

## Efficacy of *Guduchi* Oil *Pichu* in the Management Cervicitis: A Clinical Trial

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### Abstract

Women have their unique physiology like menstrual cycle, pregnancy, child birth etc. This physiological change makes her more prone to disorders like cervicitis. It is very common disease in women with any gynecological complaints. Cervicitis is an inflammatory condition of cervix producing signs and symptoms like annoying vaginal discharges, backache etc. In Ayurveda all the gynecological disorders are described under the broad heading of *Yoni vyapada*. Cervicitis can be put parallel with *paripluta yoni vyapada*. *Guduchi* (*Tinospora cordifolia*) pacifies *kapha* & *pitta* and helps in relieving vaginal discharges and inflammation. Research studies have proved *Guduchi* as a potent anti-inflammatory drug. Having anti-inflammatory property it helps to relieve backache, lower abdominal pain produced due to cervicitis. This study was based on clinical trial of *Guduchi oil Pichu* in cervicitis. Twenty patients fulfilling criteria of cervicitis were given *Guduchi oil pichu* for 21 days. Observations for relief in signs and symptoms were done in each follow-up. It was concluded that *Pichu* therapy is good for narrow passage and *Guduchi oil pichu* is effective in the management of cervicitis.

### Keywords

*Cervicitis, Yoni, Vyapada, Guduchi, Pichu*



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## INTRODUCTION

Reproductive system of women is different from her male partner both anatomically and physiologically. Women have their unique physiology like menstrual cycle, pregnancy, child birth etc. This physiological change makes her more prone to disorders like cervicitis. It is very common disease in women with any gynecological complaints<sup>1</sup>. In acute condition, it is symptomatic but may be symptomatic or asymptomatic in chronic. Cervicitis is an inflammatory condition of cervix producing signs and symptoms like annoying vaginal discharges, backache, lower abdominal pain, dyspareunia, occasional bleeding during coitus<sup>2</sup>. It may produce complications like infertility, erosions, carcinoma of cervix when becomes chronic<sup>3</sup>.

In Ayurveda all the gynecological disorders are described under the broad heading of *Yoni vyapada*. In present study an attempt has been made to correlate cervicitis with *Yoni Rogas* mentioned in Ayurveda classics. Cervicitis can be put parallel with *Paripluta Yoni Vyapada* on the basis of signs and symptoms<sup>4</sup>. This condition can be treated with such a type of drugs which have ability to remove inflammation and discharges and other signs and symptoms of cervicitis. In

modern literature treatment is mainly based on antibiotics, anti-inflammatory, surgical procedures like diathermy, cryosurgery, conisation, hysterectomy etc<sup>5</sup>. But modern therapy has got its own side effects and woman undergo hysterectomy at early age may develop osteoporosis, ischemic heart disease, anxiety etc in later period<sup>6</sup>. Few drugs have been worked out in department of Prasutitatra, I.M.S, B.H.U. for the treatment of cervicitis. Dr. RinkuTomaret *al.* 2004 have reported good results of *Bilva* in the treatment of chronic cervicitis. Dr. VijayLaxmi *et al.* 2008 have reported very good results of *Trivita oil Pichu* in treatment of chronic cervicitis. But till today as per my knowledge, no work has been done on cervicitis and *Guduchi* together before this research. *Guduchi* has *Katu, Tikta, Kashaya rasa* and *Ushnavirya* properties. It pacifies all the vitiated *Dosha*. By pacifying *Kapha & Pitta*<sup>7-9</sup> it helps in relieving vaginal discharges and inflammation. *Kashaya rasa* is known as astringent which also has properties in relieving the discharges. Research studies have proved *Guduchi* as a potent anti-inflammatory drug so can be used in treatment of cervicitis<sup>10-11</sup>. This study was based on clinical trial of *Guduchi oil pichu*

in outdoor patients of department of Prasuti Tantra, I.M.S, B.H.U. to provide relief from cervicitis in females.

## MATERIALS AND METHODS

**Selection of cases:** Patients attending OPD of Prasuti Tantra, S.S. Hospital, B.H.U., Varanasi having the complaints of white vaginal discharge, backache, pain in lower abdomen, painful coitus etc. were registered for this study.

### Ethical clearance no No.Dean 2010-11/33

#### ***Inclusion criteria:***

1. Only married women of different age group & parity.
2. Patients having Cervical Pap smear inflammatory.
3. Patients having vaginal discharge > 6months.

#### ***Exclusion criteria:***

1. Unmarried females
2. Patients suffering from any specific organic lesions or systemic illness such as Tuberculosis, acute or chronic respiratory diseases, cardiac diseases, renal diseases etc.
3. Women with Carcinoma of cervix, benign or malignant growth of reproductive tract, any degree of Genital prolapsed.
4. Patients having their HIV and VDRL reactive.

5. Patients with cervical Pap smear showing either CIN or papilloma virus infection or invasive malignancy.

**Investigations:** All selected cases were subjected to following investigations:

#### ***Routine Examinations:***

1. Blood : Hb%, TLC, DLC, ESR, FBS, VDRL, HIV
2. Urine : Routine and Microscopic

#### ***Specific Examination:***

- a. High Vaginal Swab (HVS)
- b. Cervical Pap smear

**Drugs-** *Guduchi oil* was prepared as per *Sharagdarsamhita*.

**Treatment Plan:** Registered patients were given *Guduchi oil Pichu* for 21 days. Patients were told to insert oil soaked *Pichu* in the vaginal canal before sleeping. Every time new *Pichu* was advised. Patients were advised to remove out *Pichu* on early morning or if patient go for toilet.

#### **Follow-ups:**

For the clinical study, follow-ups were observed at regular interval of 7 days up to 21 days in regular patients. Those who were not regular were excluded from study. Results were assessed on the following basis of Symptomatic relief as narrated by patients, Relief in signs as per speculum

examination and findings of Cervical Pap smear. Results were categorized as

**Cured**-Patient having relief in symptoms, signs along with normal Pap smear examination.

**Relieved**-Relief in symptoms and signs along with mild inflammation in Pap smear examination.

**Partially Relieved**-Relief in symptoms and sign but Pap smear was inflammatory.

**Unchanged**-No relief in symptoms, signs and Pap smear was inflammatory.

**Criteria of scoring:**

**Table 1** Criteria of scoring

**Table 1: Criteria of Scoring**

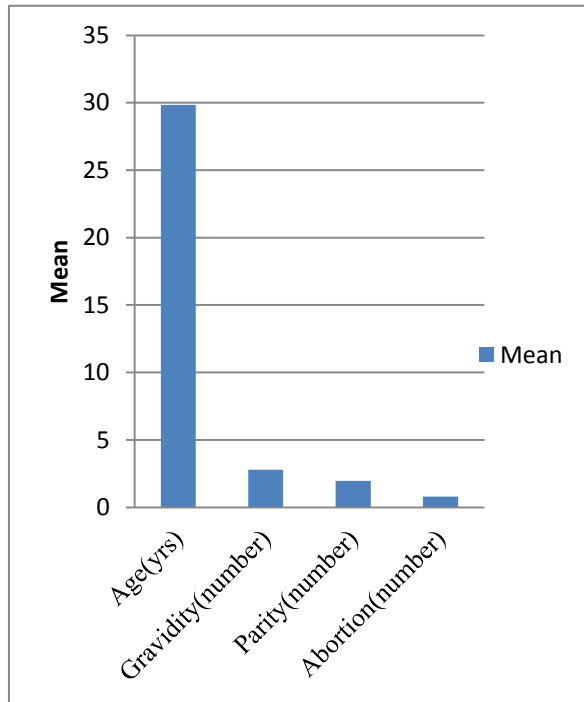
Grading	Scoring	Vaginal Discharge	Cervical Discharge(on P/S exam)	Dyspareunia	Backache	Congestion
Normal	0	No abnormal vaginal discharge	No abnormal cervical discharge.	absence of dyspareunia	No backache	No Congestion
Mild	1	Moistening on vagina but no spotting on undergarments	Moistening the cervix.	Pain during forceful coitus	Intermittent backache	Slight Congestion
Moderate	2	More discharge causing spotting of 1-2 cm in diameter on undergarments once or twice in a day	Whole of the cervix covering with mucus discharge	Patient tries to avoid marital relation due to pain during coitus	Backache during any efforts and forward bending	Congestion around cervical OS
Severe	3	Excessive discharges per vaginum causing soakage of undergarments >2cm and may require to change the undergarments.	Pouring of mucus discharge through cervix	Severe pain even in light touch	Constant pain	Congestion on whole cervix

**OBSERVATION**

Observations were made during study about history, examination and investigation

(routine and specific) and results were obtained from received data.

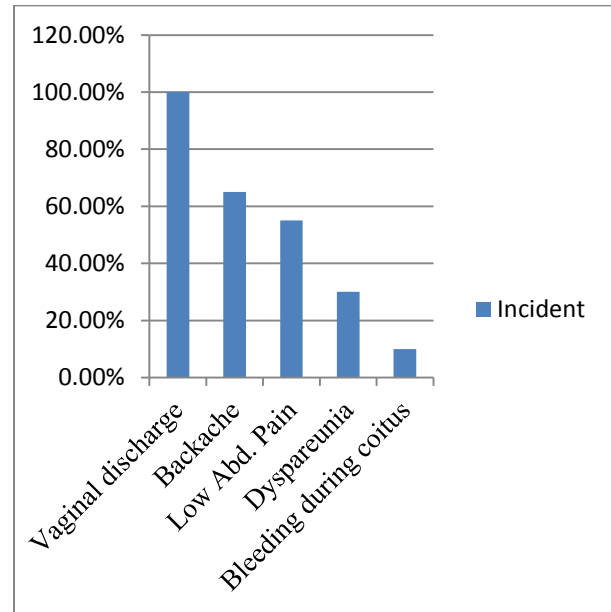
**Fig 1** Mean of Age, Gravidity, Parity, Abortion in total cases



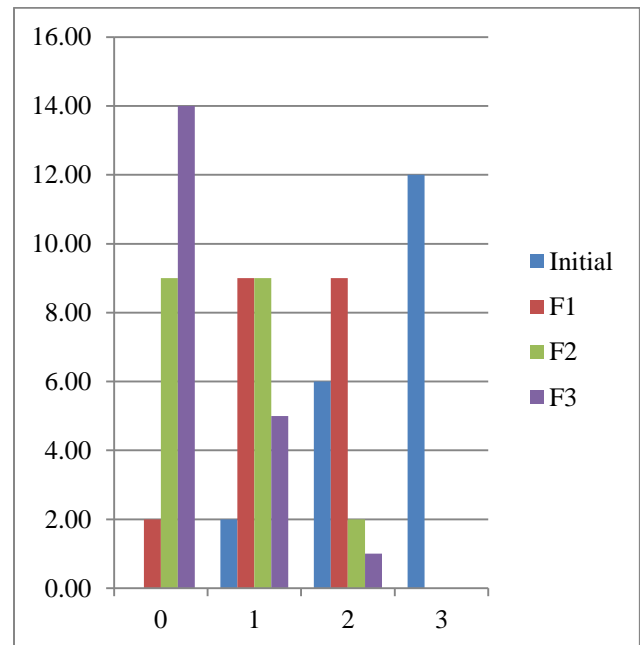
During observation most of patients were found in age group of 26-30 years, which is the most active reproductive period for female. Maximum patients were having obstetric history of multigravida, multiparity, abortion, surgical procedure related to cervix, cervical lacerations. These are risk factor for cervicitis.

Vaginal discharge was present in all the patients' i.e., 100% as it was one of the inclusion criteria. Lower abdominal pain, backache, dyspareunia and bleeding during coitus were observed in 65%, 55%, 30% and 10%, respectively.

**Fig 2** Incidence of Chief Complaints in total cases



**Fig 3** Changes in the amount of Vaginal discharge in subsequent follow-ups



**Table 2: Changes in the amount of Vaginal discharge in initial and subsequent follow-ups**

Vaginal Discharge	No. of Cases								$\chi^2$ Initial v/s $F_3$
	Initial		$F_1$		$F_2$		$F_3$		
	no	%	no	%	no	%	no	%	
0	0	0	2	10	9	45	14	70	51.22 p<0.01 H.S.
1	2	10	9	45	9	45	5	25	
2	6	30	9	45	2	10	1	5	
3	12	60	0	0	0	0	0	0	

**Table 3: Changes of Pap smear before and after treatment**

Pap smear	(n=20)			
	BT		AT	
	no	%	no	%
WNL	0	0	7	35
mild inflammatory	0	0	7	35
inflammatory smear	20	100	6	30

Figure no 3 and Table no 2 shows that initially severe vaginal discharge was present in 60% and it was decreased gradually at subsequent follow-ups. During 3rd follow-up vaginal discharge was absent in 70% while mild vaginal discharge was found in 25%. Intra-group comparison between initial and 3rd follow-up was highly significant. This proves effectiveness of *Guduchi oil pichu* in cervicitis.

Table no 3 shows that before treatment, all the cases had inflammatory Pap smear. After treatment 7 out of 20 patients showed total disappearance of inflammatory changes. While 7 patients showed mild inflammatory

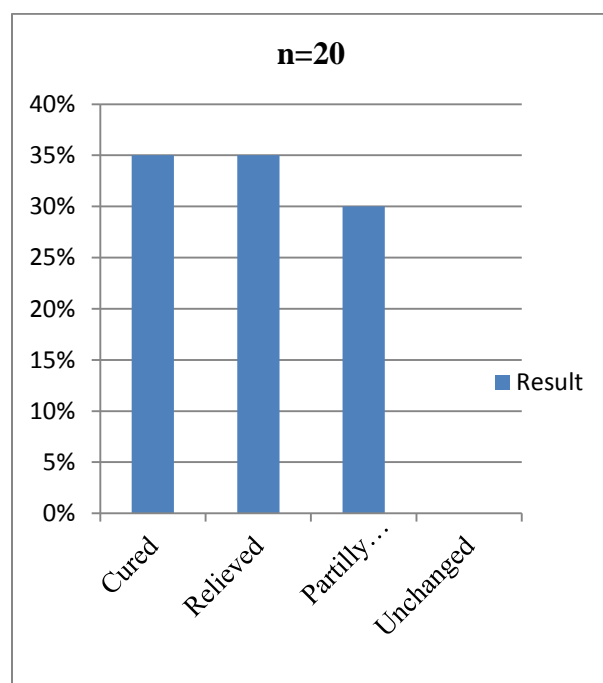
changes. Remaining 6 cases were having inflammatory smear. So this treatment is helpful in decreasing and curing inflammation of cervicitis.

Figure no 4 and Table no 4 that 35% cases were cured. 35% cases were relieved and partially relieved cases were 30%. No case was observed which remain unchanged. So *Guduchi oil Pichu* is found to be effective in the management of cervicitis.

**Table 4** Result in Total cases

Results	(n=20)	
	No.	%
Cured	7	35
Relieved	7	35
Partially relieved	6	30
Unchanged	0	00

**Fig 4: Result in total cases**



## DISCUSSION

In Ayurveda literature various diseases of female reproductive system are described under the broad heading of *Yoni Vyapada*.

The term *Yoni* is used to denote female reproductive system. In all the Ayurvedic classics twenty *Yoni Vyapadas* are described covering all the gynaecological diseases.

*Paripluta yoni vyapada* is one of them and has been described in detail. Ayurvedic *acharyas* have mentioned *Shun* (inflammation), *Sparshakshama* (tenderness), *Gramyadharmuruja* (pain during coitus), heaviness in *Basti* and *Kukshi* (bladder & lower abdomen), *Shroni*, *Vankshan*, *Prashtavedana* (lumbo- sacral, groin pain), painful bluish yellowish menstruation as clinical features of *Paripluta yoni vyapada*<sup>12-15</sup>. The signs and symptoms of *Paripluta yoni vyapada* described are similar to signs and symptoms of cervicitis so it is put parallel with cervicitis. In this disease vitiated *Dosha* are *Vata* and *Pitta*.

In modern literature treatment of cervicitis is mainly based on antibiotics, anti-inflammatory, surgical procedures but has got its own side effects. In this study *Guduchi oil pichu* is used locally for treatment of cervicitis. *Katu*, *Tikta*, *Kashaya rasa*, *Ushnavirya*, *Tridoshahara*, *Sangrahi* and anti-inflammatory and analgesic properties of *Guduchi* are useful in relieving symptoms produced in cervicitis<sup>16-17</sup>. Hence *Guduchi oil Pichu* is selected for the treatment of cervicitis.

Patients were treated with *Guduchi oil Pichu*. Total span of therapy was 21 days.

Follow ups were taken at the interval of 7 days. During each follow ups changes in signs and symptoms of cervicitis were observed. Changes in investigations were noted before and after treatment.

Most of patients were found in age group of 26-30 years, which is the most active reproductive period for female. During this period chance of infections like STDs is more, which is risk factor for cervicitis. Maximum patients were having obstetric history of multigravida, multiparity, abortion, surgical procedure related to cervix, cervical lacerations. Such females are prone to develop cervicitis. Majority of patients were having personal history like poor appetite and unhygienic mode of living which are considered to be aggravating factors for cervicitis therefore above findings strongly support the literature.

In each follow up period it was observed that there was decrease in amount of vaginal discharge, backache, lower abdominal pain, dyspareunia, cervical congestion. Investigations were done before and after treatment. No significant changes were observed in Hb%, TLC, FBS & Urine examinations. Significant improvement inflammatory in Pap smear after treatment was seen. In present study 35% cases were

cured, while 35% cases were relieved and partially relieved cases were 30%. Thus it was found that this therapy is effective in the treatment of cervicitis.

The beneficial effect of drug was probably due to their pharmacodynamic properties like *Rasa, Virya, Guna* etc. They might have played an important role in curing disease. From modern point of view the mode of action of drugs may be due to their anti-inflammatory, analgesic, anti-infective properties. Research was done in small sample size so further researches on cervicitis with large sample size can prove its above mentioned properties in details when evaluate clinically on specific type of cervicitis. In this study follow ups were not taken for long duration so recurrence of symptoms of cervicitis could not be studied. Future research with long term follow up can be done to study recurrence of cervicitis after completion of treatment.

## CONCLUSION

- Cervicitis is common in multiparous females and in age group of 26-30yrs as observed in present study i.e., most fertile period.
- *Guduchi* has anti-inflammatory, *Sangrahi, Tridosahara* property showing



the improvement in inflammatory Pap smear and Vaginal discharge.

- *Pichu* therapy is good for narrow passage.
- *Guduchi oil pichu* is effective in the treatment of cervicitis.

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