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Guggulu-Coated *Chitrak Kshara Sutra* Ligation in the Management of 2nd Degree Internal Haemorrhoids: A Case Report

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Abstract: Background: Arsha (haemorrhoids) is one of the most prevalent anorectal conditions encountered in clinical practice, significantly affecting quality of life. Despite multiple available treatment modalities, a universally satisfactory approach remains elusive. Case Presentation: A 40-year-old male presented with bleeding per rectum, prolapsed pile mass at 3 and 7 o'clock positions (2nd degree), mild mucous discharge, and constipation of 2 years duration. Guggulu-coated Chitrak Kshara Sutra ligation was performed under local anaesthesia. Outcome: Complete sloughing and falling of the pile mass occurred by Day 7. Bleeding ceased by Day 1 post-procedure. Pain was well-managed and resolved by Day 28. The patient remained symptom-free at 60-day follow-up. Conclusion: Guggulu-coated Chitrak Kshara Sutra ligation is a safe, effective, minimally invasive, and cost-efficient treatment for 2nd degree internal Arsha with no major complications.
Keywords: Arsha, Haemorrhoids, Kshara Sutra, Guggulu, Chitrak, Shalya Tantra, Ayurvedic Surgery, Minimally Invasive

I. INTRODUCTION

In today's fast-changing world, Ayurveda remains highly relevant by supporting modern healthcare systems while maintaining its traditional principles and authenticity. The growing prevalence of lifestyle-related disorders is impacting large segments of the population, giving rise to various pathological conditions that significantly impair quality of life. Among these, anorectal diseases such as *Arsha* (hemorrhoids), *Parikartika* (anal fissure), and *Bhagandara* (fistula-in-ano) are frequently observed clinical conditions.

Arsha (hemorrhoids) are defined by the dilatation of veins in the subepithelial region of the anal canal, formed by the tributaries of the superior, middle, and inferior rectal veins. Commonly regarded as varicosities of the anus and rectum, this condition is prevalent and largely influenced by lifestyle factors, with its incidence increasing with age [1]. Despite the availability of various treatment modalities, a completely definitive and universally satisfactory therapy is still being explored in medical practice. *Aacharya Sushruta* has outlined four approaches for the treatment of *Arsha*: *Bheshaja* (medicinal management), *Kshara* (chemical cauterization), *Agni* (thermal cauterization), and *Shastra* (surgical management) [2]. Among these, *Kshara Sutra*—a medicated thread prepared from herbal ingredients—is extensively used because of its simplicity, affordability, and effective therapeutic results. The procedure offers advantages such as minimal bleeding, no risk of incontinence, and eliminates the need for hospitalization or extended bed rest.

Kshara Sutra therapy offers several advantages, including its minimally invasive nature and the convenience of being performed under local anesthesia. It facilitates rapid wound healing and lowers the chances of infection due to its alkaline property (pH approximately 9.5), which produces a localized antibacterial action at the ligation site. The *Guggulu*-coated *Chitrak Kshara Sutra* is prepared by applying 11 coatings of *Guggulu* resin (Commiphora mukul), followed by 7 coatings of *Guggulu* resin combined with *Chitrak Kshara* (Plumbago zeylanica), and finally 3 coatings of *Guggulu* resin mixed with *Haridra Churna* (Curcuma longa). The pH of this *Guggulu*-coated *Chitrak Kshara Sutra* is approximately 9.5.

In the present case study, *Guggulu*-coated *Chitrak Kshara Sutra* ligation was carried out in a 40-year-old male patient diagnosed with *Arsha* at the 3 and 7 o'clock positions, presenting with prolapse, bleeding, and mild mucous discharge. *Acharya Sushruta*, regarded as the father of surgery, described the treatment of such conditions using *Kshara Karma* and *Agni Karma* techniques[3]. The outcomes confirmed that *Kshara Sutra* therapy was effective, cost-efficient, and easily administered without disrupting the patient's daily activities.

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II. MATERIALS AND METHODS

A. Study Design

In the present study, *Guggulu*-coated *Chitrak Kshara Sutra* was prepared and evaluated clinically on patients of *Arsha Roga.*

B. Place of Study

Shalya Tantra OPD and IPD, Sanjeevani Hospital, DSRRAU, Jodhpur, Rajasthan, India.

C. Selection of the Patient

Patients suffering from *Arsha* were selected randomly after obtaining written informed consent. Selected cases involved internal haemorrhoids.

D. Inclusion Criteria

- Patients having classical symptoms of 2nd degree hemorrhoids.
- Patients between the age group of 18–60 years of either gender, irrespective of religion, occupation, or socioeconomic status.
- Patients diagnosed with 3rd and 4th degree internal haemorrhoids.

E. Exclusion Criteria

- Patients with haemorrhoids secondary to inflammatory diseases like Ulcerative Colitis, Crohn's Disease, or Cirrhosis of the Liver.
- Haemorrhoids associated with Fissure-in-Ano, Fistula-in-Ano, anal stricture, perianal abscess, malignancy, or polyps.
- Patients with HIV, Tuberculosis, carcinoma of the rectum, Hepatitis A, or Hepatitis B.
- Pregnant women.

III. CASE REPORT

A 40-year-old male patient presented to the Outpatient Department of the PG Department of *Shalya Tantra*, Sanjeevani Hospital, DSRRAU, Jodhpur, with the following chief complaints:

- Bleeding per rectum — since 2 years
- Mass protruding per rectum — since 2 years
- Mild mucous discharge — since 2 years
- Constipation — since 2 years

A. History

Past Illness: No significant past medical history
Surgical History: No prior surgical procedures
Family History: All family members are healthy with no history of any serious illness

General Examination

Parameter	Finding	Status
Blood Pressure	120/80 mmHg	Normal
Pulse Rate	75/min	Normal
Height	162 cm	—
Temperature	97.6°F	Normal
Respiratory Rate	17/min	Normal
Tongue	Coated (*Malavrit*)	Abnormal

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Pallor	Absent	Normal
Icterus	Absent	Normal
Clubbing	Absent	Normal
Oedema	Absent	Normal
Lymphadenopathy	Absent	Normal

Astha Vidha Pariksha (Eight-Fold Examination)

Pariksha (Examination)	Finding
Nadi (Pulse)	75/min
Mala (Bowel frequency)	1 time/day
Mutra (Urine frequency)	4–5 times/day
Jihva (Tongue)	*Malavrit* (Coated)
Shabda (Voice)	*Samanya* (Normal)
Sparsha (Touch/Skin texture)	*Samanya* (Normal)
Drika (Eyes)	*Samanya* (Normal)
Akriti (Build)	*Madhyama* (Medium)

Personal History

Parameter	Details
Diet	Mixed
Appetite	Normal
Thirst	5–6 times/day
Micturition	3–4 times/day; 1 time/night
Sleep	Disturbed
Marital Status	Married
Addiction	None

Table 1: Local Examination

Category	Parameter	Finding
A. Inspection	External pile mass	Absent
	Discharge	Present
B.Digital Examination	Tonicity	Normal

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	Tenderness	Allowing to palpate
C.Proctoscopic Examination	Number of pile masses	02
	Degree of pile mass	2nd Degree
	Position of pile mass	3 o'clock and 7 o'clock
	Bleeding of pile mass	Present
D.*Prashna Pareeksha*	Pain	Absent
	Bleeding	Present
	Mass	Present

Table 2: Laboratory Investigations

Investigation	Result
Haemoglobin	13.5 gm/dl
Total Count (WBC)	8,570 cells/cumm
Neutrophils	70%
Lymphocytes	23%
Eosinophils	2%
Monocytes	5%
HIV	Non-Reactive
HBsAg	Negative
VDRL	Negative
Bleeding Time	2 min 15 sec
Clotting Time	4 min 59 sec
Random Blood Sugar (RBS)	105 mg/dl

IV. METHOD OF *GUGGULU*-COATED *CHITRAK KSHARA SUTRA* APPLICATION

A. *Materials Used*

- Proctoscope
- Anaesthetic gel (Lignocaine 2%)
- Local anaesthetic drug (Inj. Lignocaine 2%), syringe with needle
- Betadine (Povidone Iodine) solution, surgical spirit
- *Jatyadi Taila*
- Sponge holding forceps, needle holding forceps, Alli's tissue holding forceps
- Pile holding forceps, scissors, mosquito forceps
- Kidney tray, towel clips, cut and hole towels
- Sterilized cotton pad, gauze, adhesive plaster
- *Guggulu*-coated *Chitrak*[4] *Kshara Sutra* (pH ≈ 9.5)

B. Pre-Operative Procedure

- Written informed consent of the patient was obtained.
- The perianal area was shaved and prepared.
- Soap water enema was administered 2 hours prior to the procedure.

C. Operative Procedure

- Patient was positioned in the lithotomy position.
- The operative field was cleaned with betadine and spirit and draped with sterilized cut-and-hole towels.
- Local anaesthesia (Inj. Lignocaine 2%) was administered.
- Anus was dilated with two fingers using local anaesthetic gel.
- Positions of pile masses were assessed using a proctoscope.
- The skin was retracted with Alli's tissue holding forceps to expose the pile mass.
- The pile mass was grasped with pile-holding forceps.
- Each pile mass was transfixed by passing a curved round-body needle mounted with *Guggulu*-coated *Chitrak Kshara Sutra*[5] at its base, followed by ligation with adequate knots.
- Packing was done using *Jatyadi Taila*.
- The patient was shifted to the recovery room.

D. Post-Operative Care

- Vital signs (BP, temperature, pulse, respiratory rate) were monitored continuously.
- Packing was removed after 7–8 hours.
- Hot water sitz bath: 10–15 minutes twice daily.
- *Jatyadi Taila Pichu* applied per anus twice daily.
- Tab. *Triphala Guggulu*[6] — 2 tablets (250 mg) twice a day after food.
- Tab. *Kankayan Vati* — 2 tablets (125 mg) twice a day after food.
- *Triphala Churna* — 2 teaspoons with warm water at bedtime.
- Analgesic: Tab. Diclofenac Sodium 50 mg twice daily for 5 days.
- Antibiotic: Tab. Ofloxacin 200 mg with Ornidazole 500 mg twice daily for 5 days.

E. Follow-Up Schedule

The patient was assessed at the following time points: Day 3, Day 5, Day 7, Day 14, Day 21, Day 28, Day 45, and Day 60. The primary observation period was 28 days with extended follow-up at Day 45 and Day 60.

V. ASSESSMENT CRITERIA

Patients were assessed using both subjective and objective parameters before and after treatment.

1) Subjective Parameters

- *Ruja* (Pain) — assessed using a 0–10 numeric pain scale
- *Srava* (Discharge per rectum)
- Bleeding per rectum

2) Objective Parameter

- Sloughing and falling of pile mass

Table 3: Pain Grading Scale

Description	Grade
No pain	0
Mild pain	1–3
Moderate pain	4–6

Severe pain	7–9
Worst possible pain	10

Table 4: Bleeding Grading Scale

Description	Grade
No bleeding	0
Stains of blood along with stool and after defecation	1
Dripping of blood along with stool and after defecation	2
Profuse bleeding along with stool and after defecation	3

Table 5: Pile Mass Assessment Scale

Presence of Pile Mass	Grade
Absent	0
Present	1

Table 6: Subjective Response — Post-Operative Assessment

Sl.	Lakshana	BT	D1	D3	D5	D7	D14	D21	D45	D60
1	Pain (*Ruja*)	0	—	—	—	4	2	1	0	0
2	Bleeding (*Srava*)	3	0	0	0	0	0	0	0	0
3	Discharge	Present	Present	Present	Present	Nil	Nil	Nil	Nil	Nil

BT = Before Treatment; D = Post-Operative Day; — = data not recorded at this time point

Table 7: Objective Response — Sloughing and Falling of Pile Mass

Sl.	Parameter	BT	D1	D3	D5	D7	D14	D21	D45	D60
1	Sloughing & Falling of Pile Mass	0	1	1	1	0	0	0	0	0

0 = Absent; 1 = Present (sloughing in process)



Fig-1 2nd degree Internal Hemorrhoid



Fig-2 on 5th Post-operative Day



Fig-3 On 14th post-operative Day

VI. DISCUSSION

The present case study demonstrates the clinical utility of *Guggulu*-coated *Chitrak Kshara Sutra* in managing 2nd degree internal *Arsha*. The patient showed significant improvement in all assessed parameters within the 28-day observation period. The complete cessation of bleeding on Day 1 post-procedure and the resolution of the pile mass sloughing by Day 7 are consistent with findings reported in existing literature on *Kshara Sutra* therapy.

The alkaline pH of the *Kshara Sutra* (approximately 9.5) exerts its therapeutic action through chemical cauterisation, cutting, and antibacterial effects. The inclusion of *Guggulu* (Commiphora mukul) as the binding medium adds anti-inflammatory and wound-healing properties, while *Chitrak Kshara* (Plumbago zeylanica) provides the active *kshara* (alkaline) action. *Haridra Churna* (Curcuma longa) in the final coating layers contributes its well-documented anti-inflammatory, antibacterial, and tissue-healing effects.

The pain score peaked at Grade 4 on Day 7, corresponding to the active sloughing phase, and progressively decreased to Grade 0 by Day 28. This trajectory is predictable and manageable with standard analgesics, confirming the safety profile of the procedure. No post-operative complications such as excessive bleeding, infection, or incontinence were recorded during the follow-up period.

The advantages of this approach include its minimally invasive nature, outpatient suitability, no need for general anaesthesia or hospitalization, low cost, and minimal disruption to daily activities. These attributes align with Ayurveda's principle of achieving effective outcomes with minimal complications (*Alpa Vedana, Alpa Dravya*).

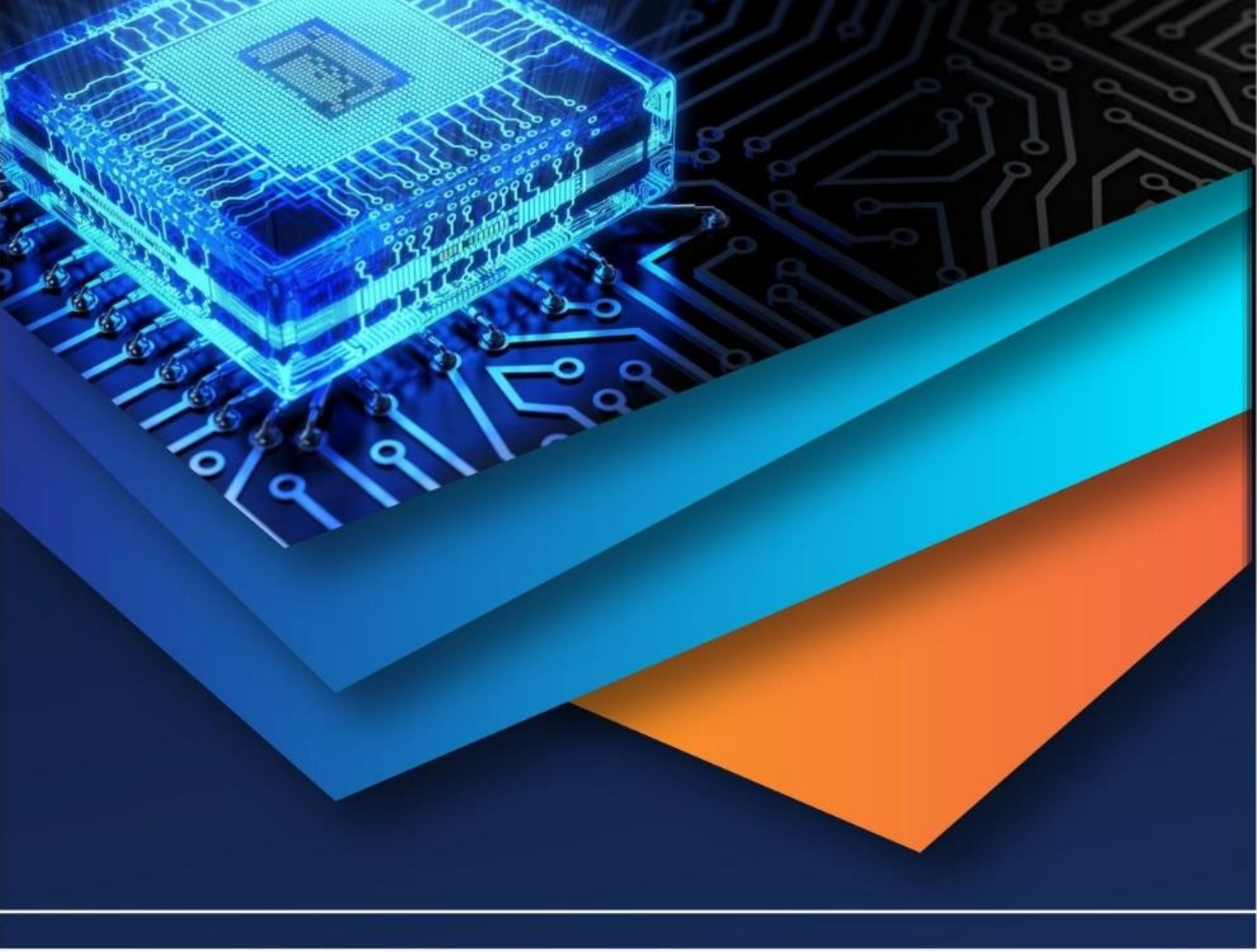
VII. CONCLUSION

Guggulu-coated *Chitrak Kshara Sutra* ligation is an effective, safe, and minimally invasive Ayurvedic surgical procedure for the management of 2nd degree internal haemorrhoids. The procedure was well tolerated, produced complete resolution of the prolapsed pile mass by Day 7, and achieved symptom-free status by Day 28, which was maintained at 60-day follow-up. The therapy is cost-efficient, requires no hospitalization, and does not impair the patient's daily routine. Since these findings are based on a single case study, larger controlled clinical trials are recommended to generate more robust and conclusive evidence.[7]

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