

Management of Urethral Stricture with Uttar Basti: A Case Study

Dr. Sunil Kumar Gupta¹, Dr. Tushita Badhani²

¹Professor, Department of Shalya Tantra,

²PG Student, Department of Shalya Tantra,

^{1,2}Uttarakhand Ayurved University, Gurukul Campus, Haridwar, Uttarakhand, India

ABSTRACT

This case study presents the successful management of urethral stricture in a 38-year-old male patient using Uttar Basti, a traditional Ayurvedic therapeutic procedure. The patient presented with typical symptoms including dribbling, burning micturition, weak stream, slow stream, dysuria, stranguria, increased frequency of urination, and incomplete emptying of the bladder. After a thorough diagnostic assessment, including retrograde urethrogram (RGU), Uttar Basti treatment was initiated. The patient experienced significant symptomatic relief post-treatment, with a subsequent RGU confirming the resolution of urethral stricture.

KEYWORDS: *urethral stricture, uttar basti, dribbling, burning urination*

How to cite this paper: Dr. Sunil Kumar Gupta | Dr. Tushita Badhani "Management of Urethral Stricture with Uttar Basti: A Case Study" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-8 | Issue-6, December 2024, pp.1115-1121,

URL: www.ijtsrd.com/papers/ijtsrd73757.pdf



IJTSRD73757

Copyright © 2024 by author (s) and International Journal of Trend in Scientific Research and Development Journal. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0>)



INTRODUCTION

Urethral stricture is a common urological condition characterized by narrowing of the urethral lumen, leading to obstructive urinary symptoms. Traditional Ayurvedic therapies, such as Uttar Basti, have been utilized for centuries to manage such conditions effectively. This case study highlights the clinical application and efficacy of Uttar Basti in the management of urethral stricture in a 38 year old male.

Case Report:

Patient Information: 38 years old, male, married, with no previous history of LUTS.

Chief Complaints: Dribbling, burning micturition, weak stream, slow stream, dysuria, stranguria, increased frequency of urination (10-12 times/day, 3-4 times at night), incomplete emptying of the bladder.

Case History:

The patient, a 38-year-old married male, had an uneventful medical history until late 2022 when he began experiencing mild burning sensation during urination. Initially, he dismissed the symptoms,

attributing them to transient causes. However, over the following months, the intensity of the burning micturition gradually escalated, prompting him to seek medical attention after enduring discomfort for 5-6 months. He consulted a local General Practitioner (GP) who suspected renal calculus due to the symptomatology and ordered a comprehensive ultrasound (USG) examination. The USG revealed the presence of 2-3 mm renal stones bilaterally, leading to the GP's prescription of medications tailored for renal stone management. Despite the prescribed treatment, his symptoms persisted, and approximately one month later, he developed stranguria and dribbling micturition, prompting him to undergo another USG examination upon self-referral. However, this subsequent USG did not detect any renal or ureteric calculi. Seeking further relief, the patient consulted another GP, who prescribed medications for urinary tract infection (UTI). Unfortunately, this course of treatment provided only minimal alleviation, prompting the patient to discontinue it on his own accord. Subsequently, his

symptoms exacerbated, leading him to seek specialized care at the Shalya Tantra Outpatient Department (OPD) of Uttarakhand Ayurved University (UAU), Gurukul campus, Haridwar, in May 2023. Following a thorough examination and diagnostic procedures, including a retrograde urethrogram (RGU), he was diagnosed with urethral stricture, necessitating the initiation of Uttar Basti therapy for management.

Diagnostic Assessment:

RGU on 06-05-2023 revealed narrowing of the bulbo-membranous urethra, confirming the diagnosis of urethral stricture.

Treatment:

Uttar Basti procedure was planned for 20 days initially, followed by a 1-month gap and then another 20 days of treatment. The procedure involved the gradual introduction of Jatyadi oil through a feeding tube into the urethra.

Expected Outcome: Improvement in symptoms, resolution of urethral narrowing.

Material and Methods:

The materials used for each sitting of Uttar Basti included:

- Disposable syringe (20 ml)
- Feeding tube (size 5 onwards)
- Xylocaine Jelly 2%
- Surgical Gloves
- Jatyadi Oil (30 ml)
- Gauze Piece (Sterilized)
- Sponge Holding Forceps
- Male Urethral Dilators (size 7 onwards)

Method:

On the initial day of treatment, the patient was instructed to empty the bladder before undergoing Uttar Basti. The patient was positioned in a supine posture, and meticulous aseptic techniques were observed during painting and draping procedures. The medicated oil used for the procedure was autoclaved to ensure sterility. Subsequently, lukewarm oil was loaded into a 20 ml syringe using gloved hands. The external urethral meatus was then opened, and 10 ml

of 2% xylocaine jelly was gently instilled into the penile urethra to provide local anesthesia. After a 10-minute interval, a feeding tube was cautiously inserted into the urethra until encountering resistance at the site of the stricture. The oil was then slowly injected in a single smooth motion. However, due to the narrowing of the urethra, excess oil led to backflow, therefore, only 5 ml of oil could be administered on the first day. The patient was instructed to retain the oil for a minimum of 20-30 minutes.

On subsequent days, the same procedure was repeated with a modification. Before introducing the feeding tube with oil, urethral dilatation was performed to widen the narrowed segment. This modification facilitated better passage of the oil, reducing backflow, and enabling the administration of 10 ml of oil on the second day. This regimen continued for a total of 20 days, during which the size of the urethral dilator and that of the feeding tube was gradually increased to accommodate the expanding urethral caliber. Additionally, the quantity of Jatyadi oil used was progressively increased up to a maximum of 20 ml, which was achieved by the 15th sitting.

Following this initial treatment phase, a one-month interval was observed before resuming Uttar Basti for another 20-day cycle, employing similar techniques and adjustments as deemed necessary based on the patient's response and clinical progress. By the 6th sitting in this second phase, 30 ml of Jatyadi oil could be administered easily, without any backflow.

Result:

After the first phase of treatment (20 days), the patient reported 60% relief in symptoms. On completion of both phases, the patient reported complete symptomatic relief with normal urinary stream and no dysuria or burning micturition.

A post-treatment RGU on 20-11-2023 showed a normal caliber of the urethra, indicating successful resolution of the urethral stricture. 3 follow-ups were done at 1 month intervals and the patient did not report any recurrence of symptoms.

NAME : MR. IKRAM HASAN
AGE : 38Y/M
REG NO. : 897
DATE : 06-05-2023
REF BY : DR. SUNIL GUPTA

RGU

RGU was performed by using 76% urographin (1:1 ratio) under aseptic precautions.

Scout film :

Bilateral visualized femur, acetabulum and iliac bones are normal.

Bilateral hip joints and SI joints are normal.

No radio opacity is seen in pelvis.

Study Reveals:

- **Narrowing seen in bulbo membrane urethra seen.**
- Anterior urethra is well opacified with contrast and normal in caliber. Wall appears smooth. No extravasation of contrast is seen.
- Urinary bladder does not show any contrast filling.

IMPRESSION:- F/S/O BULBO MEMBRANOUS STRICTURE .


Dr. Shourya Sharma
MD Radiodiagnosis

Figure 1.1: Pre-treatment RGU Report

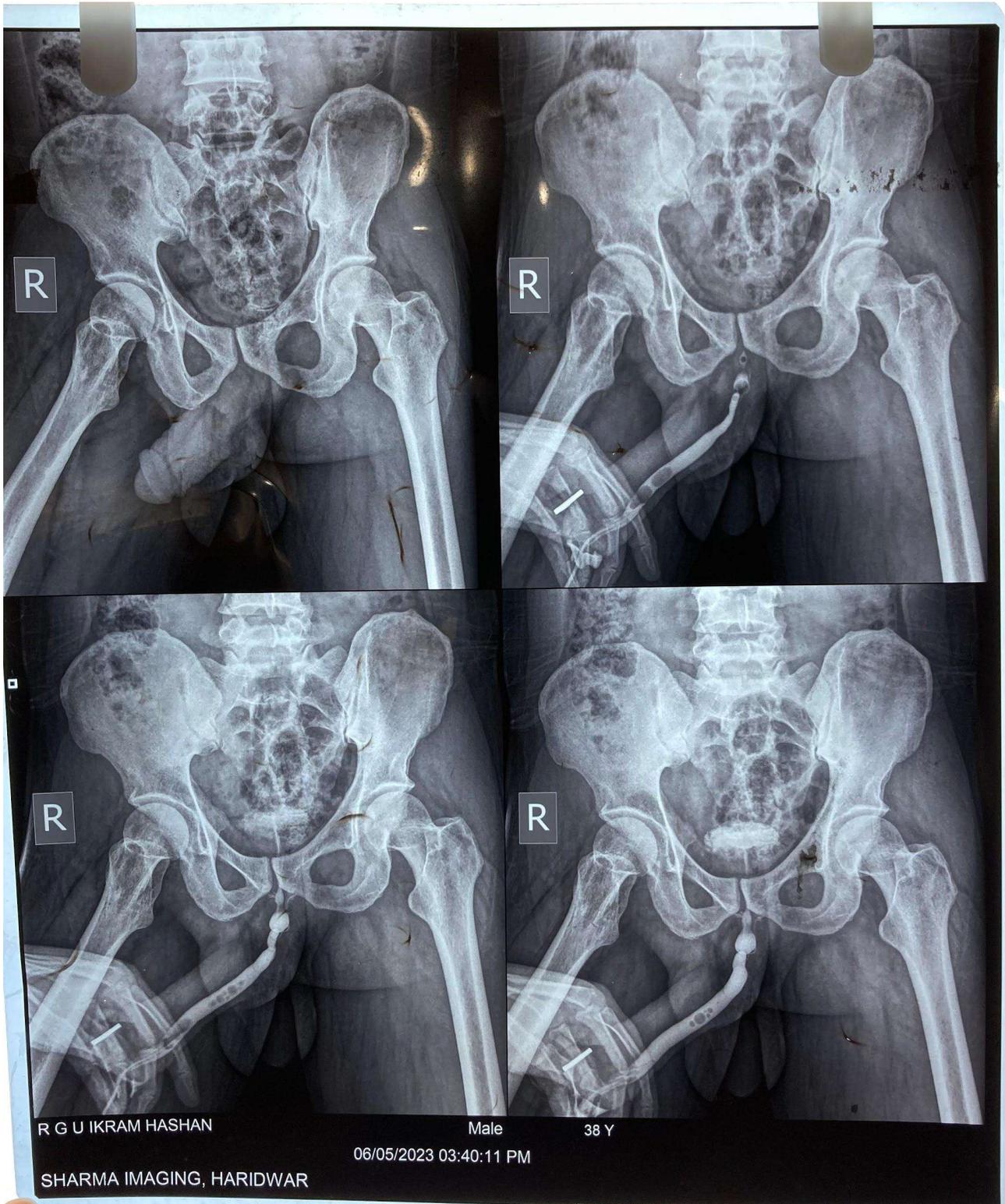


Figure 1.2: Pre-treatment RGU Scan

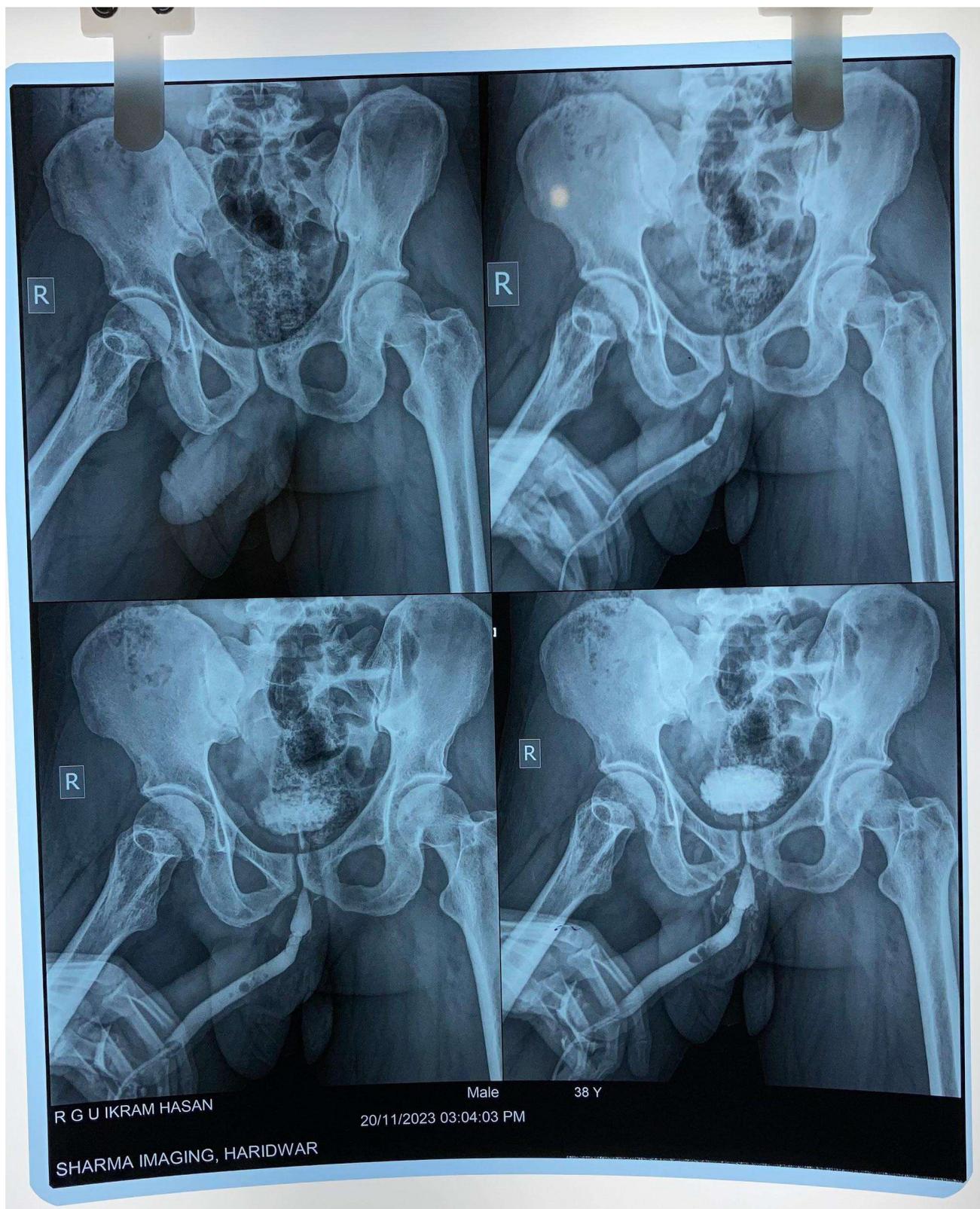


Figure 2.1: Post-treatment RGU Scan

NAME : MR. IKRAM HASAN
AGE : 38Y/M
REG. NO : 6367
DATE : 20-11-2023
REF. BY : DR. SUNIL GUPTA

RGU

RGU was performed by using 76% urographin (1:1 ratio) under aseptic precautions.

Scout film :

Bilateral visualized femur, acetabulum and iliac bones are normal.

Bilateral hip joints and SI joints are normal.

No radio opacity is seen in pelvis.

Study Reveals:

- Anterior urethra (penile and bulbar) is well opacified with contrast and normal in caliber. Wall appears smooth. No extravasation of contrast is seen.
- Urinary bladder does not show any contrast filling.

IMPRESSION:- NORMAL STUDY OF RGU.


Dr. Shourya Sharma
MD Radiodiagnosis

Figure 2.2: Post-treatment RGU Report

Discussion:

Uttar Basti, a traditional Ayurvedic procedure, has demonstrated efficacy in managing urethral stricture through both pharmacological and mechanical mechanisms. Pharmacologically, the use of Jatyadi Taila in Uttar Basti is significant due to its composition and properties. Jatyadi Taila is renowned for its wound-healing capabilities, attributed to its ingredients possessing Tikta (bitter) and Kashaya (astringent) Rasas, along with Laghu (light) and Ruksha (dry) Gunas. These properties are effective in pacifying Pitta and Kapha doshas, which are often implicated in inflammatory and obstructive pathologies like urethral stricture.

Key constituents of Jatyadi Taila include:

- Jati (*Myristica fragrans*): Contains salicylic acid, providing antibacterial, anti-inflammatory, and antifungal effects.
- Nimba (*Azadirachta indica*): Rich in nimbine, offering anti-inflammatory, analgesic, and antibacterial properties.

- Yastimadhu (*Glycyrrhiza glabra*): Contains active components that promote wound healing.
- Haridra (*Curcuma longa*): Known for its anti-inflammatory, antibacterial, and antimicrobial properties.
- Tila Taila (Sesame oil): Serves as the base oil, characterized by Ushna (hot), Teekshna (sharp), and Sukshma (subtle) Gunas, facilitating deep tissue penetration and enhancing the therapeutic effects of the herbal constituents.

The combined effect of these ingredients leads to Vrana Shodhana (wound cleansing), Ropana (healing), Pootihara (eliminating suppuration), and Vedanasthapana (pain relief), making Jatyadi Taila particularly effective in treating urethral strictures.

Mechanically, Uttar Basti involves the instillation of medicated oil into the urethra, which aids in dilating the urethral canal and stretching the constricted segment. This mechanical action helps in breaking down fibrotic tissue and reducing stricture formation,

thereby improving urinary flow. Studies have shown that Uttar Basti with medicated oils like Ksharataila can effectively manage urethral stricture, providing symptomatic relief without significant side effects.

The procedure was well-tolerated by the patient and resulted in significant improvement in urinary symptoms.

Conclusion:

Uttar Basti holds promise as an effective therapeutic modality for urethral stricture management, offering symptomatic relief and potential long-term benefits. It can be used in conjunction with urethral dilatation to resolve urethral strictures, combining pharmacological benefits from its herbal constituents with mechanical dilation of the urethra. This dual-action approach addresses both the symptoms and underlying pathology of urethral stricture, aligning with Ayurvedic principles of holistic healing. Further research and clinical trials are warranted to validate its efficacy and establish standardized protocols for implementation.

References

- [1] Acharya Sushruta, Sushruta Samhita, Sutrasthana, Chikitsasthana. Edited with Dalhana's commentary, Chaukhambha Orientalia, Varanasi.
- [2] Vagbhata, Ashtanga Hridaya, translated by Prof. K. R. Srikantha Murthy, Chaukhambha Orientalia, Varanasi.
- [3] Vagbhata, Ashtanga Sangraha, edited with commentary by Atridev Gupta, Chaukhambha Sanskrit Sansthan, Varanasi.
- [4] Sharma, P. V., Dravyaguna Vijnana, Vol II, Chaukhambha Bharati Academy, Varanasi.
- [5] Chauhan, A., & Mehta, S. (2023). "Sushruta's Surgical Techniques and Their Modern Relevance," International Journal of Ayurvedic Medicine.
- [6] Singh, R.H. (2012). "Exploration of Ayurvedic Therapeutics for Genitourinary Disorders," Journal of Ayurveda and Integrative Medicine (JAIM).
- [7] Mishra, L.C., Scientific Basis for Ayurvedic Therapies, CRC Press.
- [8] National Center for Biotechnology Information (NCBI). "Mechanisms of Urethral Stricture and Its Management," <https://www.ncbi.nlm.nih.gov>.
- [9] WJPLS. "Therapeutic Uses of Jatyadi Taila in Wound Healing," <https://www.wjpls.org>.
- [10] Gupta, P. (2020). "Ayurvedic Approach to Urological Disorders: A Focus on Uttar Basti," World Journal of Pharmaceutical and Life Sciences (WJPLS).
- [11] JAIMS. "Clinical Studies on Uttar Basti for Urethral Stricture Management," <https://jaims.in>.
- [12] Sharma, B., & Chauhan, V. (2021). "Efficacy of Jatyadi Taila in Vrana Ropana: A Pharmacological Review," Ayurveda Journal of Health Sciences.
- [13] ResearchGate. "Case Study on Uttar Basti for Urethral Stricture," <https://www.researchgate.net>.
- [14] Wisdom Library. "Properties and Uses of Jatyadi Taila in Ayurveda," <https://www.wisdomlib.org>.