[23]

235 After 9 weeks of treatment, tracks were healed completely and post treatment, no evidence of
236 peri-anal abscess or fistula was observed. The patient was followed up for the next six

237 months after treatment and no signs of recurrence or complications were noticed, which
238 indicates efficacy of the treatment.

239

240 **Conclusion:**

241 This case concluded that two-staged surgical approach along with *Ksharasutra* was effective
242 as it helped in cutting and healing of fistulous track simultaneously with reduced bleeding,
243 minimal pain and scar with no fecal incontinence. There are lesser chances of infection and
244 postoperative complications using this technique. This treatment is good alternative for
245 management of fistula-in-ano and offers the patient a better quality of life.

246

247 **Limitation:**

248 It is difficult to conclude that two-staged surgical approach along with *Ksharasutra* will
249 always be beneficial for complex, posterior, trans-sphincteric, horseshoe-shaped fistula-in-
250 ano or not as it need further study in more number of cases.

251

252 **Patient Perspective:**

253 I feel better following the operations, having no pain and pus discharge currently. Now I'm
254 able to do my work without any discomfort. I am totally satisfied with this treatment.

255

256 **Informed Consent:**

257 It was taken from the patient before starting of the treatment protocol as well as prior to
258 publication of the case details and pictures

259

260 **Financial Support and Sponsorship: Nil.**

261

262 **Conflicts of Interest:** There are no conflicts of interest.

263

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312 **Table 1: Treatment during the IPD admission.**

Date	Day	Events	Details
August 21, 2023	Day 0	OPD visit	Patient visited for the first time in OPD. Following assessment, he was recommended for admission for additional evaluation and care.
August 22, 2023	Day 1	Laboratory investigations	Haematological, biochemical, serology, urine routine & microscopic, X-ray chest (PA), USG (abdo-pelvis), ECG and TRUS were done.
August 25, 2023	Day 4	First surgery (partial fistulectomy with window technique) was performed.	Partial fistulectomy with window technique was done under spinal anaesthesia in operation theatre.
September 14, 2023	Day 24	<i>Ksharasutra</i> was removed	<i>Ksharasutra</i> (external to external - at 2 to 5 o'clock) was removed
October 6, 2023	Day 40	Post-operative 6 th week Second surgery was performed.	Lay open and shortening of fistulous tract
August 27, 2023 - October 11, 2023	Day 6 – Day 45	<i>Ksharasutra</i> change	<i>Ksharasutra</i> was changed on every 7 th day till complete cutting of the fistula track
August 27, 2023 - October 11, 2023	Day 6 – Day 45	Dressing	Cleaning of wound was done with <i>Panchavalkala Kwatha</i> , Dressing was done with <i>Thumari</i> ointment.
October 11, 2023	Day 45	Discharge of patient	The patient was instructed to attend weekly OPD visits.

313

314 **Table 2: Treatment for 16 days after discharge**

Date	Day	Events	Details
October 11, 2023 - October 20, 2023	Day 45 – Day 54	<i>Ksharasutra</i> change	<i>Ksharasutra</i> was changed on every 7 th day till complete cutting of the fistula track
October 11, 2023 - October 27, 2023	Day 45 – Day 61	Dressing	Cleaning of wound was done with <i>Panchavalkala Kwatha</i> , Dressing was done with <i>Thumari</i> ointment.

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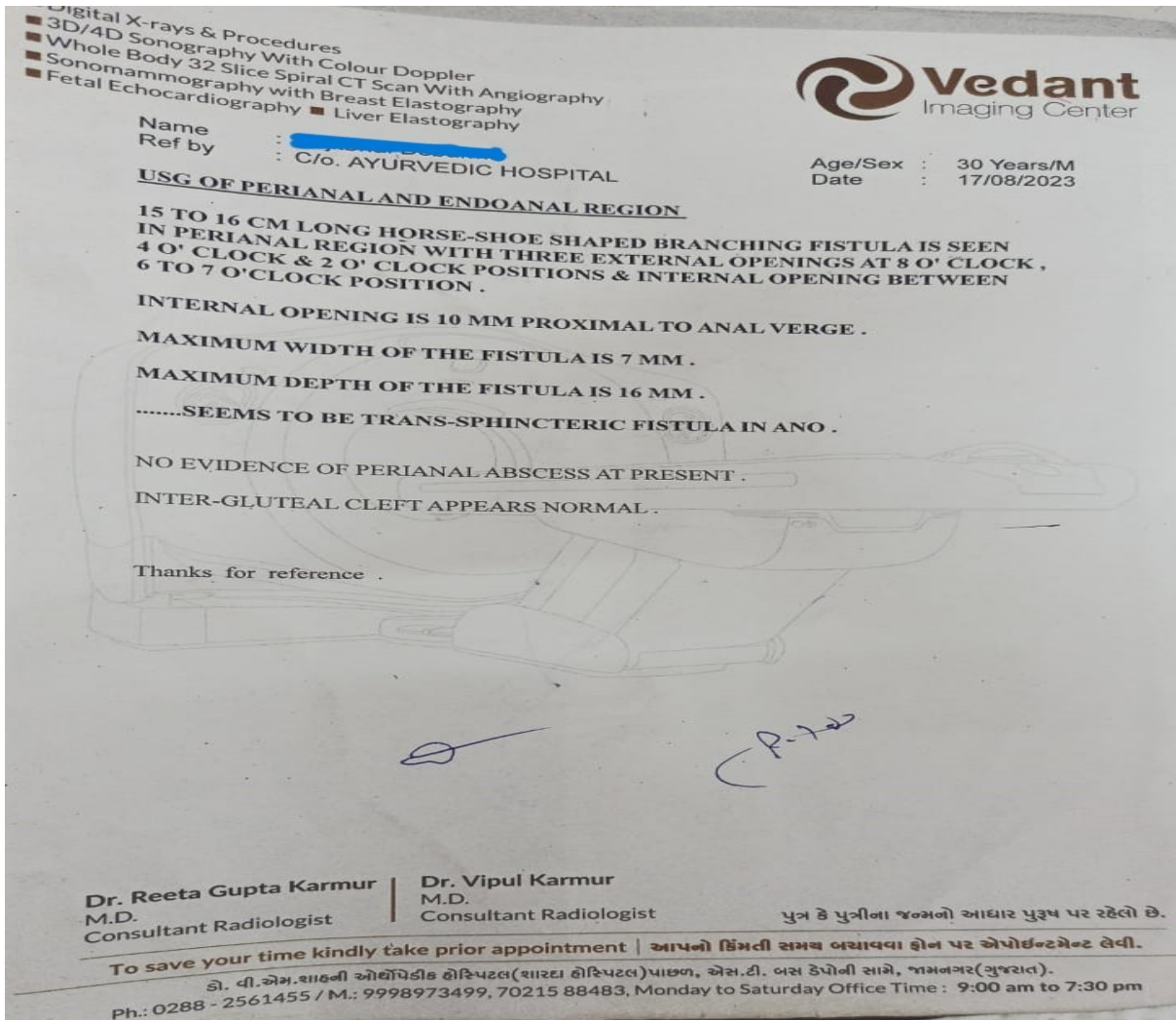
316 **Table 3: Internal medication during the IPD admission and for 30 days after discharge**

S.N.	Duration	Drug	Dose, frequency	Anupana	Time
1	August 27, 2023 – November 10, 2023	<i>Panchavalkala Kwatha</i> for <i>Avagaha Sweda</i>	Twice daily	-	After defecation
2	August 27, 2023 – November 10, 2023	<i>Kanchanara Guggulu</i>	500 mg, two tablets thrice daily, orally	Lukewarm water	After meal
3	August 27, 2023 – November 10, 2023	<i>Varunadi Kwatha</i>	20 ml, twice daily, orally	Lukewarm water	Before meal
4	August 27, 2023 – November 10, 2023	<i>Isabgol</i> husk	5 gm, once, orally	Lukewarm water	Before meal at morning
5	August 27, 2023 – November 10, 2023	T. Matformin HCL	500mg, one tablet, once daily, orally	Normal water	After meal

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318

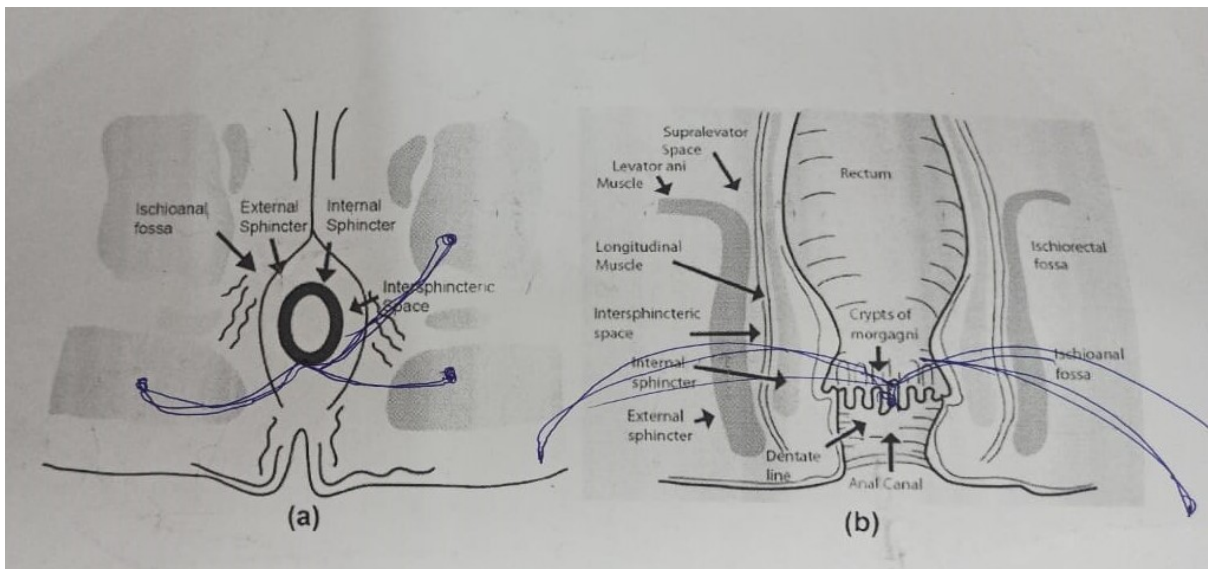
319 **Figure 1: Trans Rectal Ultra Sonography – TRUS Report**



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322 **Figure 2: Trans Rectal Ultra Sonography – TRUS Diagram**



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324 **Figure 3: Pre OP**



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327 **Figure 4: Post OP**



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330 **Figure 5: Post OP Day 5**



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333 **Figure 6: Post OP Day 14**



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335

336 **Figure 7: Post OP Day 24**



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338

339 **Figure 8: Second Sitting Post OP Day 40**



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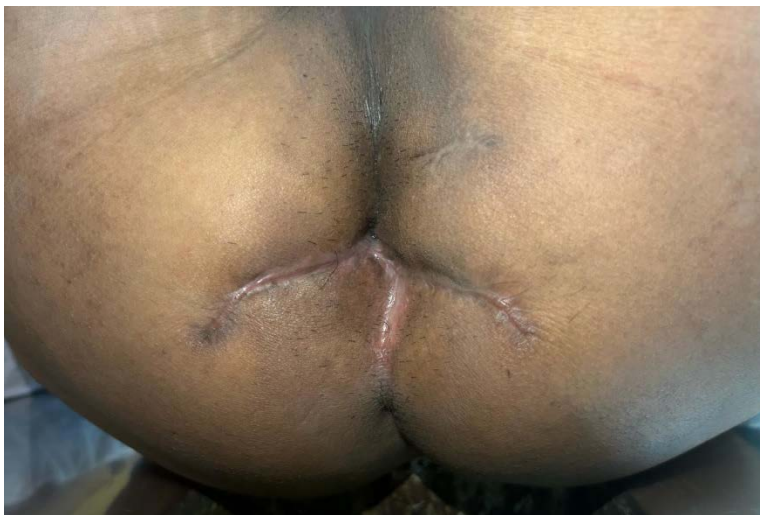
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342 **Figure 9: Post OP Day 52**



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345 **Figure 10: Complete Healing Post OP Day 63**

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हिंदीसारांश

354

गुदा क्षेत्र में हॉर्सशू फिस्टुला की दो-चरणीय शल्य चिकित्सा - एक केस रिपोर्ट

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परिचय: गुदा में हॉर्सशू फिस्टुला स्फिक्टर मांसपेशी और इसके जटिल विन्यास के साथ अपनी भागीदारी के कारण अद्वितीय नैदानिक चुनौतियां प्रस्तुत करता है। इस स्थिति के परिणामस्वरूप गुदा स्फिक्टर असंयम और उच्च पुनरावृत्ति दर हो सकती है, जिससे परिचालन देखभाल विशेष रूप से मांग वाली हो जाती है। यह केस रिपोर्ट एक जटिल हॉर्सशू फिस्टुला के सफल प्रबंधन पर प्रकाश डालती है, जिसमें पूर्ण उपचार प्राप्त करते हुए संयम को बनाए रखने के लिए ऑपरेटिव रणनीति पर जोर दिया गया

359 है।रोगी की मुख्य चिंताएँ और नैदानिक निष्कर्ष:रोगी, एक 30 वर्षीय पुरुष, डेढ़ महीने से बारबारउत्पन्नहोते पेरिएनल फोड़े, दर्द
 360 और मवाद निर्वहन की शिकायतों के साथ शल्यतंत्र ओपीडी में आया था। पेरिएनल परीक्षा में द्विपक्षीय रूप से कई बाहरी द्वार
 361 का पता चला, और डिजिटल रेक्टल परीक्षा ने 6 बजे की स्थिति में एक आंतरिक द्वार का संकेत दिया। ट्रांस-रेक्टल अल्ट्रासाउंड
 362 (TRUS) ने 15-16 सेमी लंबे ब्रांचिंग ट्रैक्ट और 8, 4 और 2 बजे की स्थिति में बाहरी द्वार के साथ एक घोड़े की नाल के आकार के
 363 फिस्टुला की पुष्टि की, जिसमें आंतरिक द्वार6 और 7 बजे की स्थिति के बीच गुदा के किनारे से 10 मिमी समीपस्थ स्थित था।
 364 पंकज गर्ग वर्गीकरण के अनुसार मामले को ग्रेड II के रूप में वर्गीकृत किया गया था।प्राथमिक निदान: पंकज गर्ग प्रणाली के
 365 अनुसार ग्रेड II वर्गीकरण के साथ गुदा में हॉर्सशू फिस्टुलाप्राथमिकनिदानकियागया।चिकित्साविधि: चरण 1: फिस्टुला के मार्ग
 366 और गहराई की पुष्टि करने के लिए एक पेटेंसी टेस्ट और जांच की गई, उसके बाद आंशिक फिस्टुलेक्टोमी और रणनीतिक चीरे
 367 लगाए गए। सिंक्टर की अखंडता और स्राव निकासी को बनाए रखने के लिए एक साधारण बारबोर लिनन धागे का उपयोग
 368 किया गया। चरण 2: पहले चरण की सर्जरी के छह सप्ताह बाद, क्षारसूत्रों की संख्या और घाव के आकार को कम करने के लिए
 369 आगे के कदम उठाए गए। घाव को ठीक करने और संयम बनाए रखने के लिए घाव प्रबंधन किया गया। रेलरोड तकनीक का
 370 उपयोग करके क्षारसूत्र के साप्ताहिक परिवर्तन किए गए।परिणाम: घाव नौ सप्ताह के भीतर पूरी तरह से ठीक हो गया। सिंक्टर
 371 अखंडता संरक्षित थी, और असंयम की कोई घटना नहीं हुई। न्यूनतम निशान देखे गए।निष्कर्ष: यह केस दर्शाता है कि एनो में
 372 हॉर्सशू फिस्टुला के लिए एक संरचित दो-चरणीय ऑपरेटिव दृष्टिकोण प्रभावी रूप से स्थिति का प्रबंधन कर सकता है, सिंक्टर
 373 फंक्शन को संरक्षित कर सकता है, और पुनरावृत्ति को कम कर सकता है। चरणबद्ध सर्जिकल हस्तक्षेप के साथ क्षारसूत्र का उपयोग
 374 एक सफल और विश्वसनीय उपचार पद्धति प्रदान करता है, जो जटिल फिस्टुला मामलों में व्यक्तिगत देखभाल के महत्व को
 375 उजागर करता है।