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# AYURVEDIC MANAGEMENT OF CHRONIC PID ASSOCIATED WITH CERVICAL INTRAEPITHELIAL NEOPLASIA - A CASE REPORT

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## ABSTRACT

Pelvic inflammatory disease (PID) is the inflammatory condition of uterus, and associated structures, which are often sexually transmitted. Human Papilloma Virus (HPV) infection is the most prevalent sexually transmitted infection as well as the most important risk factor for Cervical Intraepithelial Neoplasia (CIN) and Invasive Cervical Carcinoma (ICC). CIN are dysplastic changes taking a long period to progress into true cancer. Currently treatment is not recommended for CIN 1&2 lesions as they are said to regress in some cases. According to Ayurvedic principles, *Garbashaya Mukha Sopha*, can be managed with *Vranaropana-Ojovardhaka* drugs. The symptomatic management with anti-inflammatory and immune-modulatory drugs along with *Sthanika chikitsa*, together gave promising results even in cytological level. A 43-year-old lady presented with thick yellowish discharge per vagina along with lower abdominal pain & low back ache. On examination, hypertrophied and eroded cervix was noticed along with positive cervical motion tenderness. She was sent to Regional Cancer centre, Trivandrum for cytological evaluation, which revealed LSIL (Low grade Squamous Intraepithelial lesion) with Koilocytic atypia. She was managed with oral medication and *Sthanika chikitsa* and got relieved from symptoms which was consistent even

after the follow up period. The cytology revealed negative for intraepithelial lesion or malignancy. Ayurvedic modalities proved to be effective in management of Chronic PID with CIN.

**Keywords**: Pelvic inflammatory disease, Human Papilloma Virus, Cervical Intraepithelial Neoplasia, *Garbashaya mukha sopha, Sthanika chikitsa,*

## INTRODUCTION

Pelvic inflammatory disease comprises a spectrum of inflammatory disorders of the upper female genital tract, including any combination of endometritis, salpingitis, tubo-ovarian abscess and pelvic peritonitis[1]. In most cases these infections are sexually transmitted due to organisms like Nisseria gonorrhoeae, Chamydia trachomatis, Herpes simplex virus, HPV etc., which are usually ascending infection from the vagina or cervix. Chronic PID is usually a sequel of acute PID, due to inadequate management. As the diagnosis in PID is largely clinical, gynaecological examination is often mandatory. As per Centers for Disease Control &Prevention, one or more of the following minimum clinical criteria present on pelvic examination- Cervical motion tenderness (CMT), uterine tenderness or adnexal tenderness satisfy the clinical diagnosis of PID. Even though PID has not been evaluated as a precursor of CA cervix, presence of HPV is the most important risk in CIN and CA cervix. Human Papilloma Virus (HPV) infection is the most prevalent sexually transmitted infection as well as the most important risk factor (99.5%) for Cervical Intraepithelial Neoplasia (CIN) and Invasive Cervical Carcinoma (ICC). In the cervix, the ectocervix is lined by squamous epithelium and the endocervical canal by the columnar epithelium. The junction of the two epithelia is the squamo-columnar junction (SCJ)[2]. The area between the original and the active SCJ is the transformation zone (TZ) which is susceptible to oncogenic factors including HPV, and hence is the site of CIN. In multiparous women, due to cervical injury, ectropion and chronic cervicitis, the columnar epithelium is continuously exposed to the vaginal acidity. The hallmark of a symptomatic HPV infection is to produce proliferation of the stratified squamous epithelium. CIN is characterized by the progression from cellular atypia to various grades of dysplasia (CIN 1, 2, 3& Carcinoma in situ) before progressing to invasive carcinoma. Immune response of the individual is also important in persistence of HPV infection as humoral neutralising antibodies have capacity to clear the virus. Coming to the management of CIN, it is broadly categorised as- preventive & definitive[3]. No definitive treatment, instead observation for 6-12 months is usually recommended for CIN 1&2 lesions, whereas local ablative methods & excisional methods are suggested in CIN 3/CIS. Eradication of precursor lesion is mandatory as an effective approach to the prevention of cervical cancer. In the context of *Yoniroga* (Gynaecologic diseases), Acharya Susrutha has pointed improper sexual practice (particularly coital act in young girls) as the most important etiology of *yoni rogas*[4]. HPV infection is an *Aganthu roga* (extrinsic diseases) by origin, but later it vitiates the bodily *Dosa* and *Dhatu* and manifest to a *Nija roga (intrinsic diseases)*. There is affliction of the *Rasa-rakta-mamsa dhatu*, along with *Srotovaigunya (impairment in bodily channels)*, which pave way for development of *Sopha (edema)* at the *Garbashaya mukha (cervix)*-CIN. This is in turn the *Poorvarupa avastha(prodromal stage)* of forthcoming *Vyadhi (disease)*- cervical cancer. In the initial stage CIN can be considered as a *Vrana beda* and treatment of *Vranasopha* can be employed. *Pariseka(douche)* being one among them, washes away the excessive discharge and aids healing. Since the disease has involvement of *Mamsa dhatu*, *Sastra kshara agni karma* has a major role, where *Pratisaraneeya kshara* has site specific action. *Sodhana* and *Ropana* are the prime modalities in *Vrana chikitsa*, which makes them the treatment of choice in CIN as well. In addition, drugs which improve the *Vyadhikshamatwa* (immunity) checks the recurrence of the disease.

**Case Report:**

A 43 year old female patient approached the OPD, Govt. Ayurveda College Hospital for Women and Children, Poojappura, Thiruvanathapuram, with complaints of thick yellow white discharge per vaginum, lower abdominal pain and low back ache which was present since 4 years, and she also developed dyspareunia since 4months. Her gynecologic examination was done on 11/07/2013 which revealed thick yellowish discharge p/v with hypertrophied and eroded cervix along with positive cervical motion tenderness, and bilaterally tender fornices. She was sent to the Community Oncology Dept. of Regional Cancer Centre, Thiruvanathapuram, for Papsmear and Colposcopy examination. She was diagnosed with Low Grade Squamous Intraepithelial Lesion with Koilocytic atypia in Pap smear & HPV infection with Cervical Intraepithelial Neoplasia in Colposcopy on 13/09/2013. She got admitted in the Hospital and was advised to take *Gugguluthikthakam kasaya, Guggulupanchapala churna* and *Triphala guggulu* tablet internally. IPD treatment given where *Snehapana* (Oleation) with *Guuguluthikthaka ghrita*, followed by *Abhyanga- Usma sweda* (Oil application-Sudation) with *Pinda tailam, Virechana* (Purgation) with *Avipathi churna* and *Matravasthi* (Enema) with *Madhuyashtyadi tailam*. Followed by the *Sodhana* (purification) procedures she was posted for the *Sthanika chikitsa* (local treatment) which included- *Yoni kshalana* (Vaginal douche) with *Triphala kashaya* for 7 days, *Kshara karma* (Alkaline drug usage) with *Tankana kshara* for 3 days. There after Intravaginal *Uttaravasthi* (Retained douche) with *Mahathikthaka ghrita* for 3days and *Pichu dharana* (Tampoon) with *Mahathikthaka ghrita* for 7 days was also employed. On discharge she was advised to take *Indukantham ghritam*, *Kadhaleemadhusnuhi rasayanam* for next 3 months, as well as *Rasagandhi mezhuk* capsule for next 40 days. After 3 months review, she had marked symptomatic relief and the Papsmear and Colposcopy examination was repeated on 27/01/2014. The results revealed a smear negative for intraepithelial lesion or malignancy and Colposcopy showed minimal HPV flat lesion. Patient continued her medicines for three more months and was under follow up. After 1 year she again underwent Pap smear and Colposcopy (15/1/2015), which showed smear negative for intraepithelial lesion or malignancy, which was a clear indication of persistence of the results.

**Table 1:** Personal history

| | |
|---|---|
| Diet | Mixed |
| Bowel | Constipated |
| Appetite | Poor |
| Micturition | Recurrent UTI |
| Sleep | Disturbed |
| Allergy | Nil |
| Addictions | Nil |

**Table 2:** Menstrual History

| | |
|---|---|
| Menarche | 13 year |
| Cycles | Regular |
| LMP | 01/07/2013 |
| Interval | 21-25 days |
| Duration | 2 days |
| Amount | Moderate |
| Clots | Minimal |
| Dysmenorrhea | Absent |

**Obstetric History:** P2L2A1- FTNVD, LCB-20yrs

**Table 3:** Per speculum examination

| P/S | Vagina | Discharge | Present |
|---|---|---|---|
| (11/7/2013) | | Colour | Yellowish, Thick |
| | | Amount | +++ |
| | | Vaginitis | Present |
| | **Cervix** | Size | Hypertrophied |
| | | Cervicitis | Present |
| | | Erosion | +++,all around |
| | | Ectropion | Present |
| **P/V** | **Uterus** | Size | Normal |
| | | CMT | + |
| | | Consistency | Normal |
| | **Adnexae** | Fallopian tubes | Not palpable |
| | **Fornices** | | Tender +++ |

**Table 4:** Management

| Medicine/Procedures | Dose | Duration |
|---|---|---|
| *Gugguluthikthakam kasaya*<br>*Guggulupanchapala churna*<br>*Triphala guggulu* | 96ml bd<br>1tsp bd with honey<br>2bd | 7days |
| *Valuka sweda*<br>*Snehapana* with *Gugguluthikthaka ghrita*<br>*Abhyanga Usma sweda* with *Pindatailam*<br>*Virechanam* with *Avipathi churna with hot water*<br>*Matravasthi* with *Madhuyashtyadi tailam* | -<br>20ml-120ml<br>-<br>25gm<br>60ml | 3days<br>7days<br>3days<br>1day<br>7days |
| *Vaginal douche* with *Triphala kashaya*<br>*Kshara application* with *Tankana kshara*<br>*Intravaginal Uttaravasthi* with *Mahathikthaka ghrita*<br>*Pichu dharana* with *Mahathikthaka ghrita* | <br>1pinch<br><br> | 7days<br>3days<br>3days<br>7days |

**Table 5:** Follow up on 15/01/2014

| P/S | Vagina | Discharge | Present |
|---|---|---|---|
| (15/01/2014) | | Colour | Egg white |
| | | Amount | + |
| | | Vaginitis | Absent |
| | **Cervix** | Size | Hypertrophied |
| | | Cervicitis | Absent |
| | | Erosion | Absent |
| | | Ectropion | Absent |
| **P/V** | **Uterus** | Size | Normal |
| | | CMT | -ve |
| | | Consistency | Normal |
| | **Adnexae** | Fallopian tubes | Not palpable |
| | **Fornices** | | Non tender |

**Table 6:** Comparison of results

| | Before treatment (13/9/2013) | After treatment (27/1/2014) | Final Review (15/1/2015) |
|---|---|---|---|
| Pap Smear | Low Grade Squamous Intraepithelial Lesion with Koilocytic atypia | Negative for intraepithelial lesion or malignancy | Negative for intraepithelial lesion or malignancy |
| Colposcopy | HPV infection with Cervical Intraepithelial Neoplasia | Minimal HPV flat lesion | - |

**Reports: (Regional Cancer Centre, Trivandrum)**

## DISCUSSION

As per **Ayurvedic** classics, features of many *Yonirogas* have resemblance with the etio-pathogenesis of CIN. Multiple sexual partners, early marriage and childbearing are one of the major risk factors of HPV infection and thereby development of CIN. It begins as an *aganthu roga* which further results in *tridosha dushti*, leads to development of *sopha* at the cervix. In addition, the usage of *ahitha ahara* leads to *agni mandhya* and *ama* formation, which hampers the *dhatu pushti* and finally effects the *vyadhi kshamatwa* or *bala*. In immune deficient patients, abnormal DNA prevails, and abnormal cells multiply to develop CIN lesions. This aids the further progression of the disease. The line of management aimed at correction of the *tridosha dushti* prevailing in the body along with local correction at the affected site-cervix. This included ***S****odhana, samana, sthanika chikitsa* as the first-hand modality, further followed by *Rasayana- ojovardhana* drugs and practice of *Sadvritta* (code of conducts). *Gugguluthikthaka yoga* was chosen for internal administration as *kashaya* as well as *ghrita* for *acha snehapana*. *Gugguluthikthaka* is a polyherbal formulation with major ingredients being *Guggulu* and *pancha thikta* drugs which are known for their *vata kapha hara, krimihara, shotagna* as well as *vrana ropana* property. It's a proven drug in modulation of proinflammatory cytokines and enzymes in chronic inflammatory condition[5]. *Guggulupanchapala churna* mentioned in the context of *Nadi vrana* (sinuses) was another drug chosen. It being *deepana pachana* helps correct the *amasanchaya* in *sookshma srotas* and helps in removing the *kleda*, thereby cleanses the inflamed and dysplastic epithelium. *Guggulupanchapala churna* is rich in antioxidants[6] which also acts as a *rasayana* that aid the healing process. *Sodhana* procedures were employed aiming correction of the dislodged *dosa*, and thereby bringing an equilibrium and check the disease progression. *Sthanika chikitsa* is having special emphasise in *garbashaya mukha vrana. Mamsa dushti* occurs in CIN lesions and hence *kshara agni karmas* are having special role. Drugs which impart immunity and has *vrana ropana* property will have an upper hand in the management of this infection as the virus is believed to enter the basal layer of the squamous epithelium through microtrauma. Local procedures mainly included vaginal douche with *Triphala kashaya* which is proven for its antimicrobial, wound healing and antioxidant activity[7]. *Tankana kshara* being *katu rasa*, is *vrana avasadana* – helps in healing erosion; because of its *ruksha-ushna* property is *krimihara*, and being *Kapha Vishleshaka*[8], it checks discharge. *Kshara karma* helps in removing the unhealthy epithelium, checks discharge and promotes development of normal epithelial layer of cervix. In addition, intravaginal *uttaravasthi* and *pichu dharana* with *Mahathikthaka ghrita*[9] aided the easy wound healing and antioxidant rich drugs of the formulation prevented recurrence. *Indukantha ghrita*[10] was advised in *shaman matra* during the follow up period, which was specially intended to improve the immune status of the patient. This *ghrita* helps in *srotosodhana* thereby preventing recurrence of the cervical lesion and is moreover rich in immune-modulatory and anti-inflammatory activity. *Rasagandhi mezhuk*[11] is a herbo-mineral siddha preparation with particular emphasis in *arbuda* treatment. The ingredients being *thikta katu rasa pradhana* helps check excess *kleda*, clears the *srotorodha* as well as immune - modulatory action prevents recurrence of the disease.

*Kadhaleemadhusnuhi Rasayana* mentioned in *Lehya prakarana of Sahasrayoga*[12] is typically *krimighna, sophahara*, as well as *rasayana*, prevent the recurrence of the disease. These internal and local treatment measures ensured total relief in symptoms and moreover the cytological study brought negative result for intraepithelial lesion or malignancy.

## CONCLUSION

PID is often a persisting condition in most **of the** women, often due to inappropriate or timely management. In turn CIN are dysplastic changes taking a long period to progress into true (invasive) cancer which point towards the continuum as well as the prognosis of ICC. Hence both needs to be addressed at a very early stage itself. Ayurvedic modalities with highlight to *Sthanika chikitsa* plays a pivotal role in management of such chronic gynecologic conditions. Both internal and external medication have facilitated the re-epithelisation of cervix to normal, as well prevented the recurrence.

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## REFERENCES

1. STD Treatment Guidelines. Centres for Disease Control &Prevention 2015; Page no 728. (Last accessed on 2021 Feb 10). Available from: www.cdc.gov.std.pid
2. Sheila Balakrishnan. Textbook of Gynaecology. 2nded. Hyderabad: Paras Medical Publisher; 2016.p. 227.
3. D C Dutta. Textbook of gynaecology. 5thed. Kolkata: New Central Book Agency (P) Ltd; 2008.p. 315-317.
4. Kaviraj Kunjalal Bhishagratna. Susrutha Samhitha Vol 3(Uttarasthana). 3rded. Varanasi. Chowkamba Sanskrit Series Office 2003.p. 315
5. Mohind C. Mohan, Anu P. Abhimannue, B. Prakash Kumar, Modulation of Proinflammatory cytokines & enzymes by polyherbal formulation Gugguluthiktaka ghrita. J Ayurveda Integer Med. 2019 Jan 10; S0975-9476(18)30067-6. (Last accessed on 2021 Feb 08). Available from: http://www.ncbi.nlm.nih.gov/pubmed/30638916
6. Sruthi C.V. and Sindhu A. A preliminary study on the phytochemicals and antioxidant potential of Guggulupanchapala Choorna used in the management of Fistula-in-ano. Int. J. Res. Ayurveda Pharm.2013; 4(4):519-521. (Last accessed on 2021 Feb 05). Available from: http://dx.doi.org/10.7897/2277-4343.04412
7. Muthusamy Senthil Kumar, Shanmugam Kirubanandan, Ramasamy Sripriya, Triphala promotes healing of infected full-thickness dermal wound. J Surg Res. 2008 Jan; 144(1):94-101. (Last accessed on 2021 Feb 11). Available from: http://www.ncbi.nlm.nih.gov/pubmed/17662304
8. Dr. Ravindra Angadi. Rasatarangini(Ayurveda Pharmaceutics & Indian Alchemy). 1st ed. Varanasi; Chaukhambha Surbharati Prakasan; 2015.p.217
9. Srikantha Murthy K R. Vagbhata's Ashtanga Hridaya. Vol-2 (Chikitsa Sthana). Chaukhambha Krishnadas academy.p.473
10. K.V. Krishnan Vaidyan, S. Gopala Pillai. Sahasrayogam. 32nd ed. Mullakkal; Vidyarambham Publishers; October 2013.p.322.
11. Formulary of Siddha medicines. 6thed. Chennai; IMCOPS Publishers; 2012.p.168
12. K.V. Krishnan Vaidyan, S. Gopala Pillai. Sahasrayogam. 32nd ed. Mullakkal; Vidyarambham Publishers; October 2013.p.230.

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