

A STUDY OF THE KANDUGHNA PROPERTY OF THE STEM BARK OF KUTAJA-*Holarrhenaantidysenterica* (Linn.) Wall.exG.Don W.S.R to YONI KANDU

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ABSTRACT

A healthy woman is a promise of a healthy family and a woman's health status is a complex arrangement controlled by a range of factors headed by her reproductive system. Yoni which is the source for growth of progeny must be so healthy that her psychological, sexual and reproductive life is not disturbed throughout her entire life. *Yoni Kandu* or Pruritus Vulva literally means a sensation of itching in and around vulva. It is a symptom, and not a disease in itself. 10% of women all over the world suffer from this complaint. Many of the gynaecological disorders present the feature *Yoni Kandu* or Pruritus Vulva as the major complaint. This clinical study was carried out to evaluate the *Kandughna* property or antipruritic action of the stem bark of *Kutaja* (*Holarrhenaantidysenterica* Wall.ex G. Don) in *Yoni Kandu*. A Total of 30 Patients with signs and symptoms of *Yoni Kandu* were selected from the O.P.D. and I.P.D. of S.V. Ayurvedic Hospital Tirupathi. The study was done in single group with 2 interventions. *Kutaja Ghana vati* was administered in the dose of 2 grams per day in divided dose. Vaginal douche was given with *Kashaya* prepared out of Stem bark of *Kutaja* for 7-14 days. *Kutaja Ghana vati* & Vaginal douche with Stem bark of *Kutaja* provided statistically highly significant relief ($p < 0.01$) of 94.25% relief in vaginal itching and 90.15% in Severity of Discharge. The drug *Kutaja Ghana vati* & Vaginal douche with Stem bark of *Kutaja* provided statistically highly significant relief ($p < 0.0001$) of 80% in low backache and 72 % relief ($p < 0.0001$) in general weakness. Stem bark of *Kutaja* possess *Kaphahara*, *Kandughna*, *Krimighna* and *Vranaropana* properties, therefore the drug *Kutaja Ghana vati* is highly effective in *Yoni Kandu*. (Infectious and Non-infectious conditions).

Keywords: *Yoni Kandu*, *Caraka Samhita*, *Kanduhara Dasemani*, *Kutaja Ghana vati*

INTRODUCTION

A healthy woman is a promise of a healthy family and a woman's health status is a complex arrangement controlled by a range of factors headed by her reproduc-

tive system. Yoni which is the source for growth of progeny must be so healthy that her psychological, sexual and reproductive life is not disturbed throughout her entire

life. *Yoni Kandu* or Pruritus vulva literally means a sensation of itching in and around vulva. It is frequently observed as a symptom in many types of skin diseases, mucous membrane diseases, inflammatory conditions and infective diseases. Because of lack of knowledge about the hygiene of the private parts, infections occur; causing vaginitis followed by Pruritis vulva and vagina, associated with excessive vaginal discharge, low backache and general debility. *Yoni Kandu* is a very common complaint now a days. Many women are silent sufferers of the complaint.

In the recent times, when many drugs of modern times are developing resistance to numerous pathogens, there is a real need to find out a suitable 'Kanduhara or anti-pruritic' drug with least side effects and maximum efficacy. This article aims at evaluating the *Kandughna*, i.e. anti-pruritic action of the stem bark of *Kutaja* plant, (*Holarrhenaantidysenterica*) Wall.ex G.

Table 1-Showing Differences between the *Holarrhenaantidysenterica* & *Wrightiatinctoria*

| CHARACTERS | <i>Holarrhenaantidysenterica</i> | <i>Wrightiatinctoria</i> |
|---|---|---|
| 1. Appearance | Recurved | Curved |
| 2.COLOUR: Outer surface: Inner surface: | Buff to pale brown. Slightly brownish. | Light gray in colour Pale brown in colour. |
| 3.Fracture: | Short fracture | Tough & brittle. |
| 4.Markings: | Horizontal lenticels present | Small whitish circular lenticels present. |
| 5.Taste : | Bitter | Tasteless |

Preparation of the drug Kutaja Ghana Vati: The drug *Kutaja Ghana Vati* was prepared at Sri Srinivasa Ayurveda Pharmacy, SrinivasaMangapuram. *Kutaja Ghana vati* was prepared under 4 stages-Preparation of *Kashaya*, followed by *Rasakriya*, granules and finally tablet form. In order to prepare medicine first *Kashaya* was made. The ratio of drug and water is 1:16.Weight of the drug (*Kutaja* bark powder)-10Kg, 160 litres of water was taken and was reduced to ¼th i.e.,

Don., in *Yoni Kandu*. *Kutaja* is mentioned as one of the drug in *Kandughnadasemani of CharakaSamhita*.

MATERIALS AND METHODS

Patients attending the O.P.D. and I.P.D. of S.V.Ayurvedic Hospital Tirupathi were selected. They were assigned into a single group randomly. A Total of 31 patients with signs and symptoms of *Yoni Kandu* were registered. Out of them 30 patients completed the course of treatment.

Collection of the drug:

The Stem bark of *Kutaja* (*Holarrhenaantidysenterica*.Wall.exG.Don) was collected from 'Seshachalam' forests, *Tirumala-Hills*. In general, the Stem bark of *Kutaja* is adulterated by *Wrightiatinctoria*'s Stem bark in the market. So, the identification is very important to know the original crud-edrug. Hence, it is necessary to know the differences between the two drugs.

(Table1)

40lit followed by the preparation of *Rasakriya*. The obtained *Kashaya* was filtered through a cloth and it was again boiled and after it attained a semisolid consistency. It was further heated and after it got dried it was scraped out of the boiler. The obtained material was put inside the granule making machine and granules of the scraped material was obtained. Further it was put into tablet making machine and tablets weighing 500 mg were prepared.

Inclusion Criteria

Itching of vagina /vulva with or without vaginal discharge of any kind of origin except the conditions mentioned in exclusion criteria.

Exclusion Criteria

1. Carcinoma of Vulva, Vagina & Cervix

2. Vaginal /Uterine prolapse
3. Atrophic vaginitis
4. Tubercular cervicitis
5. Sexual Transmitted diseases(STD's)
6. Tumors of any reproductive organs
7. Diabetes

Investigations:

Blood and urine routine investigations were carried out in all the patients. (Table 2)

Table 2- Showing Investigations:

| | | |
|----|--------|--|
| 1. | Blood | Hb%, TLC, DLC, ESR, CT, BT. |
| 2. | Urine | Routine and microscopic examination. |
| 3. | Others | Culture of the vaginal secretions, Pap Smear If necessary to exclude other pathologies. |

Clinical study:

The present clinical study was planned to evaluate the efficacy of Stem bark of *Kutaja* on the symptom of “*Yoni Kandu*” in 30 patients selected from O.P.D. and I.P.D. of S.V. Ayurvedic Hospital Tirupathi. Adequate data and previous research works are not available related to treatment of *Yoni Kandu* with the drug *Kutaja*. Hence, an attempt was made by this study to assess the effect of above drug in *Ghana Vati* form orally

and in *Kashaya* form locally i.e. in the form of *Yoni prakshalana* procedure in treating *Yoni Kandu*.

Plan of present study includes single phase, single group with pre test, post test and follow clinical assessment.

Posology:

The Posology of *Kutaja Ghana vati* and Vaginal douche of *Kashaya* made out of Stem bark of *Kutaja* (Table 3) & (Table 4) are described below

Table3- Showing the Posology of Kutaja Ghana vati:

| S.NO | Drug | DOSE | VEHICLE | DURATION OF TREATMENT |
|------|------------------------|--------|---------|---|
| 1. | <i>KutajaGhanaVati</i> | 2gm BD | Water | 15 days with follow up for 2 Consecutive weeks. |

Table 4- Showing the Posology of Vaginal douche of Kashayamade out of Stem bark of Kutaja:

| S.NO | Drug | DOSE FOR Douche PREPARATION | VEHICLE | DURATION OF TREATMENT |
|------|----------------------------|-----------------------------|---------|--|
| 1. | <i>Stem Bark Of Kutaja</i> | 5gm In Kwatha form | -- | 7 days with follow up for 2 Consecutive weeks. |

Criteria of assessment:

The improvement in the patients was assessed mainly on the basis of relief in the signs and symptoms of the disease. To assess the effect of therapy objectively, scoring was given to all the signs and symptoms depending upon their severity. *Yoni Kandu*, the cardinal symptom was

assessed on its severity and duration of persistence. Other associated symptoms according to *Ayurveda* as well as per modern, were also assessed by the scoring method. (Table 5) & (Table 6) shows grading for different associated symptoms and (Table 7) shows assessment of relief obtained by the therapy in percentage

Table 5- Shows grading for different associated symptoms

| | | |
|---------------------------------------|--|--|
| vaginal itching | Vaginal discharge | General Weakness |
| No itching-0 | No vaginal discharge-0 | Patient actively involved in Physical activity -0 |
| Itching occasionally -1 | Persistent moistness of vulva-1 | Patient does not show interest in Physical activity -1 |
| Itching does not disturb daily work-2 | Severe moistness-2 | Patient feels lassitude with physical activity-2 |
| Affects her daily works-3 | Need to change the under garments frequently-3 | |

Table 6- Shows gradings for different associated symptoms

| | | | | |
|------------|---------------|------------|------------------|--------------------------|
| Backache: | Scratch marks | Giddiness: | Loss of appetite | General Evaluating Scale |
| Present -1 | Present-1 | Present-1 | Present-1 | Absence of symptoms-0 |
| Absent – 0 | Absent-0 | Absent – 0 | Absent – 0 | Mild-1 |
| | | | | Moderate-2 |
| | | | | Severe-3 |

Table 7- Showing assessment of relief obtained by the therapy in percentage;

| | |
|----------------------|-------------------|
| Percentage of relief | Effect |
| >76% | Cured |
| 51-75% | Markedly improved |
| 26-50% | Improved |
| <25% | No improvement |

OBSERVATIONS AND RESULTS

(50%) of patients were between the age group of 30-40 yrs. All the Patients selected were married.(83.33 %). of patients were of mixed diet .(83.33 %) of patients had regular bowel habits. (70%) of patients were multiparous. (63.33 %) of patients had *Kapha- Pittaprakriti*

(66.67%) of patients were suffering from persistent moistness. (Table 8) Shows the Effect of *Kutaja Ghana vati* & Stem bark of *Kutaja* on subjective parameters in 30 patients:

Table 8- Showing the Effect of Kutaja Ghana vati& Stem bark of Kutajaon subjective parameters in 30 patients:

| Symptoms | N | B.T | A.T | Mean | Relief % | S.D | S.E | ‘t’ | P |
|-----------------------|----|-------|--------|-------|----------|--------|---------|--------|--------|
| Vaginal itching | 30 | 2.300 | 0.1333 | 2.167 | 94.25% | 0.5307 | 0.09689 | 22.363 | 0.0001 |
| Severity of discharge | 30 | 2.367 | 0.2333 | 2.133 | 90.15% | 0.7303 | 0.1333 | 16.00 | 0.0001 |

This table shows that *Kutaja Ghana vati* & *Stem bark of Kutaja* provided statistically highly significant relief (p<0.01) of 94.25% relief in vaginal itching and

90.15% in Severity of Discharge. (Table 9) shows the effect of *Kutaja*on associated symptoms:

Table 9 -Showing the effect of Kutaja on associated symptoms:

| Symptoms | N | B.T | A.T | Mean | Relief % | S.D | S.E | ‘t’ | P |
|----------|---|-----|-----|------|----------|-----|-----|-----|---|
|----------|---|-----|-----|------|----------|-----|-----|-----|---|

| | | | | | | | | | |
|------------------|----|-------|-------|-------|------|--------|---------|-------|--------|
| Scratch marks | 4 | 1.000 | 0.000 | 1.000 | 100 | 0.000 | 0.000 | 0.000 | |
| Weakness | 25 | 1.000 | 0.280 | 0.720 | 72 | 0.4583 | 0.09165 | 7.856 | 0.0001 |
| Loss of appetite | 11 | 1.000 | 0.363 | 0.636 | 63.5 | 0.5045 | 0.1521 | 4.183 | 0.0019 |
| Constipation | 5 | 1.000 | 0.500 | 0.500 | 50 | 0.5477 | 0.2236 | 2.236 | 0.0756 |
| Lowbackache | 25 | 1.000 | 0.200 | 0.800 | 80 | 0.4082 | 0.08165 | 9.798 | 0.0001 |

Table 9- shows that *Kutaja Ghana vati* & Vaginal douche of *Kashaya* made out of *Stem bark of Kutaja* provided statistically highly significant relief ($p < 0.0001$) of 80%

in low backache and 72 % relief ($p < 0.0001$) in general weakness. (Table 10) shows Overall Assessment of Clinical trial:

Table 10- Showing the overall Assessment of Clinical trial:

| Result | Number of patients | % patients |
|------------------|--------------------|------------|
| Cured | 25 | 83.33 |
| Moderately cured | 05 | 16.67 |

The therapy had shown complete relief in 83.33% of patients, moderate relief in 16.67% of Patients.

DISCUSSION

Acharya Charaka mentioned 50 *Dashemani* groups of drugs. *Kutaja* is included in '*Kanduharadasemani*'. *Kutaja* is taken for the study with special reference to the '*Kanduhara*' property. *Stem bark of Kutaja* plant is taken for the study. *Kutaja* is named as it grows generally on mountain tops.

Pruritus vulvae can be caused by many different conditions. poor hygiene and lack of knowledge about the hygiene of the private parts, infections; excessive sexual act, improper diet etc. are the causes of *Yoni-Kandu*. Indulging in *innidana* leads to aggravation of *doshas*' (specifically of *Kapha* associated with others), then the *Kapha and Pitta* takes *ashraya in yoni* and causes *avarana of vata*, which in turn leads to *Yoni Kandu* with the main clinical feature "*gaatravigharshana*".

Ayurveda is an ocean and to take out a pearl i.e., treatment for any ailment is the work of Physician. Adequate data is not available related to treatment of *Yoni Kandu* with the drug *Kutaja*. Hence, an attempt was made by this study to assess the effect

of above drug in *Ghana Vati* form orally and in *Kashaya* form locally i.e in the form of *Yoni Prakshalana* procedure in treating *Yoni Kandu*.

Plan of present study includes single phase, non- group clinical assessment. Hence, the numbers of patients were selected as 30, which is sufficient to get optimal un-biased result. A special case sheet was designed with specific symptoms of '*Yoni Kandu*' and demographic data for practical convenience while carrying study. The dose of herbal drugs is taken as per *Ghana vati Kalpana* i.e between 2 - 3 grams. Basing on this overall dose of drug *Kutaja Ghana vati* is 2 grams per day in divided dose. *Stem bark of Kutaja Kashaya* douche for 7-14 days, as symptomatic relief was observed within seven days in pilot study.

As the contents of the *Stem bark Of Kutaja* possess *Kaphahara, Kandughna, Krimighna and Vranaropana* properties, the drug may be effective in *Yoni Kandu*. (Infectious and Non-infectious conditions).

Maximum number (50%) of patients belong to age group, 30-40 yrs., which indicates that maximum cases which were taken for the study were in reproductive age group which confirms the

incidence of disease related to the reproductive age.

Maximum number of patients (93.33%) belonged to Hindu religion. As the Study was conducted in Hindu Pre-dominant area, this finding was observed.

In the present study all the patients (100%) selected were married and developed the problem after marriage. Therefore the relation between active sexual life and Itching of Vulva/Vagina can be attributed.

Maximum number of patients (83.33%) reported in present study were Non-vegetarians. As it causes *VataKaphaprapakopa*, which is a cause of the disease. The relief was not completely observed in the patients who did not follow the *upasaya*.

Maximum number of patients registered was multiparous (70%) followed by primiparous (26.67%). Which indicates the relation of *Yoni Kandu* with infections followed by delivery as the predisposing factor.

Incidence according to *prakriti* showed that the majority of patients (63.33%) were of *Kapha-Pitta* (63.33%). This observation supports the involvement of *Kaphadosha* in the pathogens is of disease.

Statistically highly significant relief of 94.25 % ($p < 0.0001$) was observed in Vaginal Itching. Statistically highly significant relief of 90.15 % ($p < 0.0001$), was observed in severity of discharge. It is also provided statistically highly significant relief in associated symptoms like 100% relief in Scratch marks, 72% ($p < 0.0001$) relief in General Weakness, 63.5% ($p < 0.0019$) relief in Loss of Appetite, 50% ($p < 0.00756$) relief in Constipation, 80% ($p < 0.0001$) relief in Backache. The overall effect of the clinical trial with

Kutaja Ghana vati along with vaginal douche of *Kashaya* made out of stem bark of *Kutaja* shows that 83.33% of the patients were completely cured. Due to *Vata-Kaphasamaka*, *Kandughna*, *Krimighna* and *Vranaropana* properties of *Kutaja* stem bark; effective result might be observed on both main symptoms and associated symptoms of *Yoni Kandu*.

16.67% of the patients (5 patients) were moderately cured. In these patients, *Yoni Kandu* was mainly due to continuous moisture of the Vulva by the discharge from the cervix. The cause for the discharge was Pelvic Inflammatory Disease. Though partial relief in *Kandu* was observed in these patients, complete relief was not seen as *Kutaja* is not a specific drug for inflammatory diseases.

CONCLUSION:

Kutaja, one of the important drugs mentioned in *Kanduhara Dasaimani* by *Charaka*, was taken as a trial drug for study. *Holarrhenaantidysenterica*, which is considered the species of *Kutaja*, was taken for evaluation of '*Kandughna*' property. Though each and every part of *Kutaja* is useful as a medicine, here Stem bark of *Kutaja* alone was taken for study as '*Kandughna*' property is specifically seen in this part. *Yoni Kandu* is such a symptom which makes the patient suffer physically, sexually and psychologically. For the present study *Kutaja* is taken in the form of *Ghana vati* internally and in the form of *Kashaya* for *Yoni Prakshalana*.

Kutaja Ghana vati & Vaginal douche with *Stem bark of Kutaja* provided statistically highly significant relief ($p < 0.0001$) of 94.25% relief in vaginal itching and 90.15% in Severity of Discharge., ($p < 0.0001$) of 80% in low backache and 72 % relief ($p < 0.0001$) in general

weakness. Stem bark of *Kutaja* possess *Kaphahara, Kandughna, Krimighna and Vranaropana* properties, therefore the drug *Kutaja Ghana vati* is highly effective in *Yoni Kandu*. (Infectious and Non-infectious conditions).

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