



REVIEW ARTICLE

# Cervical Erosion - Therapeutic Cure through Ayurveda

Author: S N V Neeraja Doguparti<sup>1</sup>

<sup>1</sup>Department of Dravyaguna, Kunwar Shekhar Vijender Ayurved Medical College and Research Centre, Shobhit University, Gangoh, Saharanpur, UP, India

## ABSTRACT

Cervical erosion is the common gynaecological problem most likely in many women throughout their reproductive years. It causes more discomfort for women with difficulty in undertaking daily life activities. Sometimes it may be symptomless but many a times it is mere disturbing and if cervical erosion is associated with chronic cervicitis and leucorrhoea it leads to complications like difficulty in sexual intercourse, infertility and cervical cancer if it is neglected or not having proper treatment. There is an increase in the mortality rate in Indian women due to the cervical cancer which became the second frequent cause of death in women. When cervical erosion is associated with the chronic cervicitis along with leucorrhoea treatment should be taken properly. In the conventional medical care due to the surgical procedures like cryosurgery, Diathermy cauterization, Laser surgery they have complications and side effects later and are as well as expensive to afford by all the women. So there is a need to have treatment and care through Ayurveda which is very ancient system of medicine. Medicinal plant formulations prepared through authentic methods are quite helpful in treating the cervical erosion. In Ayurveda cervical erosion condition can be taken as Karnini yonivyapath due to its pathology involving Vata and Kapha causes erosion or karnika around the cervix. Plants like Dhataki, Daruharidra, Lodhra, Kumari, Chandana, Nagakesara, Chandana, Mundi etc are useful in cervical erosion associated with the leucorrhoea and cervicitis.

**Key Words** *Cervical erosion, Cervicitis, Karnini Yonivyapath, Dhataki, Mundi*

## INTRODUCTION

- Cervical cancer is the second frequent cause of mortality in Indian women, about 122,844 women are identified from the cervical cancer every year in India and about 67,477 of them are died from the disease<sup>1</sup>.
- Indian Council of Medical Research states that cancer of the cervix is the 3<sup>rd</sup> most common cancer with estimated 1 lakh new cases in 2016 and projected to be about 1.4 lakh in 2020<sup>2</sup>.

- Cervical erosion is the histopathological condition in which eversion of cervical mucosa is seen and is usually associated with leucorrhea due to chronic endocervicitis. Due to its non-healing and recurrent nature cervical erosion is the leading cause of cancer in cervix in women.
- Cervical erosion is a gynaecological condition seen majorly in women of all kinds of ages during their fertile years. It is a condition or growth which is not cancerous affects the female genital tract and by this cervical erosion nearly



## REVIEW ARTICLE

85% of women suffer during their lifetime<sup>3</sup>. In this type of lesion, a zone of columnar epithelium on the vaginal portion of the cervix is replaced by the stratified squamous epithelium found normally near external os.

- Cervical erosion may be congenital if it affected since birth or acquired if it occurs during the lifetime. Congenitally the erosion persists until the level of oestrogen derived from the mother falls and it heals within few days.
- During pregnancy, contraceptive pill users and in women suffering with chronic cervicitis acquired erosion is seen.
- Hyperplasia of the endocervical epithelium and papillary erosion on the cervix are mainly found in pregnant women and women who take hormonal contraceptives<sup>4</sup>.
- In cervical erosion treatments like Diathermy cauterization, Cryosurgery, Laser therapy, Conization operation, etc are used which are expensive and have their own side effects and complications.

### ***Karnini Yonivyapad:***

In Ayurveda cervical erosion can be compared to karnini yonivaypad. *Charaka* explains the cause of *Karnini Yonivyapada*, it is due to the vitiation of Vayu, Rakta and *Kapha*, while *Sushruta* explains it is due to derrangement of *Kapha*. *Charaka* explains about the nidana of Karnini, it occurs due to excessive straining during labour which leads to development of Karnika or tissue growth as sprouts<sup>5</sup>. Life style changes along with varied food habits, and mainly due to continuously being

pestered and believed as a necessary feature of womanhood, white discharge has become the frequent generative health complaint in women. The main symptom of cervical erosion is increased vaginal discharge but there are consequences of the disease like abdominal pain, low back ache, lower dyspareunia sickness, fatigue etc. causes inconvenience to the patients. If the cervical erosion is not treated it may leads to infertility and may act as predisposing factor for cervical malignancy.

### **Pathology of cervical erosion:**

- **Cervical erosion** is the due to the ulceration of the lining of cervix can be identified by the presence of bright red or pink spots on the opening of cervix. There is shedding of the mucous membrane as patches from the cervix which is found in the early stages of the erosion. The following stages are usually associated with different degrees of healing.
- The primary lesion shows an ulcer; its surface lacks mucous membrane and the tissue is granular, and may be associated with many white blood cells and bacteria. Soon after the ulcer erupts, the body starts repairs by covering the exposed area with a new epithelial (covering) layer.
- Healing of the erosion may be completely or partially and recurrence of the lesions is also seen. Infection and discharge are properly treated and there by the erosion is healed subsequently.
- The erosions may also extend to the vaginal wall near the cervix. As the ulcer heals, the



## REVIEW ARTICLE

covering epithelium on the cervix shows pinkish tan which forms as small islands on the lesion area. When these islands combine together and the lesion appears uneven over the surface. If the mucous glands present in the cervical tissue extended to the epithelial surface are blocked there may be retention of the fluids and it leads to formation of small cysts.

- The erosions tend to bleeding by any trauma or if they have any irregular or papillate surface are considered as more hazardous variety. Smooth and round erosions may heal by themselves if the cause is treated properly<sup>6</sup>.

### Prevalence of cervical erosion -

- Cervical erosion is most prevalent in women between 15-45 yrs during the active menstruation age and also during cervical or vaginal infections. They are less common before menarche or after in older women.

### Clinical Features of Cervical erosion:

- Cervical erosion is most commonly asymptomatic. It can occasionally present with post-coital bleeding, intermenstrual bleeding, or excessive discharge. Vaginal discharge which may be excessively mucoid or it may be mucopurulent, with offensive odour and irritation in presence of infection. Erosion may be even blood-stained due to premenstrual congestion. Contact bleeding especially during pregnancy and 'pill use' either following coitus or defecation may be associated. Associated cervicitis may produce backache, pelvic pain and at times, infertility.

- On **speculum examination**, a ring of everted columnar epithelium appears reddish with outer edge clearly demarcated. The lesion may be smooth or having small papillary folds or granular gives grating sensation, but it neither tender nor bleeding on touch. On rubbing with a gauze piece, there may be multiple oozing spots. When associated with chronic cervicitis, the cervix feels fibrosed, bulky with nabothian follicles around the area of erosion<sup>7</sup>.

### Investigations –

Cervical erosion as a clinical condition can be differentiated by excluding the other conditions,

- **Pregnancy test.**
- **Triple swabs** – if there is any infection with purulent discharge, then endocervical and high vaginal swabs should be taken.
- **Cervical smear** – If a frank lesion is observed, a biopsy should be taken to rule out cervical intraepithelial neoplasia.

### Causes of cervical erosion to become as nonhealing condition associated with infections:

- If the cause of cervical erosion is an infection, it may be a sexually transmitted infection or it can be nonspecific.
- Because of the sexually transmitted infections, erosion causes disease occurring unnoticed and it prone to long duration nonhealing condition.
- Infections are due to Gonorrhoea can be self-assessed, Trichomoniasis, chlamydia, mycoplasmosis and ureaplasmosis. The long term



## REVIEW ARTICLE

inflammatory process associated with minor secretions cause gradual erosion of the squamous epithelium of the cervix.

- Some non-specific infections like staphylococcal infection spreads into the vagina after infectious complications following difficult birth, abortion and chronic infections and inflammatory diseases of the uterus.
- In Bacterial vaginosis condition, there is no inflammation but the erosion occurs due to the continuous infection in the vagina<sup>8</sup>.

### **Medicinal cure in Ayurveda for Cervical erosion associated with Chronic cervicitis and Leucorrhoea:**

Ayurveda has the rich source medicinal healing cures for the prevention and treatment of many gynaecological conditions using medicinal plants. These include rasanjan prepared from *Berberis aristata*, lodhrasav (*Symplocos racemosa*), musambar(*Aloe vera*), Satapushpa(*Anethum sowa*), Nagakeshara(*Mesua ferrea*), Kutaja(*Wrightia tinctoria*), Haridra(*Curcuma longa*), Dhatakai(*Woodfordia fruticosa*), Shatapushpa(*Anethum graveolens*).

### **Leucorrhoea(Sweta pradara) with Cervical erosion-**

- **Madhukadi choorna in shweta pradar-** it consists of choornas of haridra –48 parts, yastimadhu –48 parts, vanga bhasma -1parts along with arka patra swarasa. 5gms oral administration for 30 days. Each drug utilized in the preparation of the compound formulation madhukadi choorna holds good for its action as kaphahar, kanduhara, ushnagna and anti-exudative property<sup>9</sup>.

- **Panchavalkala kashaya yoni prakshalana(Vaginal douche) in swetha pradara(Leucorrhoea)** -The panchavalkala drugs are kashaya rasa pradan and kashaya rasa is nothing but the astringent. Astringents may be equated with tannins. The bark of all the 5 drugs contains tannins as the major chemical constituents. Tannins are non-nitrogenous characterized by astringent action upon mucous membranes. They precipitate proteins of mucous membrane of the cells, thus exerts a protective action. Astringent is a substance that “causes contraction of body tissues” they are topically anti-inflammatory, can be used for inflammations of the skin and mucous topically. They are tanning agents which can shrivel the inflamed tissues and also remove moisture from tissues<sup>10</sup>.

- **Cervical Erosion(Karnini Yonivyapad) using Jatyadi tail Pichu–**

In Ayurveda science regarding the pathogenesis of this disease and ayurvedic treatment of karnini yonivyapad the kaphahara chikitsa with kshara which have property of lekhana, shodhana, ropana, stambhana, kaphghna etc and Jatyadi taila which have property of vatashamak, shlesmhara, mansapkarshana, shodhana and ropana and its base is Tilataila which has property of yonivishodhana. All these properties facilitate destruction of columnar epithelium and facilitate the growth of new healthy stratified squamous epithelium on ectocervix<sup>11</sup>.

- **Kalamegha** - (Lingtang Town Hospital of Gaoyou County,1975). Treatment of vaginitis



## REVIEW ARTICLE

using *Andrographis paniculata*, acts as antibacterial in vaginitis.

**Lodhra**(*Symplocos racemosa*) –it acts as stimulant and increases the levels of reproductive hormones FSH and LH. It has anti-inflammatory, antimicrobial and useful in the infections of the female reproductive system and also urinary tract infections like chyluria.

**Shatapuspa**(*Anethum sowa*) – It is a rich source of phytoestrogens. Phytoestrogens can help reducing the cellular imbalance which leads to metabolic disturbances in PCOS. In a randomised and placebo-controlled trial, which includes 60 women a study was conducted to know the effect of *Anethum graveolens* vaginal suppositories in comparison with 100 mg clotrimazole vaginal tablets on vulvovaginal Candidiasis. The vaginal suppositories of 2% *Anethum graveolens* were found to be effective as clotrimazole vaginal tablets in reducing both clinical and microbiological symptoms of Candidiasis<sup>12</sup>.

### Vulvovaginal candidiasis:

**Ethanol extracts** of the medicinal plants like *Acalypha indica* L., *Allium cepa* var. *aggregatum* L., *A. cepa* var. *cepa* L., *A. sativum* L., *A. schoenoprasum* L., *Azadirachta indica* A. Juss, *Camellia sinensis* (L) O. Ktze, *Capsicum annum* L., *Cassia alata* L., *C. stula* L., *C. occidentalis* L., *Coffea arabica* L., *Curcuma longa* L., *Lawsonia inermis* L., *Ocimum sanctum* L., *Piper betle* L. and *Psoralea corylifolia* L. are manifested more anti-candida activity than others and it was observed that their active principle is more soluble in a non-polar solvents<sup>13</sup>. Vaijyanthimala et al. (2000)

Essential oils of the plants *Pelargonium roseum*, *Rosmarinus officinalis*, *Artemisia sieberi*, *Communis hominis*, *Anethum graveolens*, *Citrus aurantifolia*, *Saturella hortensis*, *Foeniculum vulgare*, *M. spicata*, *Z. multiflora*, *Arthemisia dracuncululus*, *Eucalyptus globulus* and *Lavandula estoechas* are exhibited inhibitory effect on *C. albicans* and *G. vaginalis*, whereas *Z. multiflora* showed the most activity<sup>14</sup>. Bayat et al. (2008)

### Trichomonas vaginitis:

- Anti-trichomonas activity of *Allium hirtifolium* (persian shallot) if compared with metronidazole is effective and it can be because of its components like allicin, ajoene and other organosulfides<sup>15</sup>.
- Berberine derived from *Berberis aristata* on *T. vaginalis in vitro* showed potency comparable to metronidazole. On the other hand, it has the advantage of being more safe and probable replacement in metronidazole-resistant cases<sup>16</sup>.
- The extracts of *Myrtus communis* and *Eucalyptus camaldulensis* helps in the eradication of *T. vaginalis*<sup>17</sup>.
- The extract of *Punica granatum (in vitro)* and *Commiphora molmol* (human study) aids in the relief of the pathogenicity of *T. vaginalis*<sup>18</sup>.

### Effect of Dashamoolarishta:

A study was conducted to know the efficacy of Dashamoolarishta in 113 women for 90 days for about 20 ml BD and follow up for every 15 days. It shows statistically significant decrease in cervical redness, swelling, low backache. Significant inflammatory changes were observed



## REVIEW ARTICLE

in pap smear test. ESR was significantly decreased after treatment<sup>19</sup>. Dashamoolarishta can be a potential drug for cervicitis. Dashmoola drugs are mentioned under shothahara dasemani (anti-inflammatory), and Vata alleviating drugs in *Charaka samhita*. Arishta is a different kind of formulation prepared by getting the essence of drugs through natural fermentation process and it reaches small channels and act with immediate effects if it is administered. Further, these plants are reported to have anti-inflammatory, anti-fungal and wound healing properties<sup>20,21</sup>. The plants of Brihatpanchamoola probably have tikta, kashaya rasa along with other rasa, ushna veerya and katu vipaka, whereas the constituent plants of Laghupanchamoola probably have kashaya, tikta rasa along with other rasa, ushna veerya and madhura vipaka.

### Use of Panchavalkal ghrut, containing five magical herbs:

In a clinical study Panchavalkal, *Ficus bengalensis*, *Ficus religiosa*, *Ficus glomerata*, *Ficus lacor*, *Thespesia populnea* plants bark are used to prepare the ghrut (ghee).

*Panchavalkalghrut* possess *Shothhar* (anti-inflammatory) and *Krimighana* (anti-microbial) properties apart from *Rakta Shodhak*, *Varnahar*, *Kapha Pitta Doshanashak* *Gunas*. *Panchavalkalghrut*. The contents of *Panchavalkal* are *Kaphapittanashak*, *Dahanashak*, *Stambhan*, *Yonidosahar*, *Yonishodhak*, *Shothhar*, *Rakpittanashak*. It decreased amount of vaginal discharge, foul smell and itching per vaginum by its *Stambhan*, *Kapha Doshhar*, *Yonidosahar*

*gunas*. *Panchavalkala ghrut* reduces pain, discharge, redness, swelling of the cervix. It works on pain induced by inflammation. Highly significant effects were obtained on cervical tenderness (75 % relief) and they can be understood by anti-inflammatory and analgesic effect of the contents of the drugs used in the therapy<sup>22</sup>.

### Effect of Dhatakyadi Taila Pichu with Snuhi Kshara application:

In a clinical study performed in 20 women having the signs and symptoms of cervical erosion are given the snuhi kshara application along with the dhatakyadi taila pichu (*Woodfordia fruticosa* as the main ingredient). This application has effectively reduced the pain, inflammation, vaginal discharge and aided in better healing of the cervical erosion. Snuhi latex (*Euphorbia nerifolia*) is found to be having anti-inflammatory and analgesic property. Along with dhatakyadi taila pichu it removed the karnika (nabothian follicles) and subsided the associated chronic cervicitis<sup>23</sup>.

### Mundi (*Sphaeranthus indicus*), Madayantika (*Lawsonia inermis*):

Randomized placebo controlled single blind study is carried out in 45 patients diagnosed with symptoms of cervical erosion associated with cervicitis. Safoof Mundi flower powder of 6gms was given in 3 divided doses along with the *Lawsonia inermis* cream prepared with *Murdarsang* (*Plumbi oxidum*) applied intravaginally twice daily for 9 wks. In this study better improvement is found in the treatment



## REVIEW ARTICLE

group by relieving the symptoms with proper healing of the erosion<sup>24</sup>.

### **Agil kattai choornam:**

In a clinical study conducted in OPD level, out of 20 women, 6 patients were diagnosed with the infection due to *Candida albicans* and 14 patients with infection due to *Garenerella vaginalis* by the vaginal smear test. Agnil kattai choornam<sup>25</sup> (powder form) in siddha medicine is given 1 gm twice daily with butter after food for about 48 days. This compound formulation contains important plant drugs like Chandan(*Santalum album*), Agil kattai(*Aquilaria agallocha*), ela(*elettaria cardamomum*), lavangapattai(*Cinnamomum verum*), Kirambu(*Syzygium aromaticum*), Sombu(*Pimpinella anisum*), Atimadhuram(*Glycyrrhiza glabra*), Karbogi vitthu (*Psoralea corylifolia*), Vetpalai arisi (*Wrightia tinctoria*), Thettran vithai (*Strychnos potatorum*), Arugam veer (*Cyanodon dactylon*), Chitramutti (*Pavonia Zeylanica*). most of the drugs are evaluated for their antifungal, antibacterial The symptoms such as whitish discharge, foul smelling discharge, pruritis vulva, dysuria, low backache and lower abdominal pain, constipation were reduced greatly and the overall health was also well improved. This formulation was found to possess antifungal and antibacterial activities which helped in improvement of the vaginal health of the women.

**PATHYA- APATHYA: Dietary regulations to be followed during the Yonivyapad,**

Meals prepared with yava(*Hordeum vulgare*), sidhu, tail, abhayarishta(*Terminalia chebula*) should be used every day. Pippali(*Piper longum*), lauhabhasma, and Haritaki all in equal amount should be taken with honey<sup>26</sup>. Lasuna(*Allium sativum*) should be used in any form of diet in the morning. Diet rich in meat and milk is most beneficial in Karnini yonivyapad<sup>27</sup>. Manda is contraindicated to the women suffering from yonivyapad<sup>28</sup>.

## CONCLUSION

Cervical erosion in women is a commonest clinical condition, but through Ayurvedic care by using the medicinal plants as single drugs or as different combinations is very helpful. Furthermore clinical studies are to be taken on these plants in wide range to prove their efficacies by using standard treatment protocols are beneficial.



## REVIEW ARTICLE

## REFERENCES

1. ICO Information Centre on HPV and cancer. (Summary Report 2014, August, 22.) Human Papillomavirus and Related Diseases in India.
2. Atul Joshi, (2017, July 5). Understanding Cancer, Health Talk on Cancer Organised at Fortis Hospital, Mohali, Chandigarh, Retrieved from, <https://www.newznew.com/health-talk-on-cancer-organised-at-fortis>
3. Neelam, Neeraj, K. (2009). Management of cervical erosion. *Ayu Journal*, 30, 171-74.
4. Howkins and Bourne (2014). Shaws's Textbook of Gynecology, Elsevier Publications, 171-173.
5. Charaka Samhita, Chikitsa sthana, YoniVyapat Cikitsa(30/27-28), Ayurveda Dipika's Ayushi Hindi commentary by Vaidya Harishchandra simha Kushahwa, , Chaukambha Orientalia, Varanasi, 2009; 803.
6. The Editors of Encyclopaedia Britannica, Kanchan Gupta, Gloria Latha, (added in 1998, July 20, updated in 2019, October 18). Cervical erosion Pathology, Britannica, <https://www.britannica.com/science/cervical-erosion>
7. Biswas, T.K., Mukharjee, B. (2003). Plant Medicines of Indian origin for Wound Healing Activity: a Review. *International Journal of Lower Extremity Wounds*.2(1), 25-39
8. Site at: <https://www.treatcurefast.com/women/eroding-cervix/cervical-erosion>
9. Poonam, B., Suvrna, P., Mitti, J.G., Patel, M.C., (2016). A clinical evaluation of the efficacy of madhukadi choorna in *Shweta pradara*. *Interanational.Journal.of Research in Ayurveda and Pharmacy*; 7(1), 41-44.
10. Ramadevi, G., Jayasudha, G.C., Prasad, U.N., (2014). Clinical evaluation of panchavalkala kashaya yoni prakshalana in *Shwetha pradara*(vaginitis). *Interanational Ayurvedic Medical Journal*, 2(4), 464-470
11. Pragya Gupta, Sushila Sharma, (2015). Clinical evaluation of the efficacy of kshara karma with *Apamarga kshara* and *Jatyadi taila pichu* in the Management of Cervical Erosion (Karnini Yonivyapada). *World Journal of Clinical Pharmacology Microbiology and Toxicology*, 1(3), 43-49
12. Saghafi, N., karjalian, M., Ghazanfarpour, M., Khorsand, I. (2018). *Journal of Obstetrics & Gynaecology Research*, 38(7), 985-988
13. Vaijyanthimala J., Anandi C., Udhaya V., Pugalendi, K. V. (2000). Anticandidal activity of certain South Indian medicinal plants. *Phytotherapy Research*, 14, 207-209.
14. Bayat, M., Kousha, A., Saraji, A.A., Rohani, R.S.R., & Nissiani, M. (2008). Study effects of some kinds of standard essences over two microorganisms (*Candida albicans* and *Gardnerella vaginalis*) related to leucorrhoea disease as *in vitro*. *World Applied Sciences Journal*, 5, 418-421.
15. Taran, M., Rezaeian, M., & Izaddoost, M. (2006). *In vitro* antitrichomonas activity of *Allium hirtifolium* (Persian Shallot) in comparison with





## REVIEW ARTICLE

- metronidazole. *Iranian Journal of Public Health*, 35, 92-94.
16. Soffar, S.A., Metwali, D.M., Abdel-Aziz, S.S., El-Wakil, H.S., & Saad, G.A. (2001). Evaluation of the effect of a plant alkaloid (berberine derived from *Berberis aristata*) on *Trichomonas vaginalis* in vitro. *Journal of Egyptian Society of Parasitology*, 31, 893-904.
17. Mahdi, N.K., Gany, Z.H., & Sharief, M. (2006). Alternative drugs against *Trichomonas vaginalis*. *Eastern Mediterranean Health Journal*, 12, 679-684.
18. El-Sherbini, G.T.M., B.R. El Gozamy, N.M. Abdel-Hady and T.A. Morsy, (2009). Efficacy of two plant extracts against vaginal trichomoniasis. *Journal of Egyptian Society of Parasitology*, 39, 47-58.
19. Rao ML, Savithramma N. (2012). Antimicrobial activity of Dasamoola – an ayurvedic drug. *World Journal of Pharmaceutical Research*, 1(3), 803-812.
20. Sharangadhra Samhita, Madhyama Khanda, Sandhana Kalpana, (10/1 & 77-92) Jivanprada, Hindi commentary by Srimati Sailaja Srivastava, Chowkhamba Orientalia, 2013, 244 & 254-256.
21. Swati M., Esha K., Bhagyasri N. (2014). Evaluation of efficacy of Dashmoolarishta in Cervicitis: A proof-of-concept study. *World Journal of Pharmacy and pharmaceutical sciences*, 3(6), 521-532
22. Jyoti Banderwar, (2018) Ayurvedic management of cervical erosion through *panchavalkal ghrut pichu*. *International Journal of Innovative Pharmaceutical Sciences & Research*, 6 (10), 40-48
23. Priyanka Sharma, Sushila Sharma, (2015). A clinical study to evaluate efficacy of *snuhi kshara & dhatakyadi tail pichu* in the management of *karnini yonivyapad* w.s.r. to cervical erosion. *World Journal of pharmaceutical Research*, 4(10), 1258-1265.
24. Shabana Hashmi, Wajeeha Begum, Ashriya Sultana, (2011). Efficacy of *Sphaeranthus indicus* and cream of *Lawsonia inermis* in cervical erosion with cervicitis. *European Journal of Internal Medicine*, 3(3), 183-188
25. Helen Sathiya, X (2017). *A Clinical study on vellai noi (Leucorrhoea) with the evaluation of siddha drug aghil kattai chooranam*, (Doctoral dissertation, Dr M.G.R. Medical University, Tamilnadu). Retrieved from, <http://repositorytnmgrmu.ac.in/id/eprint/9629>, Reg. No. 321411103
26. Astanga Hridaya, Uttar Sthana, Guhya Pratisedha(34/24), Sarvanga sundara and Ayurvedarasayana, Sanskrit Commentary, collated by Anna Moreswara Kunte and Krsna Ramachandra Sastri Navare, edited by Bhishagcharya Harisastri Paradkar Vaidya, Chaukhambha Orientalia, Varanasi, 1939, 900
27. Sushruta Samhita, Uttar Tantra, Yonivyapat Pratisedha(38/39), Ayurveda Tatva Sandipika, Hindi commentary by Ambika Dutta Shastri, Chaukhambha Sanskrit Series, 2003, 231.
28. Kashyap Samhita, Kalpa sthana, Bhojana kalpa(?/65-66) Vidyotini Hindi Commentary by



**REVIEW ARTICLE**

Sri Satya Pal Bishagcharya, Kalpa sthana,  
Chaukhambha Sanskrit Sansthan, Varanasi, 1993,  
208