

INTERNATIONAL AYURVEDIC MEDICAL JOURNAL



Case Report

ISSN: 2320-5091

Impact Factor: 6.719

A CASE OF CERVICAL INTRAEPITHELIAL NEOPLASIA - MANAGEMENT THROUGH AYURVEDA

Deepthi. G. B¹, Gayathri Bhat. N.V²

¹Final Year Pg Scholar, Dept of Prasuti tantra Stree and Streeroga, Sri Dharmasthala Manjunateshwara College of Ayurveda and Hospital, Hassan, Karnataka, India

²Professor and Head of Department, Dept of Prasuti tantra Streeroga, Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital Hassan, Karnataka, India

Corresponding Author: <u>deepthi.gudi@gmail.com</u>

https://doi.org/10.46607/iamj3609122021

(Published Online: December 2021)

Open Access © International Ayurvedic Medical Journal, India Article Received: 19/10//2021 - Peer Reviewed: 13/11/2021 - Accepted for Publication 08/12/2021

Check for updates

ABSTRACT

Introduction – Cervical cancer is the 2nd most leading prevalent cancer in India. There are an estimated 123,000 new cases of cervical cancer in India every year with 67,000 deaths in women alone. Cervical cancer in Recent studies shows that screening of cervical cancer reduces the disease incidence and disease mortality by 50%. Low-grade squamous intraepithelial lesion (LSIL) is a common abnormal result on a Pap smear cervical test. It's also known as mild dysplasia. **Methodology** – Here is a case report of a patient aged 26yrs with complaints of white discharge per vagina with severe itching, on routine cervical screening investigations found to have Low grade squamous intraepithelial neoplasms. She was treated with *Ayurvedic sthanika chikitsa (Local therapies)* such as *Yoni prakshalana* (Vaginal douching), and Yoni pichu (Vaginal tamponing) for 7 days along with shaman chikitsa. Later PAP smear was repeated after 1 month of follow up and found to have negative for intraepithelial neoplasia. And there was relief in the symptoms following treatment. **Results**- In this case, there was a relief of symptoms and on follow up when Pap smear was repeated, there was negative for intraepithelial neoplasia. *Ayurvedic* treatment modalities such as *Sthanika chikitsa* which includes *yoni prakshalana* and *Yoni Pichu* are the line of treatment for various gynecological problems and help in reducing mortality and morbidity caused due to cervical cancer in India.

Discussion- Here Low-grade squamous Intraepithelial neoplasia can be considered as the *Sanchaya avastha* and hence diagnosing the disease in its *Sanchaya avastha* i.e mild dysplasia, is important. During *Sanchaya avastha* there is localized neoplastic changes of cervical cells and there is Manifestation of Low-grade Intraepithelial Neoplasia. In the later stages of *Kriyakala (Stages of disease manifestation)* the neoplasia turns into metastasis and further differentiation occurs which Manifests all the symptoms of Cervical Cancer. Hence treatment modalities such as *Yoni prakshalana* and *yoni pichu* helps in preventing later conditions such as cervical cancer.

Keywords: Cervical Cancer, LSIL, Ayurveda, Sanchaya

INTRODUCTION

The case of a 26-year-old married, nonalcoholic, nonsmoking housewife. She complained of white discharge per vagina for 8 months. She was anxious to conceive for 7yrs with a history of irregular menses since 5yrs and is under medications. She was admitted for *Basti chikitsa* (medicated enema treatment) and as a part of routine investigation for cervical screening was done. She was found to have low-grade intraepithelial neoplasm hence further management was planned in the In-patient department of *Prasuti tantra streeroga*, SDM hospital Hassan

PRADHANA VEDANA/MAIN COMPLAINT: - Pt anxious to conceive since 7yrs

ANUBANDHI VEDANA/ASSOCIATED COM-PLAINT: -Pt c/o white discharge per vagina for 8 months.

HISTORY OF PRESENT ILLNESS: - Pt anxious to conceive since 7yrs with a history of irregular menses since 5yrs and is under medications. Pt was admitted for Basti *chikitsa* and as a part of routine investigation for cervical screening was done and pt. was found to have low-grade intraepithelial neoplasm hence further management was planned

H/O PAST ILLNESS: K/C/O PCOD since 5yrs **FAMILY HISTORY**: -No history of cervical abnormal lesions in the mother and siblings

PERSONAL HISTORY/VAYYAKTIKA VRUT-TANTA: -

- AHARA(Diet): -mixed
- AGNI(Digestion): Jataragni janya
- KOSTA(Bowels): madhyama
- *NIDRA(Sleep): vikruta* (disturbed)
- VYASANA/ADDICTION: nothing specific

- MALA PRAVRUTHI(Defecation): prakrutha (Normal
- MUTRA PRAVRUTHI(Micturation): prakrutha
- NATURE OF WORK: Housewife

GYNECOLOGICAL HISTORY: -

- AGE OF MENARCHE: 14 years
- LMP- 2/11/020
- MENSTRUAL HISTORY: 2-3days /75-80days (2pads/day)
- PAIN- absent
- CLOTS- absent
- FOUL SMELL- absent

• ASSOCIATED COMPLAINTS- nothing specific **OBSTETRICAL HISTORY:** -Anxious to conceive **GENERAL EXAMINATION:** -

- BUILT- obese (BMI 33.1)
- NOURISHMENT- malnourished (due to Agni mandhya)
- PALLOR- Absent
- ICTRUS- Absent
- EDEMA- Absent
- LYMPHADENOPATHY- Absent
- CLUBBING- Absent
- WEIGHT- 79.4KG, height 155cms
- BP- 120/80 mm of hg PR-80 bpm

DASHAVIDHA PAREKSHA: -

- *Prakruthi: Kapha pitta prakriti*
- Vikriti: -Kapha pradhana tridosha
- Sara: -Meda Sara purusha
- Samhanana: Avara
- Pramana: Sthula deha
- Sathmya: Sarva rasa Sathmya
- Sattva: Madhyama
- Ahara shakti: Madhyama

- Vyayama shakti: Madhyama (walking 1hr a day)
- Vaya: Yuva

ASTA STHANA PAREEKSHA: -

- NADI: 72 bpm
- *MALA*: -prakrutha
- *MUTRA*: Prakrutha
- JIHWA: Alipta
- SHABDA: Prakrutha
- SPARSHA: Ruksha
- DRUK: prakrutha
- AKRUTHI: sthula

CLINICAL EXAMINATIONS-

- P/A EXAMINATION: -soft, nonnon-tender
- P/s- Cx congestion in the upperlip, erosion+ WDPV+
- P/v- NS/AV/FF

Table 1: Samprapti Ghataka



Figure 1: Per Specu-Lum Findings

ROUTINE INVESTIGATIONS – Blood and Urine routine under normal limits.

Cervical Screening-PAP Smear- Reports indicating the presence of Low-Grade Squamous intraepithelial neoplasia.

Samprapthi Gataka: -		
Dosha: -	Kapha, Vata	
Dushya: -	Rasa Raktaadi	
Agni: -	Jataragni Janya	
Ama: -	Jataragni Janya Ama	
Srotas: -	Arthavavaha Strotas	
Srotodusti: -	Granti, Vimarga Gamana	
Udbhava Sthana: -	Garbhashaya	
Vyakta Sthana: -	Yoni Mukha (Cervix)	
Roga Marga: -	Abhyantara	
Sadyasadyata: -	Kruchra Sadya	

Table 2: Differential Diagnosis

DISEA	ASE	INCLUSION CRITERIA	EXCLUSION CRITERIA
1)	Kaphaja yoni vyapat	White discharge per vagina Pain in the vagina	Pap smear reports – Mild dysplasia
2)	Arbuda	Purvarupa avastha of Arbuda can be included Mild dysplasia on Pap smear reports	

FINAL DIAGNOSIS- Purva rupa avastha of Arbuda THERAPEUTICAL INTERVENTION CHIKITSA- STHANIKA CHIKITSA –

- Yoni abhyanga with Triphala kwatha -7days
- Yoni Pichu with ropana ghrita -7days
- Obesity diet
- Yoga and pranayama

STHANIKA CHIKITSA FOR CERVICAL NEOPLASIA

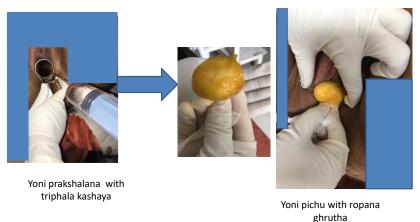


Figure 3: Demonstration of Sthanika Chikitsa (A) Yoni Prakshalana (B) Yoni Pichu

RESULTS-

Follow-ups and outcomes-

After 7 days of sthanika chikitsa, follow up was done after 1 month of the treatment Pt had relief in the symptoms, Vaginal Itching and white discharge were reduced. On repeating The PAP smear- it was negative for intraepithelial neoplasia.

According to Sushruta, When the doshas are scummed in the premonitory stage(sanchaya avastha) itself, the disease doesn't progress to further stages and the bala of the disease reduces³. Here Low grade squamous intraepithelial neoplasia can be considered as the sanchaya avastha and Hence diagnosing the disease in its Sanchaya avastha i.e mild dysplasia, is important and it helps in preventing later conditions such as cervical cancer.

DISCUSSION

DISCUSSION ON THE DISEASE - Low-grade squamous intraepithelial lesion (LSIL) is a common abnormal result on a Pap test. It's also known as mild

dysplasia. It's a type of cervical cancer that is 2nd most leading prevalent cancer in India. There are an estimated 123,000 new cases of cervical cancer in India every year with 67,000 deaths in women in India alone.4Cervical cancer is Recent studies shows that screening of cervical cancer reduces the disease incidence and disease mortality by 50%⁵. cervical Cancers can be prevented at the earliest by detecting the presence of HPV. Regular population-based Screening is done using Pap smear cytology and it is accepted as the international screening Programmed. PAP smear screening helps in detecting the pre-cancerous stages such as Low-grade intraepithelial neoplasia, Highgrade Squamous intra-epithelial neoplasia prevents Cervical Cancer. HPV (Human Papilloma Virus) is one of the most common causes of intra-epithelial neoplasms. HPV reduces the embryo's ability to implant in the uterus. HPV infections also damage the embryo and hence also one of the causes for Primary infertility in the female of reproductive age group⁶

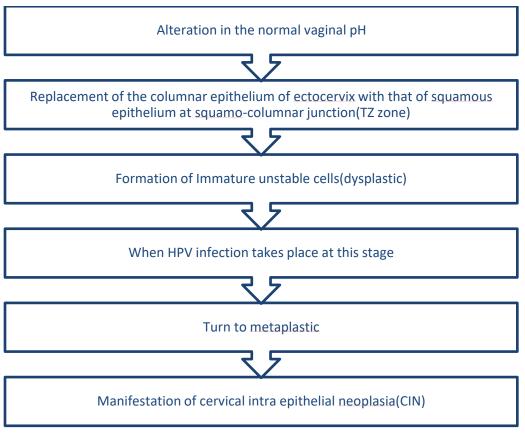


 Table 3: Manifestation of CIN

AYURVEDIC UNDERSTANDING OF LSIL (LOW GRADE SQUAMOUS INTRAEPITHELIAL NEO-PLASMS-

The cervical intraepithelial neoplasm can be taken as *Arbuda, Granti* or *Dustavrana*. Cancer originates due to metabolic changes. *Vata dosha* is responsible for cell division. Due to *Dosha prakopa*, there is

Aggravation of *vata* and Suppression of *Kapha* which is the major reason for the proliferation of the cells. At this stage, there is Growth of the Proliferated cells at a specific part i.e., *Ekadeshabhivrudhi*. Here we can consider the proliferation of abnormal cells at the cervix and further turns into Low-grade intra-epithelial neoplasm.

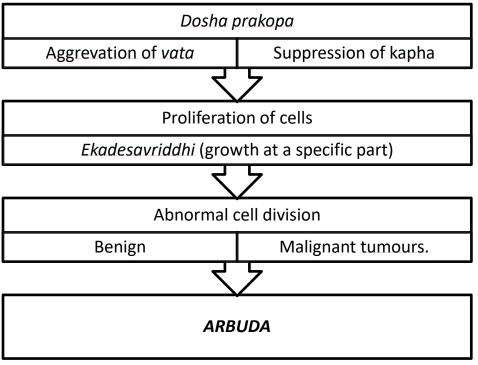


Table 4: Manifestation of Arbuda

Shad kriya Kala is disease progression acc to Ayurveda and Manifestation of Arbuda can be understood as follows-

During *Sanchaya avastha* there is localized neoplastic changes of cervical cells and there is Manifestation of

Low-grade Intraepithelial Neoplasia. In the later stages of kriyakala, the neoplasia turns into metastasis and further differentiation occurs which Manifests all the symptoms of Cervical Cancer.

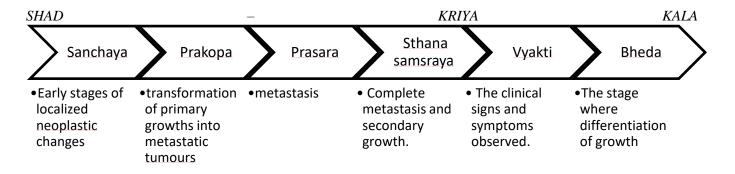


Figure 6: Shad Kriya Kala of Arbuda

DISCUSSION ON MODE OF ACTION OF CHIKITSA (TREATMENT GIVEN) – The treatment given was *Yoni Prakshalana* with *Triphaladi Kwatha* followed by *Yoni Pichu* with *Ropana Ghrita* for 7 days. Here *Sthanika Chikitsa* with *Yoni Prakshalana* is employed, which is indicated in the case of Yoni Srava, Yoni Paichhilyata, Yoni Daurgandhya. Triphala Kashaya is used for Yoni Prakshalana. Triphaladi Kashaya is Tiktakashaya rasa pradhana, Laghu Ruksha guna and hence their action is Kaphahara, Lekhana, Kandugna, Kleda-shoshaka, vrana shodhana and ropana, srava kleda hara, *Šothahara, vedana sthapaka.* From this, it is clear that *Yoni Prakshalana* with *Triphaladi Kwatha* is Bacteriodcidal, anti-Inflammatory and it removes the debris of unhealthy tissues and dysplastic tissues. It helps in the regeneration of new tissue growth in the vaginal flora and maintains normal vaginal mucosa by maintaining the normal vaginal pH.⁷

Followed by *Yoni pichu* with *Ropana Ghrutha* was done. *Ropana Ghrutha*⁸ has the following ingredients

PROPORTION 1 part
1 part
1 part
1 part
1 part
1part 1
1 part
28parts
1 Part

TABLE 5: Ingredients of Ropana Ghrutha

Ropana Ghrutha –All the ingredients are Laghu, ruksha guna pradhana and absorb the excessive moisture, smoothens the tissue; due to Tikta Madhura Rasa Pradhana, Katu Vipaka, Sheeta Veerya they are antiinflammatory, bactericidal and remove the dead cells and replaces the dysplastic tissues. By promoting the new healthy tissue formation. It acts as Pittashamaka, Shophahara, Vrana ropaka, Drusta vrana hara. Ingredients of Roopana Ghrutha demonstrates anti-cancerous, anti-tumour, anti-scavenging, cytotoxic, activity such as -

1) *Londra*- Acc. to niyati et all *Symplocos racemose* bark showed potent antioxidant and anticancer activity. It may be due to the presence of phytochemicals that are responsible for the anticancer activity.⁹

2) *Madhuka* – Acc to asima et all. The *in vitro* cytotoxicity was performed against five human cancer cell lines namely of the lung (A-549), liver (Hep-2) colon (502713 HT-29) and neuroblastoma (IMR-32). Against lung (A-549) cell line plant extract showed 83% growth of inhibition. plant extracts showed selective *in vitro* cytotoxicity, active against some human cancer cell lines and others, not show activity.

3) *Manjista* - Methanol fraction of Rubia cordifolia extract exhibited potent inhibition of Human cervical cancer cell line and Human larynx carcinoma cell line while was found to be less cytotoxic against normal

human kidney cells displaying safety for normal cells. $^{\rm 10}$

4) *Chandana*- Enhanced GST activity and acidsoluble SH levels were suggestive of possible chemopreventive action of sandalwood oil on carcinogenesis through a blocking mechanism. topical application of α -santalol demonstrated chemopreventive effects as observed from reduced ornithine decarboxylase activity, tumour incidence, and multiplicity^{11,12}

Yoni Pichu helps in penetration of these drugs into the tissue and helps in absorption of these drugs due to its *Sukshma, Vyavaayi guna* and lipophilic property, thus helping in nourishing the pelvic tissues. here *Yoni Pichu* is removed into amutra Kala (until the next urge of micturition). Hence these drugs retain in the vagina for a longer period and help in better action. It helps in normalizing the *Apana Vata* and maintains a healthy vaginal symbiosis.

These two treatment modalities which are the vaginal therapies act through the vaginal drug delivery system. The vaginal epithelium is made up of 40 distinct layers and the range of the epithelium creates an involuted surface that covers a large surface area, approximately 360cms. And the vaginal administration of drug delivery surpasses the first-pass metabolism and ease the administration of the drugs and have high permeability for low molecular weight drugs which are lipophilic such as ghrutha. Hence the trans-epithelial absorption via the vaginal route helps in easy and quick absorption of the medications.

Overall *Sthanika Chikitsa* (Treatment modalities which include *Yoni Prakshalana* and *Yoni Pichu*) helps in -

- Imparts dryness and denatures the microorganisms (HPV)
- Helps in the maintenance of the pH and by regaining normal vaginal pH,
- Healthy layer on the cervix
- Regeneration of healthy cervical epithelia
- Healing of CIN 1 lesion (LSIL)

CONCLUSION

LSIL (Low grade squamous intraepithelial lesions) can be considered as the *Purvarupa avastha of Arbuda* which left untreated will cause cervical cancer. *Doshasya apahruta dosha Labate a Uttara Gati* hence during its *Sanchaya avastha* only if proper treatment is given, it doesn't progress to other *Kriyakala* stages. Hence Integrative management of precancerous stages should be adopted.

REFERENCES

- Kashinath Pandey And Gorakhnath Chaturvedi Charak samhita Vidyotini vyakhya Part –I chikitsa Sthan 13-14/30 Reprint 2009 Varanasi Chaukambha Bharti Academy
- Shastri A D. Susruta Samhita (Purvardha) with Ayurveda-Tatva-Sandipika Hindi commentary. Reprint ed. Varanasi: Chaukhambha Sanskrita Sansthan; 2005. nidanasthana, sloka No. 13
- Shastri A D. Susruta Samhita (Purvardha) with Ayurveda-Tatva-Sandipika Hindi commentary. Reprint ed. Varanasi: Chaukhambha Sanskrita Sansthan; 2005. Sutrasthana, sloka No. 21/39
- Senapati R, Nayak B, Kar SK, Dwivedi B. HPV Genotypes distribution in Indian women with and without cervical carcinoma: Implication for HPV vaccination program in Odisha, Eastern India. BMC infectious diseases. 2017 Dec;17(1):1-0.
- Franco EL, Duarte-Franco E, Ferenczy A. Cervical cancer: epidemiology, prevention and the role of human papillomavirus infection. Cmaj. 2001 Apr 3;164(7):1017-25.

- https://screening.iarc.fr/doc/WHO_India_CCSP_guidelines_2005.pdf
- 7. Priyanka Teva, Kalpna Sharma, Hem Prakash. Mode of Action of Sthanik Chikitsa in Commonly Used in Stree Roga. AYUSHDHARA, 2020;7(Suppl 1):36-41.
- 8. Sharanghadhara, Sharanghadhara Samhita English translation By Prof. K.R. Srikanthmurthy Chaukhambha Orientalia Varanasi, Second edition 1995 madyama khanda 9/1-2
- Niyati A, Unnati S, Lal H, Sanjeev A. Antioxidant andanti-cancer potential of Symplocos racemosa bark against Hep3B cell line. International Journal of Pharmaceutical Sciences and Research (IJPSR). 2015;6(10):4529-33.2)
- Patel PR, Nagar AA, Patel RC, Rathod DK, Patel VR. In-vitro anticancer activity of Rubia cordifolia against Hela and Hep-2 cell lines. Phytomedicine. 2010; 2:44-6.
- Dwivedi C, Valluri HB, Guan X, Agarwal R, Chemopreventive effects of α-santalol on ultraviolet B radiation-induced skin tumour development in SKH-1 hairless mice. Carcinogenesis, 2006; 27: 1917-1922
- Kumar R, Anjum N, Tripathi YC. Phytochemistry and pharmacology of Santalum album L.: A review. World Journal of Pharmaceutical Research. 2015 Aug 4;4(10):1842-76.

Source of Support: Nil Conflict of Interest: None Declared

How to cite this URL: Deepthi. G. B & Gayathri Bhat. N.V: A Case Of Cervical Intraepithelial Neoplasia- Management Through Ayurveda. International Ayurvedic Medical Journal {online} 2021 {cited December 2021} Available from: http://www.iamj.in/posts/images/upload/3143_3150.pdf