

TO STUDY EFFICACY OF LODHRA WITH HONEY GEL IN UPAPLUTA YONIVYAPAD

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Article Received on
19 April 2022,

Revised on 09 May 2022,
Accepted on 29 May 2022

DOI: 10.20959/wjpr20227-24050

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ABSTRACT

Background and Objective: Vaginal candidiasis is fairly common during pregnancy due to various immunological and other physiological factors. Modern treatment for it entails many risks and other such limitations. It was decided to find out potential of ayurvedic formulation which is recommended in similar condition (a *yonivyapad*) with its economic feasibility as well as safety during pregnancy. **Aim:** To study efficacy of *Lodhra* with honey gel in *Upapluta yonivyapad*. **Methodology:** The research was carried out at Prasuti tantra and *Striroga vibhag* of Bharati Ayurved Hospital, Dhankawadi, Pune-43, Single blind experimental (clinical) study, total 30 patients were enrolled and were given 2ml of *Lodhra* with honey Gel for vaginal application twice a day for 7 days with follow up on 15

days of treatment. **Results:** Comparing the assessment criteria before and after treatment, it was seen that there was significant action of drugs used in gel on vaginal candidiasis during pregnancy. Treatment showed no any adverse effects in present clinical trial. **Statistical analysis:** As per statistical analysis *Lodhra* with honey gel showed significant effect. **Conclusion:** In the present study it has been proved that *Lodhra* with honey Gel had good effect on vaginal candidiasis during pregnancy. *Candida albican* species found in all patients. No any adverse or side effects were found during and after the treatment.

KEYWORDS: Vaginal candidiasis during pregnancy, *Lodhra*, Honey.

INTRODUCTION

Pregnancy, a joyful phase of women's life, can also be challenging as she goes through

numerous changes in order to support the growing fetus.

Vaginal secretions, like white discharge increase during pregnancy due to increases vaginal circulation. But sometimes, it is observed that if pregnant women take an excess of *kaphakar dravyas* and try to withhold the vomiting reflex or expiration then the disordered *Vata* brings *Kapha* to *yonis* and cause *yonivyapad*. Due to this excessive vaginal mucoid discharge causes great discomfort to women and hamper her normal activities.

During pregnancy female genital tract infection is very common. In all infection found in women vaginal candidiasis is frequently found. Pregnancy, oral estrogen pills, oc pills, are such condition in which estrogen level increases and glycogen level also increases.

Candida infection occurs more frequently in pregnant women. This same condition can be correlated with *upapluta yonivyapad*.

During pregnancy state, estrogen level is increases in female vaginal epithelium and glycogen level also increases which result in a greater number of chances for frequent infection.

Upapluta Yonivyapad is one of the 20 *Yonivyapad*.^[1]

According to *charaka upapluta yonivyapad* only found in *Garbhini*. As description mentioned in Samhita and modern, *upapluta yonivyapad* is correlated with vaginal candidiasis during pregnancy.

Acharya charak described *upapluta yonivyapad* in *charak Samhita chikitsa sthan* 30/21,22.^[2]

Aim: To study efficacy of *Lodhra* with honey gel in *Upapluta yonivyapad*.

METHOD AND METHODOLOGY

Lodhra with honey gel

- Form of drug: Gel
- Route of administration: Per vaginally (local)
- Dose: 2 ml twice day
- duration of durg: 7 days
- Number of patients: 30 (prevalence 2%)
- Type of study: open clinical study

- Follow UP : 1st follow up on 3rd day of treatment
2nd follow up on 7th day of treatment
3rd follow up on 15th day of treatment
- Place of work: Bharati Vidyapeeth Ayurvedic Hospital (OPD Patients)

Inclusion criteria

- All *Garbhini* irrespective of parity who are diagnosed clinically with candida vaginitis in pregnancy
- Diagnosed case of Gestational diabetes mellitus

Exclusion criteria

- Woman having vaginal infection other than candidial vaginitis
Non-Pregnant patients of candidial vaginitis
- Vaginal discharge due to any other local causes like polyp, Ca, etc.
- HIV, HBsAG and VDRL positive

Discontinuation criteria

- Voluntary withdrawal by the patients.
- If patient was not regular for follow up
- If patient has developed untowards side effects

Assesment criteria

Each patient was measured for following criteria and gradation was done as follow -

Lab investigation: (Objective)

1. Vaginal swab
2. Vaginal PH

Subjective criteria

Grading of strava pramana

Grade	Pramana of strava
0	No discharge
1	Wet sensation only
2	Wetness of inner wear
3	Requires perineal pad

Grading of yoni kandu

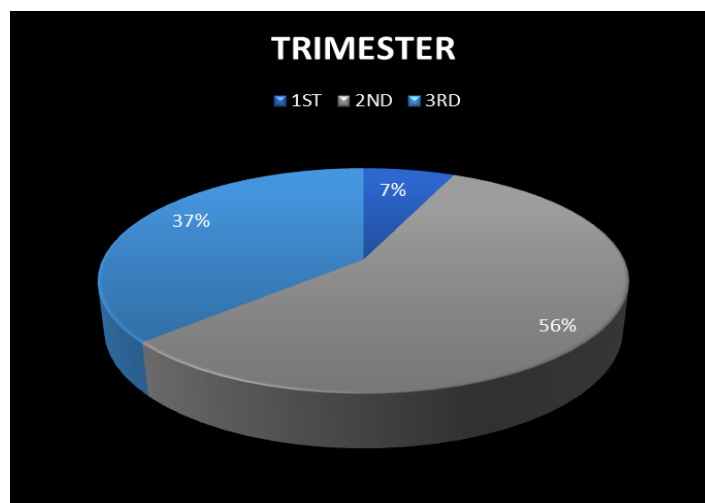
Grade	Pramana of kandu
0	No any kandu
1	Mild (Mild discomfort)
2	Moderate (More discomfort)
3	Severe (Restlessness)

Grading of strava varna

Grade	Varna of strava
0	No discharge
1	White, curdy
2	White, curdy, excess sticky
3	White, curdy, sticky adherent to vagina

Investigations

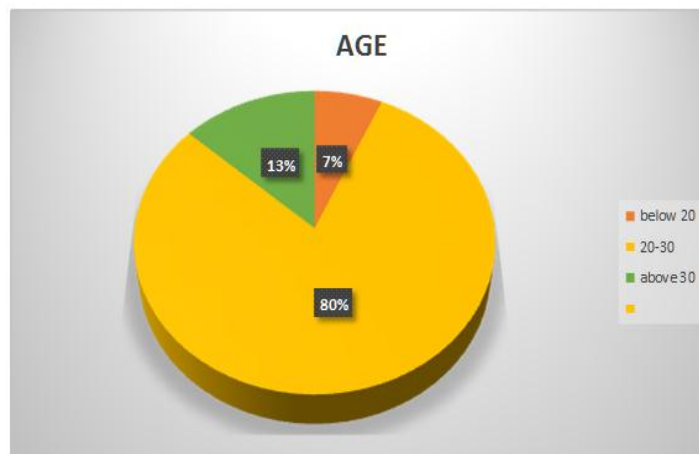
- Haemogram, Urine -Routine & Microscopy
- BSL (R), HIV, HBsAG, VDRL
- Smear pre treatment and post treatment.

Observation**1) As per trimester****Graph no. 1: Distribution according to trimester.****Table no. 8.1: Showing distribution of patients according to trimester.**

Trimester	No of pts
1 st	2
2 nd	17
3 rd	11

Observation – In this study, it was observed that most of patient were found in 2nd trimester and 3rd trimester

2) As per age



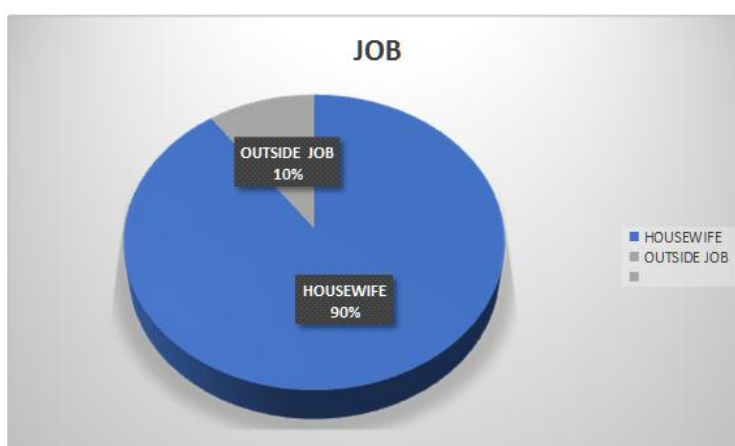
Graph no. 2: Distribution of patients according to age.

Table no. 8.2: Showing distribution of patients according to age.

	No of patient
Below 20	2
20-30	24
Above 30	4
Total	30

Observation – It was observed that most of patient were found inbetween age group 20 -30 year.

3) As per occupation



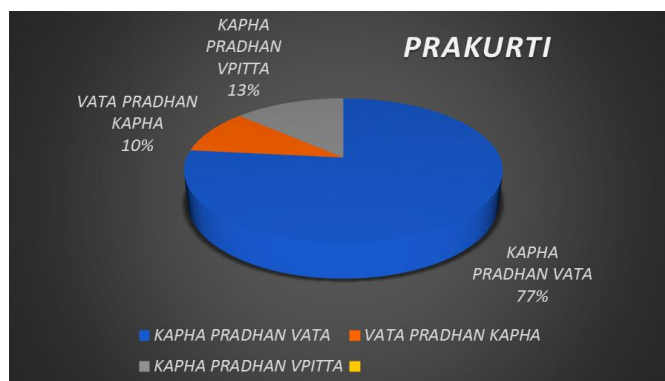
Graph no. 3: Distribution of patients according to occupation.

Table no. 8.3: Showing distribution of patients according to occupation.

Job	No of pateitnt
Housewife	27
Outside job	3
Total	30

Observation – In this study, it was observed that most of patienthousewife.

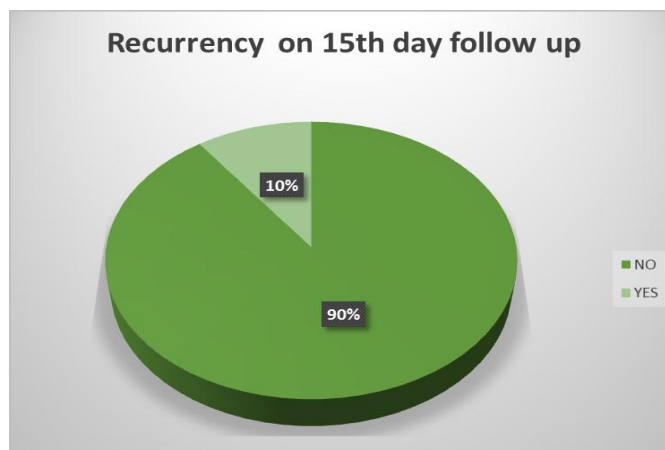
4) As per *prakurti*

Graph no. 4: Distribution of patients according to *prakurti*.Table No. 8.4: Showing distribution of patients according to *prakurti*.

<i>Prakurti</i>	<i>No of pateitnt</i>
<i>Kapha pradhhan vata</i>	23
<i>Vata prdhan kaph</i>	3
<i>Kapha pradhan pitta</i>	4
<i>Total</i>	30

Observation – In this study, it was observed that most of patient were found - *kapha pradhan vata dosha*.

5) Recurrency on 15th day follows up



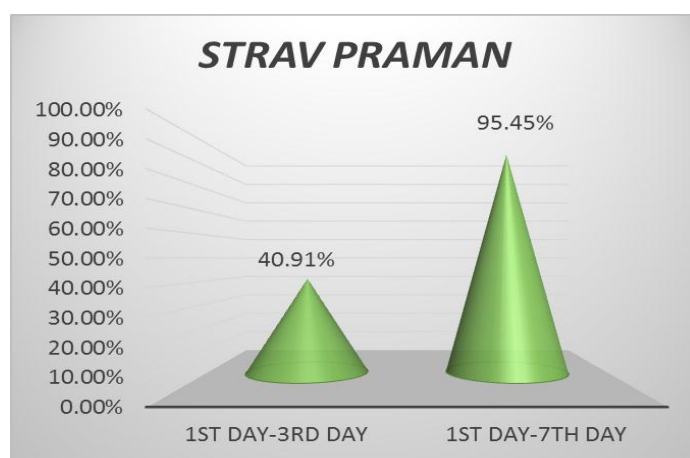
Graph no. 5: Distribution of patients according to recurrency.

Table no. 8.5: Showing distribution of patients according to Recurrency.

Recurrency on 15 th day follow up	No of pts
NO	27
YES	3

Observation – In this study, it was observed that out of 30 patient in 3 patient recurrency occurred.

Effect of *lodhra* with honey gel on *strav praman* in *upapluta yonivyapad* (Vaginal candidiasis in pregnancy)

**Graph no. 6: Distribution of patients according to strav praman.****Table no. 8.6: Showing distribution of patients according to strav praman.**

Parameter		Mean		x	% of improvement	Positive rank	Negative rank	Tie	z	P value
		BT	AT							
Strav praman	1 st day - 3 rd day	1.467	0.867	0.6	40.91%	12	0	18	-4.24	0
	1 st day - 7 th day	1.467	0.067	1.4	95.45%	1	0	29	-4.85	0

Observation

The mean grade of strav praman on 1st day was 1.46 which was decreased to 0.86 at 3rd day. The mean increment in score was 40.91% which is significant as observed by wilcoxon test (as p value < 0.05) thus it can be said that there is significant increment on strav praman in upapluta yonivyapad (vaginal candidiasis in pregnancy).

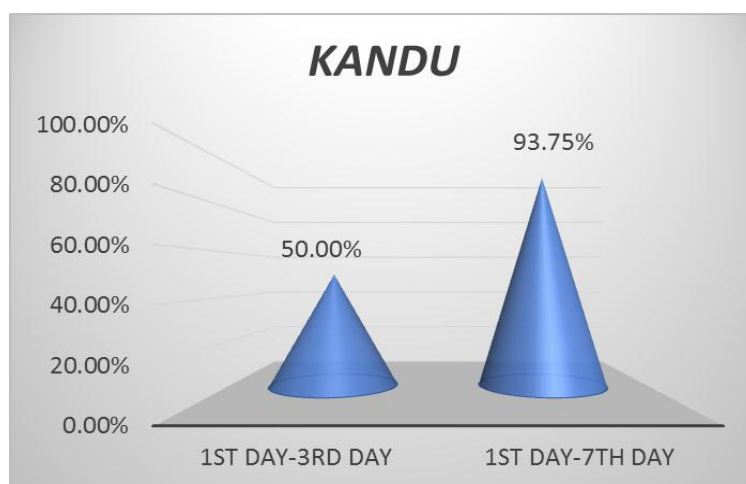
Also 95.45% improvement found at 7th day of treatment on strav praman in upapluta yonivyapad (vaginal candidiasis in pregnancy).

I.e. Lodhra with honey gel was effective on strava praman in upapluta yonivyapad.

Effect of *lodhra* with honey gel on *kandu* in *upapluta yonivyapad* (Vaginal candidiasis in pregnancy)

Table no. 8.7: Showing distribution of patients according to kandu.

Parameter		Mean		x	% of improvement	Positive rank	Negative rank	Tie	z	P Value
		BT	AT							
Kandu	1 st day-3 rd day	1.067	0.533	0.53333	50.00%	14	0	16	-4	0
	1 st day-7 th day	1.067	0.067	1	93.75%	5	0	25	-4.77	0



Graph no. 7: Distribution of patients according to kandu.

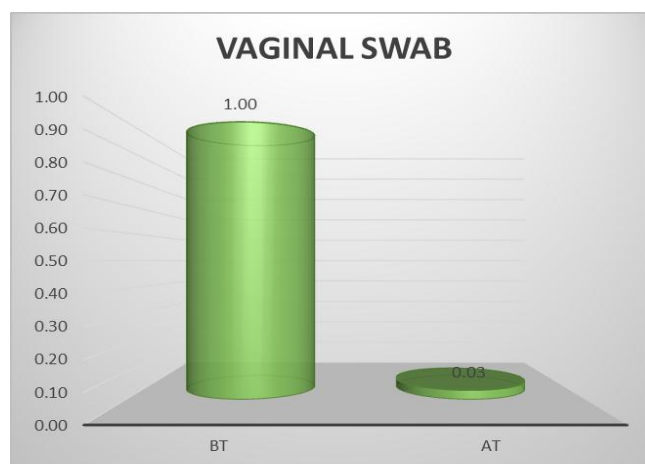
Observation

The mean grade of kandu on 1st day was 1.06 which was decreased to 0.53 at 3rd day. The mean increment in score was 50% which is significant as observed by wilcoxon test (as p value<0.05) thus it can be said that there is significant increment on kandu in upapluta yonivyapad (vaginal candidiasis in pregnancy)

Also 93.75% improvement found at 7th day of treatment on kandu in upapluta yonivyapad (vaginal candidiasis in pregnancy)

I.e. Lodhra with honey gel was effective on kandu in upapluta yonivyapad.

Effect of *lodhra* with honey gel on vaginal swab in *upapluta yonivyapad* (Vaginal candidiasis in pregnancy)



Graph no. 8: Distribution of patients according to vaginal swab.

Table no. 8.8: Showing distribution of patients according to vaginal swab.

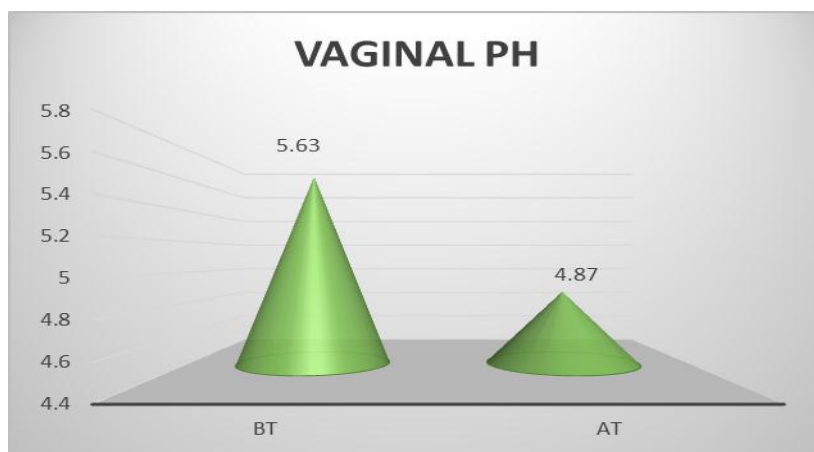
Parameter	Mean		X	% of improvement	Positive rank	Negative rank	Tie	Z	P value
	Bt	At							
Vaginal swab	1	0.03	0.967	96.67%	1	0	29	-5.39	0

Observation

The mean grade of vaginal swab BT was 1 which was decreased to 0.03 AT. The mean increment in score was 96.67% which is significant as observed by wilcoxon test (as p value<0.05) thus it can be said that there is significant increment on vaginal swab in *upapluta yonivyapad* (Vaginal candidiasis in pregnancy).

I.e. *lodhra* with honey gel was effective on vaginal swab in *upapluta yonivyapad* (vaginal candidiasis in pregnancy)

Effect of *lodhra* with honey gel on vaginal ph in *upapluta yonivyapad* (Vaginal candidiasis in pregnancy)



Graph no. 9: Distribution of patients according to Vaginal PH.

Parameter	Mean		X	% of improvement	T	P value
	Bt	At				
Vaginal ph	5.63	4.87	0.77	15.75%	-8.332	0

Observation

The mean grade of vaginal pH BT was 5.63 which was decreased to 4.87 AT day. The mean increment in score was 15.75% which is significant as observed by paired t test (as p value < 0.05) thus it can be said that there is significant increment on vaginal pH in upapluta yonivyapad (Vaginal candidiasis in pregnancy).

I.e. Lodhra with honey gel was effective on vaginal pH in upapluta yonivyapad.

DISCUSSION

Age

Most of the patients were found in between age group 20 -30 years. This is considered as *madhyam avstha* in which, pitta dosha is dominant and vitiated pitta leads to vomiting in pregnancy. Average age of marriage in India which is 20 – 30 years. That is the reason why we find maximum number of pregnant patients in this age group.

Prakuti

In this study most of the patients were of *kapha pradhan vata dosha*. *kapha dosha* and *vata dosha* are responsible for *upapluta yonivyapad*.

Work

In this study most of the patients were housewife and it was observed that these women did not maintain Vulval hygiene properly and thus *strav dushti* was seen and *upapluta yonivyapad* was concluded.

Trimester

In pregnancy most of the patient complaints of vomiting in 1st trimester; but holds the urge of vomiting leading to the vitiation of *vata dosha*. Patient's habit of intake of *Madhur rasa ahar* continuously leads to vitiation of the *kapha dosha* and this pathology is continued in 2nd as well as 3rd trimester, thus it was observed that more patients were found in 2nd and 3rd trimester.

Vaginal swab

Before treatment vaginal smear was positive for candidiasis in all 30 patients, it was negative in 29 patients, hence the effect was significant on candida. The formulations is having anti-inflammatory, anti- microbial and *kaphaghna* properties which have action on *upapluta yonivyapad*. One patient who came candida positive after treatment, did not maintained proper hygiene and took excessive *kaphakar ahar*.

Strav praman

There was significant decrease in *praman of strava* after treatment. *Lodhra* being *kaphaghna* due to *kashay ras* and honey being also *kaphaghna pichhil strav* dries up and the quantity is decreased.

Due to antimicrobial property and *stambhan* action of *lodhra* reformation of *strav* get derecreased.

Kandu

Lodhra with honey gel was effective on *kandu* in *upapluta yonivyapad*. *Lodhra* has anti-inflammatory, antibacterial properties. Honey has antimicrobial, anti-inflammatory action and it enhance property of *lodhra*, thus patient get relived. Honey is known as "*Yogavahi*" - since it has a quality of penetrating the deepest tissue. When honey is used with other herbal preparations it enhances the medicinal qualities of those preparations and also helps them to reach the deeper tissues.

Vaginal PH

It was found that *lodhra* with honey gel changes vaginal PH, which result in decrease in glycogen level and *kapha* dosha thus symptoms were relieved.

Recurrancy

In this study, cause found for recurrancy was *Madhur rasa ahar sevan* (sweet dishes – mithai 1-2 days in week) and unhygienic condition.

Out of 3 patients, 2 patients (before treatment candid was present and after treatment candid was absent) symptomatic relief found on 7th day of treatment and on 15th day recurrancy was found.

Only in one patient (before treatment candid present and after treatment candid present) no symptomatic relief found on 7th day of treatment and on 15th day recurrancy found due to *hetu sevan* and not maintenance of hygiene, *samprapti* continues thus no relief was observed.

Discussion about proposed action of individual drug

- **Properties of lodhra**

Lodhra being *kashay rasatmak*, *kapha pittghna* and *ruksha* and *laghu gunatmak* helps in *stambhan* of *kledakarak strava* through *Yonimarga*. And hence by virtue of its *kaphaghna* action we observed decline in the level of *stravas*.

- **Properties of honey (Madhu)**

Madhu being *tridoshatmak kaphghna* and *laghu gunatmak* helps in reduction of *kapha* and *kleda* by virtue of its *kaphghna* property and due to its *laghu* and *strotogamitwa guna* it is easily absorbed and helps in reduction of *yonigata shwetastrava* due to *krumighna* action it helps in reduction of *yonikandu*.

CONCLUSION

- Occurrence of *upapluta yonivyapad* is more in 2nd trimester and 3rd trimester
- Drug was found effective in *upapluta yonivyapad*.
- In pregnancy vaginal glycogen level increase, thus there is increased candida growth. *kapha dosha* is also responsible for increased glycogen level in vagina and more candida growth occurs in the vagina.

By the treatment of *lodhra* with honey gel it reduces, the increased vitiated *kapha dosha* and hence candida growth is controlled.

- *Lodhra* and honey gel is effective in decreasing vaginal secretion and itching.
- With the local treatment, if oral treatment is given then 100% relief may occur.
- No any side effect was found in all patients.
- Good response seen in local symptoms.

REFERENCES

1. *Agnivesh's charak Samhita with Ayurveda dipika commentary of chakrapanidatta* bt Dr. ramakant sharma and Vaidya bhagwan dash, chowkhanba Sanskrit series office, 1983; 2: 1.
2. *Ayurvediya prasuti tantra evam striroga by premvati tewari*, chowkhamba prakashan, edition, 2000; 1: 4.
3. *Ayurvediya prasuti tantra evam striroga by premvati tewari*, chowkhamba prakashan, edition, 2000; 1: 4.
4. *Ayurvediya prasuti tantra evam striroga by premvati tewari*, chowkhamba prakashan, edition, 2000; 1: 4.
5. *Agnivesh's charak Samhita with Ayurveda dipika commentary of chakrapanidatta* bt Dr. ramakant sharma and Vaidya bhagwan dash, chowkhanba Sanskrit series office, 1983; 2: 30.
6. *Agnivesh's charak Samhita with Ayurveda dipika commentary of chakrapanidatta* bt Dr. ramakant sharma and Vaidya bhagwan dash, chowkhanba Sanskrit series office, 1983; 2: 30.
7. *Agnivesh's charak Samhita with Ayurveda dipika commentary of chakrapanidatta* bt Dr. ramakant sharma and Vaidya bhagwan dash, chowkhanba Sanskrit series office, 1983; 2: 1.
8. *Ayurvediya prasuti tantra evam striroga by premvati tewari*, chowkhamba prakashan, edition, 2000; 7: 361.
9. *Charak Samhita (Marathi Commentary)*, vol 2, vd. Ya Go joshi, 4th edition vaidyamitra pune, 2014; 685: 30 - 120.
10. *Ayurvediya prasuti tantra evam striroga by premvati tewari*, volume 1, chowkhamba prakashan, edition, 2000; 1: 5.
11. *Ayurvediya prasuti tantra evam striroga by premvati tewari*, volume 2, chowkhamba prakashan, edition, 2000; 1: 6.

12. *Ayurvediya prasuti tantra evam striroga by premvati tewari, chowkhamba prakashan*, edition, 2000; 1: 5-6.
13. *Sushrut Samhita, sharir sthan*, chapter no, 5.
14. *Ashtang sanhgraha, shrari sthan*, chapter no, 5.
15. *Sushrut Samhita, sharir sthan*, chapter no, 5.
16. *Sushrut Samhita, sharir sthan*, chapter no, 5: 364.
17. *Charak Samhita (Marathi Commentary)*, vd. Ya Go joshi, *vaidyamtira pune*, 2014; 316: 4-5.
18. *Ashtang hriday sharir stha*, 363: 1 - 8.
19. *Sushrut Samhita, sharir sthan*, chapter no, 368: 5 – 39.
20. <https://slidetodoc.com/the-reproductive-system-female-reproductive-system-ovaries-duct/>
21. D.C.dutta text book of gynecology edited by hiralal konar new central book agency, 2000; 4: 4.
22. Shaws textbook of gynaecology, 2: 6.
23. C. S. Dawn, 8.
24. Jeffcoat's textbook of gynaecology. Chapter, 2: 27.
25. Jeffcoat's textbook of gynaecology. Chapter, 2: 27.
26. Walter D Rosenfeld And Jill Clark. Vulvovaginitis And Cervicitis In Adolescent Gynaecology, 490.
27. Shaws textbook of gynaecology, 2: 6.
28. Shaws textbook of gynecology, 1: 5.
29. Jeffcoat's textbook of gynaecology
30. *Ayurvediya prasuti tantra evam striroga by premvati tewari*, volume 1, *chowkhamba prakashan*, edition, 2000; 7: 361.
31. Text book of gynecology, *streeroga-vajikarna* by N.K.Usha ,*chaukhamba prakashan*, reprint, 2016; 7: 235-244.
32. <https://in.pinterest.com/pin/87046205269206140/>
33. Arendrup et al., 2005; 2009.
34. Text book of gynecology, *streeroga-vajikarna* by N. K. Usha, *chaukhamba prakashan*, reprint, 2016; 7: 235-244.
35. Text book of gynecology, *streeroga-vajikarna* by N.K.Usha ,*chaukhamba prakashan*, reprint, 2016; 7: 240-243.
36. <https://wellcomecollection.org/works/d8s5mb2q/items>
37. Text book of gynecology, *streeroga-vajikarna* by N.K.Usha ,*chaukhamba prakashan*,

- reprint, 2016; 7: 243-244.
38. <https://geekymedics.com/bacterial-vaginosis/>
39. <https://www.kamaayurveda.com/ingredient/lodhra>
40. International journal of pharmaceutical and biology archives by dr. *pooja singh, dr ranjeev singh*, 2015.
41. International journal of pharmaceutical and biology archives by dr. *pooja singh, dr ranjeev singh*, 2015.
42. International research journal of pharmacy, therapeutic and nutritional values of honey, by Bagade A. B., published in, 2013; 11: 03.
43. International research journal of pharmacy, therapeutic and nutritional values of honey, by Bagade A. B., published in, 2013; 11: 03.
44. International research journal of pharmacy, therapeutic and nutritional values of honey, by Bagade A. B., published in, 2013; 11: 03.