

Clinical effect of *Tamra Shalaka Agnikarma* (Thermal Cauterization done with copper probe) in the Management of Cervical Ectropion: A Single Case Study

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ABSTRACT:

Cervical ectropion / cervical erosion is typically associated with endo-cervicitis, and if left untreated, may lead to recurrent infections, pelvic inflammatory disease, infertility, and a hampered quality of life. Hence, there is a need for effective and minimally invasive treatment approaches in such cases. A 28-year-old female diabetic patient presented with the complaint of abnormal vaginal discharge along with lower abdominal pain for the last three months. According to the clinical findings, vaginal examination and the Papanicolaou smear (Pap Smear) report findings, the condition was diagnosed as cervical ectropion. In this case, the ectropion condition was first treated with *Rasayanadi Churna* 5g, which was given twice daily with lukewarm water, as the oral medication and *Yoni Prakshalana* and *Yoni Avachurnana* as *Sthanika Chikitsa* (Local treatment). Once reduced the inflammatory signs, *Tamra Shalaka Agnikarma* (thermal cauterization using a copper instrument) was performed. Noticeable improvement of cervical ectropion was observed within a week, with complete recovery in one month. This suggests that *Tamra Shalaka Agnikarma*, along with adjuvant *Ayurveda* medicine, is an effective, affordable, and minimally invasive option for managing cervical ectropion.

KEYWORDS: *Agnikarma*, Cervical ectropion, Cervical erosion, Endo-cervicitis, *Tamra Shalaka*

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INTRODUCTION:

Cervical ectropion/ectropy, or erosion, is a benign condition where the cervical columnar epithelium extends outward. It is often detected during routine pelvic exams and linked to oestrogen exposure. It affects 17–50% of women globally ^[1], with a 34.4% prevalence in Southern India ^[2]. Though usually harmless, if untreated, it can develop into severe inflammatory conditions, and it can cause symptoms like post-coital bleeding, pelvic pain, infertility and affect the quality of life. In *Ayurveda*, it correlates with *Karnini Yoni Vyapad* ^[3] due to *Vata-Kapha* vitiation and considering direct classical indication of ulcers with excessive granulations, cervical ectropion was treated with *Agnikarma* ^[4]. This study reports the successful use of *Tamra Shalaka Agnikarma*, a thermal cauterization technique, for effective management.

In allopathic practice, cervical ectropy is treated with cryotherapy, electrocautery, or silver nitrate. However, these procedures have hazards such as chemical burns, profuse discharge, delayed healing, scarring, and cervical stenosis. In contrast, *Agnikarma* provides precise cauterization with minimum scarring, faster wound healing, and a rational basis in *Ayurveda* through *Dosha* balancing, *Vrana Shuddhi*, and *Vrana Ropana*. This case is based on a diabetic patient with a cervical ectropion. In a diabetic patient, impaired healing and a higher infection risk are present. Hence, this case is unique compared to previous studies on cervical ectropy.

CASE HISTORY:

A 28-year-old female patient who came to the *Stree Roga* (Gynecology) clinic of the hospital of the Institute of Teaching and Research in *Ayurveda*, Jamnagar, India, complained of abnormal vaginal discharge

with lower abdominal pain for the past three months. Also, she was identified as a diabetic mellitus patient five years ago, and she is taking allopathic treatments (glibenclamide tablets 5mg bd, Metformin tablet 500mg twice daily, Gliclazid SR 120mg and Dapagliflozin 20mg once daily) for that. She has regular menstrual cycles without dysmenorrhea. Menstrual flow is normal (duration: 3 days, two full sanitary pads per day). According to the patient, there was a significant family history of diabetes mellitus. She had three incomplete miscarriages and had one full-term vacuum-assisted delivery.

The patient exhibited a good appetite and had a sound sleep, approximately 6 to 7 hours of uninterrupted nighttime sleep supplemented by a 2-hour daytime sleep. Urinary frequency was 4 to 5 times during the day and twice at night, with no complaints of dysuria. Bowel movements occurred regularly once daily, without constipation. The patient reported no known allergies to specific foods or medications.

Clinical Findings

On general examination, the patient's height was 160 cm, the weight was 60 kg, and the Body Mass Index (BMI) was 23.9 kg/m², which falls within the normal range. Vital signs were within normal limits, with a blood pressure reading of 120/80 mmHg, a pulse rate of 82 beats per minute, and a respiratory rate of 18 breaths per minute.

Abdominal examination revealed a soft and non-tender abdomen, with no signs of guarding or rigidity.

Per speculum (PS) and per vaginal (PV) examinations revealed the presence of a sticky white discharge in the cervical region, accompanied by a foul odor. A flat-type cervical erosion was observed

circumferentially around the cervix, suggestive of end cervicitis. The uterus was anteverted and mobile with mild tenderness noted on palpation. The cervix was firm, and both adnexa were clear on examination.

Timeline: The timeline of the events for the case is exhibited in Figure 01.

Investigations:

Pap Smear cytology was taken before and after the treatment (Table 01 and Figure 02). Blood tests revealed a fasting glucose of 100 mg/dL, postprandial glucose of 154 mg/dL, and glycated haemoglobin (HbA1c) of 5.7%, consistent with early glucose intolerance. Screening for Human immunodeficiency virus (HIV), Hepatitis B surface antigen (HBsAg), Hepatitis C Virus (HCV), and Venereal Disease Research Laboratory test (VDRL) were negative. Coagulation profile, complete blood count, and urinalysis were within normal limits.

Diagnosis:

According to the clinical findings and pap smear report findings, the vaginal examination condition diagnosed as cervical ectropion. This can be corrected with the *Karnini Yoni Vyapad*, explained in *Ayurveda* [5] under the twenty types of *Yoni Vyapads*. As explained in *Ayurveda* classics, she delivered a child as a prolonged delivery (she had a vacuum delivery history), and she had a history of three abortions, which could be the reason for the development of *Karnini Yoni Vyapad* (Cervical ectropion).

THERAPEUTIC INTERVENTION:

After administering some oral medicines for three weeks and completing *Yoni Prakshalana* (Vaginal douching) followed by *Yoni Avachurnana* (Powder dusting) for 14 days, the cervical ectropion was treated with *Tamra Shalaka Agnikarma*. The therapeutic intervention was included in Table 02. After *Agnikarma*, a month-long follow-up period was carried out to assess the treatment effect or recurrence.

Agnikarma Procedure:

During the preoperative procedure, at first, the patient was explained in detail about the *Tamra Shalaka Agnikarma* procedure, and written consent was taken. Next, all the vitals of patient were checked. After emptying the bladder, the patient was put in the lithotomy position. Clean the area using *Triphala* decoction, and aseptic precautions were ensured. Subsequently, *Agnikarma* was performed using a *Tamra Agni Shalaka*. The *Shalaka* was heated over flame until it attained a red-hot stage (*Rakta-Aruna Varna*) and then applied to the ectropion in a *Chandrabindu* pattern until the appearance of a constricted wound with a pigeon-colour, which is described as *Samyaka Dagdha Lakshana*. Finally, as the *Pashchat Karma* (Post-operative procedure), *Jatyadi* oil *Yoni Pichu* (oil-soaked cotton pad) was inserted into the vagina, and advice was given to patients to avoid sexual intercourse for two weeks; lastly, asked the patient to avoid *Tikshna* and *Ushna Ahara* such as *Pani puri*, *Masala pav*, *Garlic*, *Chilly*, *Chines foods*, *junk foods*, *fast foods*, *Spicy foods*, and etc.

Table -1: Pap Smear Cytology

Before treatment /Agnikarma (20/12/2024)	After treatment / Agnikarma (31/05/2025)
Cells are predominantly neutrophils with lymphocytes many benign superficial and intermediate squamous cells with few endocervical cells with clusters. Few metaplastic squamous cells were seen. Marked inflammation. No dysplasia seen.	Cells are predominantly neutrophils with lymphocytes many benign superficial and intermediate squamous cells with few endocervical cells in clusters. Few metaplastic squamous cells were seen. Reparative changes observed. Marked inflammation, with changes of repair. No dysplasia seen.

Table-2: Therapeutic Intervention

Drugs used for Oral and Sthanika Chikitsa	Oral Drugs	Sthanika Chikitsa/Local Treatment
	<u>Rasayanadi Churna</u> -Amalaki Churna 1g -Guduchi Churna 1g -Gokshura Churna 1g -Chopachini Churna 1g -Vidanga Churna 500mg -Haridra Churna 500mg 5 g of this Churna was given twice daily before food with lukewarm water and was continued for three weeks without Sthanika Chikitsa.	1. Yoni Prakshalana with Tripla Kwatha and 2. Yoni Avachurnana were done once daily with Lodradi Churna for 14 days <u>Lodradi Churna</u> -Lodra Churna -Khadira Churna -Yashtimadu Churna -Haridra Churna (Lodradi Churna consists of 2g of each of the above-mentioned fine powders)
Agnikarma was done using Tamra Shalaka for Cervical Ectropion for one day		
A follow-up was taken for one month.		

Table-3: Progress of the Signs and Symptoms

Signs/Symptoms	Before starting the oral medicines for cervicitis	Three weeks after the oral treatments	Before Agnikarma	One week after the Agnikarma	One month after the Agnikarma
Mild mucoïd Vaginal Discharge	++	+	+	-	-
Oedematous Appearance	+	-	-	-	-
Bright red appearance around external OS	+++	+++	+++	+	-
Lower abdominal pain	++	-	-	-	-

Table-4: Ayurvedic Properties of the used herbs ^[10,11,12,13]

	Sanskrit Name	Scientific Name	Rasa	Guna	Veerya	Vipaka	Prabhava
1.	<i>Amalaki</i>	<i>Phyllanthus emblica</i> L.	Amla, Madhura, Kashaya, Tikta, Katu	Guru, Ruksha	Sheeta	Madhura	
2.	<i>Guduchi</i>	<i>Tinospora cordifolia</i> (Willd.) Miers	Tikta, Kashaya	Guru, Snigdha	Ushna	Madhura	
3.	<i>Gokshura</i>	<i>Tribulus terrestris</i> L.	Madhura	Guru, Snigdha	Sheeta	Madhura	
4.	<i>Chopchini</i>	<i>Smilax glabra</i> Roxb.	Tikta	Laghu, Ruksha	Ushna	Katu	
5.	<i>Vidanga</i>	<i>Embelia ribes</i> Burm.f.	Tikta, Katu	Laghu, Ruksha, Teekshna	Ushna	Katu	Krimighna
6.	<i>Haridra</i>	<i>Curcuma longa</i> L.	Tikta	Ruksha, Laghu	Ushna	Katu	
7.	<i>Haritaki</i>	<i>Terminalia chebula</i> Retz.	Kashya, Tikta, Madhura, Katu, Amla	Laghu, Ruksha	Ushna	Madhura	
8.	<i>Vibhitaka</i>	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Kashaya	Ruksha, Laghu	Ushna	Madhura	
9.	<i>Lodhra</i>	<i>Symplocos racemosa</i> Roxb.	Kashaya	Laghu, Ruksha	Sheeta	Katu	
10.	<i>Khadira</i>	<i>Acacia catechu</i> (L.f.) Willd.	Tikta	Laghu, Ruksha	Sheeta	Katu	
11.	<i>Yashtimadhu</i>	<i>Glycyrrhiza glabra</i> L.	Madhura	Guru, Snigdha	Sheeta	Madhura	

Table-5: Doshagnata & Pharmacological Activities of the used herbs ^[10,11,12,13]

	Sanskrit Name	Scientific Name	Doshagnata	Important Pharmacological Activities
1.	<i>Amalaki</i>	<i>Phyllanthus emblica</i> L.	Tridoshashamaka	Anti-inflammatory, Antibacterial, Antifungal, Antimicrobial, Antioxidant, Antitumour
2.	<i>Guduchi</i>	<i>Tinospora cordifolia</i> (Willd.) Miers	Tridoshashamaka	Analgesic, Antibacterial, Antimicrobial, Anti-inflammatory, Antidiabetic, Antioxidant, Antitumor
3.	<i>Gokshura</i>	<i>Tribulus terrestris</i> L.	Vatapittashamaka	Analgesic, Antibacterial, Antifungal, Anti-

				inflammatory, Antimicrobial
4.	<i>Chopchini</i>	<i>Smilax glabra</i> Roxb.	<i>Tridoshashamaka</i>	Antibacterial, Antimicrobial, Antifungal, Analgesic
5.	<i>Vidanga</i>	<i>Embelia ribes</i> Burm.f.	<i>Vatapittashamaka</i>	Anti-inflammatory, Antimicrobial
6.	<i>Haridra</i>	<i>Curcuma longa</i> L.	<i>Tridoshashamaka</i>	Antiinflammation, Antibiotic
7.	<i>Haritaki</i>	<i>Terminalia chebula</i> Retz.	<i>Tridoshashamaka</i>	Antimicrobial, Antifungal, Antibacterial
8.	<i>Vibhitaka</i>	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	<i>Kaphavataashamaka</i>	Hypoglycaemic, Antibiotic, Anti-inflammatory
9.	<i>Lodhra</i>	<i>Symplocos racemosa</i> Roxb.	<i>Kaphapittashamaka</i>	Antimicrobial, Anti-inflammatory
10.	<i>Khadira</i>	<i>Acacia catechu</i> (L.f.) Willd.	<i>Kaphapittashamaka</i>	Anti-inflammatory
11.	<i>Yashtimadhu</i>	<i>Glycyrrhiza glabra</i> L.	<i>Vatapittashamaka</i>	Antimicrobial, Anti-inflammatory, Antioxidant

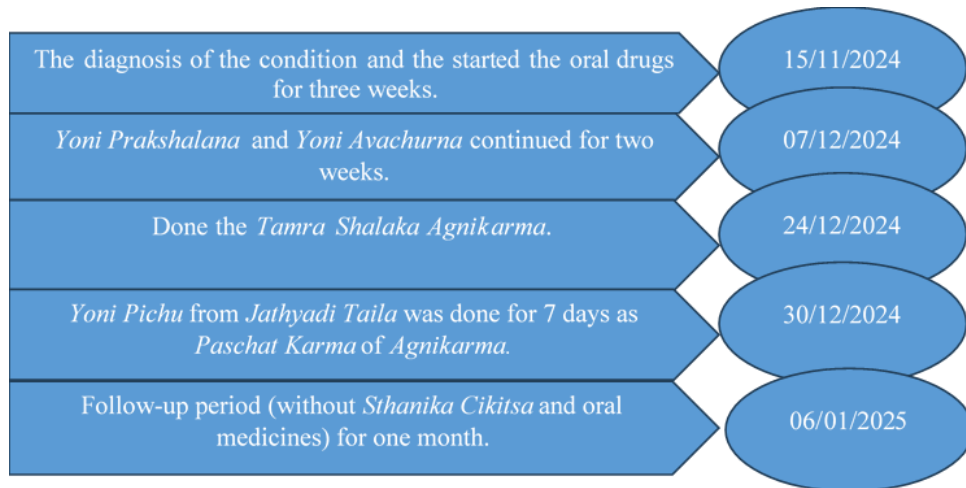


Figure-1: Timeline

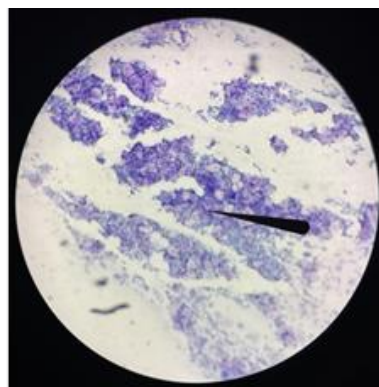


Figure-2: Pap Smear Cytology report



Figure-3: Cervical changes before and After *Agnikarma*

RESULT:

According to the signs and symptoms and the results obtained from the Pap smear, an inflammation condition with cervical ectropion was diagnosed as explained above. After oral treatments, *Yoni Prakshalana* following *Yoni Avachurnana*, inflammatory signs and symptoms reduced to some extent and after *Agnikarma* cervical ectropion had completely cured, as shown in Table 3. The appearance of the cervix before, after, and during the follow-up period is shown in Figure 03 which is clinical evident.

DISCUSSION:

Based on the clinical evaluation and Pap smear findings, the condition was diagnosed as cervical ectropion, and premalignant or malignant lesions were ruled out. It is impossible to cure ectropion permanently without previously or simultaneously curing the endo cervicitis. *Karnini Yoni Vyapad* should be treated with all methods of *Kapha* and *Vata* pacifying treatments ^[5]. *Rasayanaadi Churna* which used to treat orally consist with, *Amalaki/ Phyllanthus emblica* L. , *Guduchi/ Tinospora cordifolia* (Willd.) Miers , *Gokshura/ Tribulus terrestris* L. , *Chopachini / Smilax glabra* Roxb. and *Haridra/ Curcuma*

longa L. *Churna*. *Tripala Kwatha* (*Haritaki/ Terminalia chebula* Retz., *Vibhitaka / Terminalia bellirica* (Gaertn.) Roxb. and *Amalaki/ Phyllanthus emblica* L.) used as *Yoni Prakshalana*. *Lodhra/ Symplocos racemosa* Roxb., *Khadira/ Acacia catechu* (L.f.) Willd., *Yashtimadhu / Glycyrrhiza glabra* L., and *Haridra Churna/ Curcuma longa* L. are included in *Lodhradi Churna*, which was used for *Yoni Avachurnana*. *Ayurveda* properties and pharmacological activities of herbs used to treat this case were tabulated in Table 04 & 05. Most of drugs used for the present treatment protocol are prominent with *Tikta, Kashaya Rasa* and *Laghu Ruksha Guna*. *Tikta, Kashaya Rasa* pacifies the *Kapha* and *Pitta* and reduced the inflammation. *Laghu, Ruksha Guna, Ushna Virya* properties of these drugs reduced *Kapha Dosha*. Most of the drugs show *Tridoshashamana* properties. According to previously publish research articles, drugs that have anti-inflammatory properties, wound healing, anti-microbial, analgesic, immunomodulatory, antioxidant, anti-proliferative, etc., are commonly used to treat this condition ^[6].

Some of the research uses the *Kashaya Rasa* drugs to treat cervical ectropion; by virtue of its *Guna*, it restrains *Srava*. *Kashaya Rasa* also

has properties like *Samshamana*, *Shoshana*, *Sangrahi*, *Sthambhana*, *Ropana*, and *Kaphanashaka* ^[7]. *Agnikarma* possesses *Ushna*, *Tikshna*, *Sukshma*, and *Aashukari* *Gunas*, which are opposite to *Vata* and *Kapha* properties. As mentioned in *Susruta Samhita*, *Agnikarma* is best among all the caustics, as the diseases treated by it do not relapse and moreover, those incurable by medicines, operations and caustics, also yield to it ^[8]. *Agnikarma* can be effective in cervical ectropion in several ways. It sterilized the site and removed the pathogenic organisms; secondly, it increased blood circulation, which helped to nourish the site. Due to its *Ushna*, *Tikshna* properties, it pacifies *Vata Dosha*, reduces pain, and the same properties of *Agnikarma* cause *Kapha* and *Vata Shamana* and reduce the diseases caused by *Kapha* and *Vata Dosha*. The *Agni Shalaka* was made from *Tamra*. Properties of *Tamra*, including *Vranaropana* (wound healing), *Lekhana* (to scrap), *Tridoshabhara*, *Krimihara* (Anti-microbial), *Rasayana* (rejuvenation) properties and help relieve excessive vaginal discharge, foul smell, redness, and inflammation which mainly cause due to vitiated *Kapha Dosha* ^[9].

CONCLUSION:

The efficiency of *Tamra Shalaka Agnikarma* for cervical ectropion was proved by a significant reduction in ectropion within a month, with no adverse effects. As a result, it can be concluded that *Agnikarma* with *Tamra Shalaka* is a minimally invasive, cost-effective treatment option for cervical ectropion. However, this is a single case study. Hence, a clinical trial with an adequate number of samples needs to be conducted to prove its efficacy.

Patient's consent: Informed written consent was taken before the treatment and publication.

Conflict of interest: Author declares that there is no conflict of interest.

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REFERENCES:

1. Aggarwal P, Ben Amor A. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK560709/> [Last Accessed on 23.5.25]
2. Vidhubala E, Niraimathi K, Shewade HD, Mahadevan S. Cervical cancer care continuum in South India: evidence from a community-based screening program. *J Epidemiol Glob Health*. 2020;10(1):28–35.

3. Sharma RK, Caraka Samhita, Chikitsasthana, *Yoni Vyapad Chikitsaadhyaya*, 30/27. Chowkhamba Sanskrit Series Office, Varanasi:2019,p.136.
4. Singhal GD & et al, Susruta Samhita, Sutrastana, *Agnikarma vidhiadhyaya*, 12/10, Chaukhamba Sanskrit Pratishthan, Delhi: 2021,p.98-99.
5. Sharma RK, Caraka Samhita, Chikitsasthana, *Yoni Vyapad Chikitsaadhyaya*, 30/102-103. Chowkhamba Sanskrit Series Office, Varanasi:2019,p.155.
6. Mishra M, Bagade T, Review of management of Cervical Ectropion using Traditional Ayurvedic Interventions. J Ayu Int Med Sci. 2023;8(3):55-62.
7. Rupapara AV, Donga S, Devi L. Effect of Darvyadi Yoni Varti in the management of Garbhasaya Mukhagata Vrana (cervical erosion) - An open label clinical trial. J Ayurveda Integr Med Sci. 2017;2(3):1-5.
8. Tambe NN, Satav DG, Mane SG, Mane BS. Comparative literary study of Ayurvedic classical Karnini Yonivyapad and modern science cervical erosion. J Orient Res Madras. 2023;94(12):48-59.
9. Sonam, Asokan V. Randomized trial on electrified Tamra Shalaka Agnikarma and Punarnavashtaka Ghanavati on Garbhashaya Grivagata Vrana (cervical erosion). Int Ayurved Med J. 2023;11(5):494-499.
10. Sharma PC, Yelne MB, Dennis TJ. *Database on medicinal plants used in Ayurveda*. Vol. 1. New Delhi: Documentation and Publication Division, Central Council for Research in Ayurveda & Siddha; 2005. p.152, 216.
11. Sharma PC, Yelne MB, Dennis TJ. *Database on medicinal plants used in Ayurveda*. Vol. 3. New Delhi: Documentation and Publication Division, Central Council for Research in Ayurveda & Siddha; 2005. p.11, 158, 229, 256, 282.
12. Sharma PC, Yelne MB, Dennis TJ. *Database on medicinal plants used in Ayurveda*. Vol. 5. New Delhi: Documentation and Publication Division, Central Council for Research in Ayurveda & Siddha; 2008. p.164, 478.
13. Gogte VM, Ayurveda Pharmacology & Therapeutic Uses of Medicinal Plants (Dravyaguna Vignyan), Chaukhambha Publications, New Delhi,2017. p. 638.