

Ayurvedic Management of Cervical Erosion through Ksharakarma - A Review

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Abstract:- Cervical erosion happens when cells that line the inside of your cervix grow on the outside. Nowadays it is very common among women in reproductive age. This reviewing is done to know the effect of its treatment as *vrana* by means of *ksharakarma* by using different types of *kshara*. It concluded that it is cost effective, has almost equivalent effect of modern treatment in terms of its result, less complications like secondary infertility etc and less chance for the reemerging of the same.

Keywords:- cervical erosion, garbhasayamukhagatha vrana, apamarga kshara, palasha kshara, tuttha kshara

I. INTRODUCTION

Cervical erosion/ectopy is a benign condition where the squamous epithelium of the ectocervix is replaced by columnar epithelium, which is continuous with the endocervix^[1]. Nowadays it is widely accepted as a morphophysiological expression of changes initiated by ovarian hormones occurring different periods of life.

The prevalence of cervical erosion ranges between 17-50%. Prevalence increases with parity but decreases with age 35 and above and it is uncommon in post-menopausal women. Cervical erosion can be found in up to 80% of sexually active adolescents^[2].

Aetiology^[1]

1. Congenital and developmental
2. Acquired
 - (1) Hormonal (usually found in the conditions of high estrogen)
 - Adolescents
 - Pregnancy
 - Women on oral contraception
 - During the years of menstruation mainly in the ovulatory phase
 - (2) Infection
 - Cervicitis

Symptoms

Woman with cervical erosion may presents vaginal discharge (mucoid/ mucopurulent/ irritant/ offensive/ blood stained), contact bleeding (during coitus/ defecation), infertility, vulvar pruritus, low back pain, dyspareunia, dysuria, nocturia and pollakiuria.^{[3][4]}

Signs

On per speculam examination it is visible that bright red area surrounding and extending beyond the external os in the ectocervix, clearly demarcated outer edge, lesion with smooth surface/ having papillary folds and sometimes multiple oozing spot on rubbing with gauze piece^[3].

Diagnosis

Cervical erosion is likely to be discovered during routine pelvic examination and Pap smear test (Pap test).^[5]

Types^[1]

1. Congenital
2. Acquired
 - Simple/flat type
 - Papillary type
 - Follicular type

Treatment

Persistent erosion with troublesome discharge should be treated surgically by electrocautery, cryotherapy, CO₂ laser vaporisation, chemical cauterisation and conozation.^[3] The resulting raw area takes 6-8 weeks to become covered with squamous epithelium. As coitus should be avoided until healing has taken place.

Garbhasayamukhagatha vrana

There is no classical reference for *garbhasayamukhagatha vrana*. But the basic references can used to define *vrana* at the *garbhasayamukha* and can be correlated with cervical erosion.

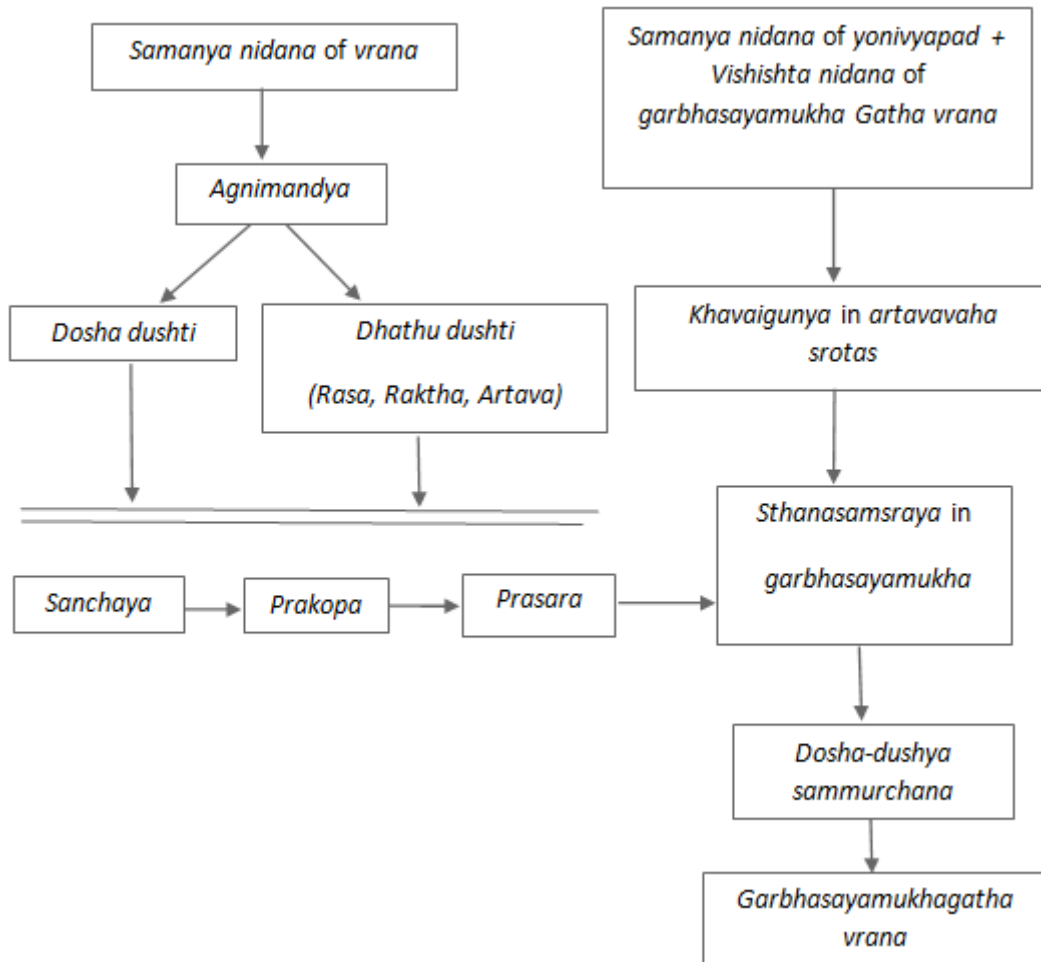
Nidana

1. *Samanya nidana*
 - *Samanya nidana* of *vrana* : *Tridosha prakopa, agni, kshara, visha* etc.^[6]
 - *Samanya nidana* of *yonivyapad* : *Mithya ahara-vihara, artava dushti, beeja dosha, daiva*, coitus with *purusha* having *pravrudha linga* by a *rooksha durbala stree* (size disparity of sex organs), *vishamasthaanga shayana*(abnormal posture), *bhrusha maithuna sevana* (excessive coitus) and use of *apa dravya*.^{[7][8][9][10][11]}
2. *Vishishta nidana*

- *Vishishta nidana* of certain *yonivyapad* : *Pitta-kapha-sannipatiki yonivyapad*, *karnini* and *acharana* (*Vipluta* by *Vagbhata*)
- Specific factors causing *apanavayu dushti* : *Ruksha-guru anna*, *vegarodha*, *atisevana* of *yana*, *yanasana*, *sthana* and *chankramana* etc.^[12]
- Structural deformity in *artavavaha srothas* and *garbhasayamukha* : *Brusha maidhuna sevana*, use of

barrier methods of contraception, *hetu* of *karnini yonivyapad* (“*Akale Vahamanayaa*”), increased frequency of vaginal delivery, accidental injuries during assisted delivery (vacuum, forceps), D&C, Hysteroscopy, Hysterosalpingography etc. may also be considered as *Vishishta Nidana*.

Samprapthi



Lakshana++

- ★ *Yoni srava* associated with *pichilatwa* in *kaphaja vrana* and *dourgandhya* in *pithaja vrana*.
- ★ *Yoni kandu*
- ★ *Yoni daha*
- ★ *Maithuna-asahishnuta*
- ★ *Vedana - kati, adhonabhi* and *yoni*
- ★ Infertility
- ★ *Moothrashayagatha vikara*

Sadhya-asadhyata

Acharya Sushruta has mentioned the *prajanana vrana* as *sukha sadhya vrana*.^[13]

Chikitsa

1. *Nidana parivarjana*
2. *Shashti upakrama (Chikitsa) of Vrana*^[14]

- Upto *amavastha* of *vranasopha* - The first twelve *upakrama* of Acharya Susruta, ie, from *apatarpana* to *virechana* are advisable.
- Manifested *vrana* - *Vrana shodhana (dosha harana)* as well as *ropana* therapies. The *upakrama* 22nd to 40th of Acharya Susruta (ie, *sandhana* to *agnikarma*) serve these purposes.

Ksharakarma

According to Susrutha samhitha,
 "vran gathra vichurnane, vranayathi ithi vranaha" (Su.chi 1/6)

The term *vrana* indicates a discontinuity in the healthy tissue of body. There are 14 types of *vrana* based on *dosha* predominance. Among them, the cervical erosion may be correlated as the *sannipathiki vrana*.

Among all *shastra* and *anushastra*, *kshara* is the supreme because it is most effective and acts immediately.

"Shastra anushastrebhyah ksharah pradhanathamah chedyabhedyalekhyakaranaa tridoshagnatwath visheshakriyaavacharananchaa||"
(Su .su 11/3)

Kshara is a caustic, alkaline in nature obtained from the ashes of medical plants. It is a milder procedure compared to surgery and thermal cautery. *Kshara* has the properties like *ushna virya*, *laghu-teekshna guna*, *tridoshagna*, *dahana*, *pachana*, *darana*, *vilayana*, *shodhana*, *ropana*, *shoshana*, *stambhana*, *krimigna*, and *lekhana karma*. It's external application (*pratisaraneeya kshara*) is enough to manage the *vrana* along with internal medicines. In general it's action can be correlated in this way,

- Cleansing the wound
- Antiseptic property
- Desquamation of sloughs
- Draining of pus
- New vascularization
- Granulation tissue formation
- Impouring of proteins and fibrocytes for the formation of scars(fibrous tissue)to fill up the gap

II. DISCUSSION

In *garbhasayamukhagatha vrana*, *ksharakarma* can be done by using *kshara* of *apamarga* (*Achyranthes aspera* Linn.), *snuhi* (*Euphorbia neriifolia* Linn.), *tankana* (borax), *tuttha* (copper sulphate), *yava* (*Hordeum vulgare*) and *udumbara* (*Ficus racemosa*).^[15]

Before doing any of these, the patient should be prepared by means of *yonikshalana*, *yonipichu*, *yonikalkadharana* etc. to reduce the inflammatory changes in the cervix.

There were a comparative study on the effectiveness of *kshara* and *agni karma* in the management of *garbhasayamukhagatha vrana*. *Ksharakarma* was done by using *snuhikshara* followed by *yonipichu* with *udumbarataila*. It showed reduction of cervical erosion along with complete symptomatic relief (*yonisrava*, *yonikandu*, *kateeshoola*, vaginal pH and cervical tenderness).^[16]

AsodhithaTuttha kshara also effective in the management of cervical erosion especially in *kaphapradhana* condition. As the drug *tuttha* possess

lekhana, *sodhana*, *ropana*, *shothahara* and *raktashodhaka* properties, it worked efficiently and responsible for reducing size, appearance and degree of cervical erosion along with the symptoms like *yonisrava* and *kandu*.^[17]

Usage of *apamarga kshara* followed by *yonipichu* with *jatyadi taila* in *garbhasayamukhagatha vrana* showed quick relief from the same. It is due to the strong alkaline nature of *apamarga kshara* and it brought the destruction of superficial cells of eroded cervical area flowed by sloughing off of unhealthy tissue.^[18]

In a comparative study of using *jatyadi taila* with and without *apamarga kshara* was performed and it showed that re-epithelialization of healthy squamous epithelium begins earlier where *kshara* used. The *apamarga kshara* was found strongly alkaline in reaction (pH = 10.44) and hygroscopic. It has

- pH = 10.44
- Acid radicals - Co^{3-} , So^{4-} , Cl^-
- Phosphate - P^{2O_5}
- Basic radicals - Ca^{++} , Mg^{++} , Na^+ , K^+ , Fe^{+++} etc.

As its strong alkaline nature (pH = 10.44) was responsible for the corrosive action and re-epithelialization of squamous epithelium easily.^[19]

Application of *Yavakshara* for two consecutive cycles for 7 days along with internal medication resulted significant reduction in amount of discharge, color of erosion and size of erosion. In addition to the *ksharaguna*, *yavakshara* has properties like *chedana*, *bhedana* and *vishesh kriya avacharana* were worked. Examination on the 60th day showed 100% of healing and normal appearance of cervix.^[20]

There was an interventional study with comparison of the effects before and after the study by using *palasha kshara* and *tankana bhasma* as *prathisarana* in eroded areas. *Palasha kshara* is *kshara shreshtha* by Shodhal nighantu and *tankana bhasma* is mentioned under *kshara varga* in Rasatarangini. In effect both are equally effective statistically. But clinically, *palasha kshara* exhibited better results by acting on *yonisrava* and *shula* by its *tikshna*, *ushnaguna*, faster healing property.^[21]

III. CONCLUSION

Modern treatment for cervical erosion is cauterization & cryosurgery which have their own complications like bleeding per vagina and infection, secondary infertility, stenosis etc^[3]. That is why traditional system of medicines is getting valued. On conclusion, *bahiparimarjana chikitsa* by *kshara* facilitates enhanced drug effect for early and uncomplicated wound healing by this way,

PROPERTIES OF <i>KSHARA</i>	ACTION	EFFECT
<i>Ushna virya</i>	<i>Kapha-vathahara</i>	Pain/ tenderness
	<i>Pachana</i>	Reduce the inflammation in lesser time (<i>paka</i>)
<i>Teekshna guna</i>	<i>Kapha-vathahara nissarana</i>	<ul style="list-style-type: none"> • Reduce <i>yonisrava</i> • Reduce <i>yonis</i>
<ul style="list-style-type: none"> • <i>Lekhana</i> • <i>Dahana</i> (Corrosive nature)	<i>Dushitha mamsaharana</i>	Destruction of columnar epithelium and thus promote the re epithelialization of squamous epithelium
	Removes the vitiated <i>dosha</i>	<ul style="list-style-type: none"> • Draining of pus • Desquamation of sloughs • Hence enhances the healing process (<i>ropana</i>)
<ul style="list-style-type: none"> • <i>Kushtagna</i> • <i>Tikta Rasa</i> • <i>Laghu-Ruksha Guna</i> 	Reduces the vitiated <i>kapha</i> and <i>pitha</i>	Reduces <i>yonis kandu</i>
<i>Krimigna</i>	Destroy the infectious agent	<ul style="list-style-type: none"> • Anti infectious • Anti septic
<ul style="list-style-type: none"> • <i>Sodhana</i> • <i>Soshana</i> 	<i>Kapha-pitha hara</i>	<ul style="list-style-type: none"> • Reduces <i>yonis srava</i> • Reduces <i>kleda</i>
<i>Dosha vilayana</i>	Dissolution of <i>dushitha dosha</i>	<i>Samprapthi vighatana</i>

REFERENCES

- [1]. D. C. Dutta's Textbook of Gynecology including contraception, New Central Book Agency (P) Ltd, 7th edition, reprint: August 2016, Benign Lesions of the Cervix, pp.217
- [2]. Aggarwal P, Amor AB. Cervical Ectropion. StatPearls [Internet]. 2020 Jul 31.
- [3]. D. C. Dutta's Textbook of Gynecology including contraception, New Central Book Agency (P) Ltd, 7th edition, reprint: August 2016, Benign Lesions of the Cervix, pp.218
- [4]. Goldacre MJ, Loudon N, Watt B, et al. Epidemiology and clinical significance of cervical erosion in women attending a family planning clinic. Br Med J. 1978;1(6115):748-50
- [5]. <https://www.healthline.com/health/womens-health/cervical-ectropion#treatment>
- [6]. Acharya Jadavaji Trikamaji, N M Acharya, editor. Sushruta Samhita of Sushruta with Nibandhsangraha Commentry of Dalhana Acharya, Chikitsa Sthana. 3rd ed., Ch.1, Ver.3, Varanasi: Chaukhambha Surbharati Prakashan; 2014. pp.396
- [7]. Acharya Jadavaji Trikamaji, editor. Charak Samhita of Agnivesha with Ayurveda Dipika commentary of Chakrapanidatta, Chikitsa Sthana. Ch. 30, Ver.7,8 Reprint edition. Varanasi:Chaukhambha Prakashan; 2011. pp.634
- [8]. Acharya Jadavaji Trikamaji, N M Acharya, editor. Sushruta Samhita of Sushruta with Nibandhsangraha Commentry of Dalhana Acharya, Uttara Tantra. 3rd ed., Ch.38, Ver.3-6, Varanasi: Chaukhambha Surbharati Prakashan; 2014. pp.668
- [9]. Bhisagratna Pandit Shree Brahma Shankara Mishra, editor. Bhavaprakasha of Shree Bhavamishra edited with the Vidyotini Hindi Commentary, Vol. 2, Ch. 70, Edition-2013. Varanasi: Chaukhambha Sanskrit Bhawan;2013, pp.764
- [10]. Prof. Yadunandana Upadhyaya, editor. Madhava Nidana of Sri Madhavakara with The "Madhukosha" Sanskrit Commentary by Shree Vijayrakshita and Shree Kanthadatta with The Vidyotini Hindi Commentary and notes By Shree Sudarshana Shashtri, Uttarardha, Jarayuroga Nidana. Varanasi: Chaukhambha Surbharati Prakashan; 2009. pp.512
- [11]. Shivprasad Sharma, editor. Astanga Samgraha of Vriddha Vagbhata with the Sasilekha Sanskrit commentary of Indu, Uttara Tantra. Ch. 38, Ver. 32, 1st ed., Varanasi:Chaukhambha Sanskrit Series office; 2006. pp.828
- [12]. Murthy S.K.R. Ashtanga Hridaya (with English translation):Chaukhamba orientalia publications, Varanasi;1999;vol I:Nidana sthana, chapter.16/27.pp. 163
- [13]. Acharya Jadavaji Trikamaji, N M Acharya, editor. Sushruta Samhita of Sushruta with Nibandhsangraha Commentry of Dalhana Acharya, Sutra Sthana. 3rd ed., Ch.23, Ver.5, Varanasi: Chaukhambha Surbharati Prakashan; 2014. pp.111
- [14]. Acharya Jadavaji Trikamaji, N M Acharya, editor. Sushruta Samhita of Sushruta with Nibandhsangraha Commentry of Dalhana Acharya, Chikitsa Sthana. 3rd ed., Ch.1, Ver.8 Varanasi: Chaukhambha Surbharati Prakashan; 2014. pp.397
- [15]. <https://madhavuniversity.edu.in/cervical.html>
- [16]. Asha Rout, A comparative study on effect of Ksharakarma and Agnikarma in management of Garbhashaya Grivamukha Gata Vrana, Thesis submission, IPGT & RA, Gujarat Ayurved University, Jamnagar, 2002.
- [17]. Krishna S et al. Role of tuttha karma in the management of cervical erosion with mild cervical dysplasia. A case report. WJPPS 2018;7(7): 1069-1073

- [18]. Chandla A, Tomer R. Kshara, prakshalana and Picchu karma as ayurveda treatment modalities in cervical erosion; A case study.
- [19]. Pragya Gupta, Sushila Sharma. Clinical evaluation of the efficacy of kshara karma with Apamarga kshara and jatyadi taila pichu in the Management of Cervical Erosion (Karnini Yonivyapada). World J. Clin. Pharmacol. Microbiol. Toxicol. Vol 1[3] September 2015. 43-49
- [20]. Dave et al. Efficacy of Yavakshara Application in the Management of Cervical Erosion: A case study. J Ayu Med Sci 2018; Oct- Dec 3(4):443-5
- [21]. Lumi Bhagat et al : A Comparative Clinical Study on the Efficacy of Palasha Kshara and Tankana in Karnini Yoni Vyapat (Cervical Erosion) IJAAR VOLUME III ISSUE III JUL-AUG 2017 : 684-692