



KSHAR KARMA IN THE MANAGEMENT OF CERVICAL EROSION – A PHARMACOLOGICAL REVIEW

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ABSTRACT

Cervical erosion/ectopy is a most common seen in women of reproductive age groups. Its prevalence ranges between 17-50% of all the gynecological conditions. This condition can be correlated with *Garbhashayamukhagata vrana* or *Karnini yonivyapada*. In modern system of medicine diathermy cauterization or cryosurgery are generally advised for treatment but these procedures have their own side effects and complications like excessive vaginal discharge, secondary infertility, bleeding per vagina, infections, stenosis etc. In *Ayurveda* found better alternative treatment for cervical erosion like *Kshar karma*, *Agni karma*, *Avachurna* as para-surgical procedures or *Yoni pichu*, *Yoni varti*, *Yoni prakshalan* as *sthanik chikitsa*. All of these *Kshar karma* is consider as satisfactory approach to treat cervical erosion because of its properties like *chedya*, *bhedy*, *lekhaniya* and *tridoshahara*.

Keywords: Cervical erosion, *Kshar karma*, *Garbhashayamukhagata vrana*

INTRODUCTION

Cervical erosion is condition in which the squamous epithelium of the cervix is replaced by Columnar epithelium which is continuous with that lining the endocervix¹. Cervical erosion/ectopy is a most common seen in women of reproductive age groups.

The prevalence of cervical erosion ranges between 17-50%. The condition is increases with parity and decreases with age 35 and above, Uncommon in post-menopausal women. This condition can be found in up 80% of sexually active adolescents also common in those who uses hormonal contraceptive pills².

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

Etiology⁷⁻¹²

Cervical erosion	Garbhashayamukhagata vrana
1. Congenital and developmental This condition persist only for a few days until the level of estrogen derived from the mother is falls down.	1. <i>Samanya nidana</i> <i>Vrana- Tridoshaprakopa, Agni, Kshar, Visha mithya prayoga etc.</i> <i>Yonivyapada- Mithya aahar-vihar, Artava dushti, Bhrush maithuna sevan, Use of apathya dravya.</i>
2. Acquired <u>Hormonal</u> (Usually found in the condition of high estrogen) -Adolescents -Pregnancy -Women on oral contraception -During the years of menstruation mainly in the ovulatory phase <u>Infection</u> Chronic Cervicitis	2. <i>Vishishta nidana</i> Structural deformity in <i>Artavavaha srotas</i> and <i>Garbhashayamukha- Brush maithuna sevana, Karnini yonivyapada hetu (Akale vahamanaya)</i> , Increased frequency of vaginal delivery, accidental injuries during assisted delivery (vacuum, forceps), D&C, Diagnostic procedures etc. <i>Yonivyapada-Pitta-kapha- sannipatiki yonivyapada, Karnini and acharana (vipluta by vagbhata) yonivyapada.</i>

Symptoms & Signs^{3,4}

Cervical erosion	Garbhashayamukhagata vrana
Abnormal Vaginal discharge (mucoïd/mucopurulent/irritant/offensive/bloodstained)	<i>Yoni strava</i> associated with <i>pichilatwa</i> in <i>kaphaj vrana</i> and <i>dourgandhya</i> in <i>pitaj vrana</i>
Post coital bleeding	<i>Yoni daha</i>
Infertility	<i>Vandhyatva</i>
Vulvar pruritus	<i>Yoni kandu</i>
Low back pain	<i>Kati vedana</i>
Dyspareunia	<i>Maithuna asahishnuta</i>
Frequent burning micturition	<i>Mutrashayagata vikara</i>

Signs

On per speculum 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 piece³.

Types

1. Congenital
2. Acquired
 - Simple/flat type
 - Papillary type
 - Follicular type¹

Diagnosis

Cervical erosion is likely to be discovered during routine pelvic examination and Pap smear test⁵.

Treatment

Cervical ectropion requires no treatment unless the symptoms are affecting the patient's daily life. First-line treatment is discontinuing hormonal contraceptives like oral contraceptive pills, depot medroxyprogesterone acetate, and switching to non-hormonal contraception methods. If the symptoms persist, the following treatment can be offered:

Electrocautery also is known as thermal coagulation. The cautery probe is held for 30 seconds against the area of ectropion, while the area is treated with heat to destroy the abnormal cells.

Cryotherapy (freezing): The cautery probe is held for two minutes against ectropion while the area becomes frozen.

Laser therapy: In this procedure, the carbon dioxide laser beam is used to destroy the abnormal cervical epithelium seen on magnification by a colposcope.

Boric acid vaginal suppositories can be used to make the pH acidic.

In *Ayurveda* found better alternative treatment for cervical erosion like *Kshar karma*, *Agni karma*, *Avachurna* as para-surgical procedures or *Yoni pichu*, *Yoni varti*, *Yoni prakshalan* as *sthanik chikitsa*.

Kshar Karm : Application of *Kshar* on wound (Chemical cauterization) e.g. *Apamarg Kshar*, *Arka Kshar*

Agni Karma : Application of *Dahan upakaran* on wound (Cauterization) e.g. *Pancha-dhatu shalaka*

Avchoorna : Dusting a *choorna* (dry powder) on wound e.g. *Haridra*, *Lodhra*, *Yashtimadhu*

Yoni Prakshalan : Cleaning of wound with medicated preparations e.g. *Panchwalkal kwath*, *Triphala kwath*.

Yoni Pichu : Placing a Tampon soaked in medicated oil or liquid e.g. *Jatyadi tail*, *Bala tail*, *Yashtimadhu ghrita*

Yoni Varti : Placing a medicated suppository e.g. *Kasisadi yonivarti*, *Argwadhadhi yonivarti*

Kshar Karma

According to *Sushruta samhita*,

“*Vrana gatra vichurnane, vranayati iti 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 *sannipatiki vrana*.

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

“*Shastra anushstrebhyah ksharah pradhantamah chedyabhedyalekhnyakaranaa tridoshagnatwah visheshkriyavacharnanaha*”

Kshar is a caustic, alkaline in nature obtained from the ashes of medical plants. It is a milder procedure compared to surgery and thermal cautery. *Kshar* has the properties like *ushna virya*, *laghu-teekshna guna*, *tridhoshgna*, *dahana*, *pachana*, *darana*, *vilayana*, *shodhana*, *ropana*, *shoshana*, *stambhana*, *krimighna*, and *lekhana karma*. It's external application (*Pratisaraneeya kshara*) is enough to manage the *vrana* along with internal medicines¹³.

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
- Inpouring of proteins and fibrocytes for the formation of scars (fibrous tissue) to fill up the gap.

Examples: *Snuhi kshar*, *Apamarg kshar*, *Udumbar kshar*, *Palash kshar*, *Tankan kshar* can be used.

Advantages of *Kshar karma*

- Postoperative pain is mild in intensity
- No bleeding
- Minimum hospitalization-one day care
- No scope for recurrence
- Systemic diseases are also undergoing this procedure.
- No surgical complications like incontinence, stenosis and stricture.

On conclusion, *Garbhashayamukhagata vrana chikitsa* by *Kshar karma* facilitates enhanced drug effect for early and uncomplicated wound healing by this way,

Properties of <i>Kshar</i>	Action	Effect
<i>Ushna virya</i>	<i>Kapha-vatahar</i> <i>Pachana</i>	Pain/tenderness Reduce the inflammation in lesser time(<i>paka</i>)
<i>Teekshna guna</i>	<i>Kaphavatahar</i>	<i>Yoni stravahara</i>
<i>Lekhana, Dahana</i> (Corrosive nature)	<i>Dushita mamsaharan</i> Remove the vitiated <i>dosha</i>	Destruction of columnar epithelium and thus promote the re-epithelialization of squamous epithelium Draining of pus Desquamation of sloughs Hence enhance the healing process
<i>Kushtagna</i> <i>Tikta rasa</i> <i>Laghu-Ruksha guna</i>	Reduces the vitiated <i>kapha</i> and <i>pita</i>	<i>Yoni kandu nashak</i>
<i>Krimighna</i>	Destroy infectious agent	Anti-microbial
<i>Shodhana</i> <i>Shoshana</i>	<i>Kapha-pitahara</i>	<i>Yoni stravahara</i>
<i>Dosha vilayana</i>	Dissolution of <i>dushita dosha</i>	<i>Samprapti vighatana</i>

CONCLUSION

In modern system of medicine diathermy cauterization or cryosurgery are generally advised for treatment but these procedures have their own side effects and complications like excessive vaginal discharge, secondary infertility, bleeding per vagina, infections, stenosis etc. In pharmacological aspect treatment of cervical erosion is “re-epithelization of squamous epithelium” for that in ayurveda, *Kshar* is strong alkaline nature is responsible for the corrosive action and re-epithelization of squamous epithelium easily.

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