



Research Article

“A CLINICAL COMPARATIVE STUDY OF THE EFFICACY OF KARANJ TAILA YONI PICHU DHARAN AND UDUMBARADI TAILA YONI PICHU DHARAN IN THE MANAGEMENT OF KAPHAJA YONIVYAPADA”

*Dr. Pradumn Sunil Ambekar and Dr. Deshmukh,

C.S.M.S.'S Ayurved College, Kanchanwadi, Aurangabad, Maharashtra, India

ARTICLE INFO

Article History:

Received 27th November, 2014
Received in revised form
20th December, 2014
Accepted 30th January, 2015
Published online 28st February, 2015

Keywords:

Kaphaja Yonivyapada,
Karanj Taila,
Udumbaradi Taila,
Comparative Clinical Trial,
Statistical Analysis,
Result,
Discussion,
Conclusion,
References

ABSTRACT

Now a day's women have to bear all the responsibilities from both the domestic point of view as well as the external matters. Lack of proper nutrition due to busy schedule and lack of proper rest are the additional factors. She is also subjected to do the *dharanof Adharaniya Vega* due to a lot of office work. Psychological factors that include mental and emotional stress. The cumulative effect of night shifts, junk food, and the physical and mental stress from the home and office, gives rise to many diseases, *Kaphaja Yonivyapada* is one of them, having *Yonigat shwetastrav*, *Yonikandu* and *Yonivedana* as *Pradhanlakshan*. In this Comparative study, *Karanj taila* (Trial) and *Udumbaradi taila* (Control) *Yonipichudharanin* 60 patients show significant reduction in symptoms of *Kaphaja Yonivyapada*.

Copyright © 2015 Dr. Pradumn Sunil Ambekar and Dr. Deshmukh. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Certain diseases may not be life threatening but troublesome and may irritate to an individual in their day to day routine activity. "*Kaphaja Yonivyapada*" is one of among them, having *Yonigat shwetastrav*, *Yonikandu* and *Yonivedana* as *Pradhanlakshan*. If it is neglected, it may lead to ascending infections harming the general health and disturbing to women psychologically. In modern text of view Non-pathological leucorrhoea have similar symptoms as such like *Kaphaja Yonivyapada*. It is excessive mucous discharge originates in cervix and vagina itself as transudation through cervix and vaginal wall. Hence, considering the above factors, I have selected this study with the hope to provide better results for women suffering from *Kaphaja Yonivyapada* and to make their life more comfortable with the help of Ayurvedic formulations with minimal side effect.

*Corresponding author: *Dr. Pradumn Sunil Ambekar,
C.S.M.S.'S Ayurved College, Kanchanwadi, Aurangabad,
Maharashtra, India.

The null hypothesis, H₀

The effect of treatment of *Karanj taila* (Group A) is not significant than *Udumbaradi taila* (Group B) in *Kaphaja Yonivyapada*.

The alternative hypothesis H_a

The effect of treatment of *Karanj taila* (Group A) is significant than *Udumbaradi taila* (Group B) in *Kaphaja Yonivyapada*.

Prevalence

A study was conducted in Nagpur city by medical practitioners of Preventive and Social Medicine Department. Leucorrhoea is found in 27.47% women. Leucorrhoea was found significantly more in married women as compared to unmarried women i.e. the number of women in reproductive age group (15-44 yrs.) report excessive vaginal discharge.

Aim

To do clinical comparative study of efficacy of *Karanj Taila Yoni Pichu Dharan* & *Udumbaradi Taila Yoni Pichu Dharan* in the management of *Kaphaja Yonivyapada*.

Objectives

- To Study *Kaphaja Yonivyapada* in detail.
- To Study the efficacy of *Karanj Taila Pichu* in *Kaphaja Yonivyapada*.
- To Study the efficacy of *Udumbaradi Taila Pichu* in *Kaphaja Yonivyapada*.
- To Study the change in *Yonigat shwetastrav*, *Yonivedana*, *Yonikandu*, before and after 21 days of treatment.

Inclusion criteria

- Age (18-40yrs).
- Married patients.
- Non-pregnant.
- Patients having history of regular menstrual cycle.

Exclusion criteria

- Pelvic inflammatory disease, Venereal diseases, Diabetes.
- Patient taking Hormonal drugs.
- Patient with IUCD and on contraceptive pills.
- Antenatal and postnatal patients.
- Suspected case of CA cervix.

Table 1. Assessment criteria³

Sr. no	Topic	Group A (Trial)	Group B (control)
1)	Form	<i>Karanj Taila Pichu</i> .	<i>Udumbaradi Taila Pichu</i> .
2)	Dose	<i>Karpas Pichu</i> soaked in 10 ml <i>Taila</i> for both groups.	
3)	Kaal	6 hr-8hr daily application for both groups.	
4)	Duration of therapy	21 days for both groups with weekly follow up.	
5)	Route of administration	<i>Yoni Pichu Dharan</i> for both groups.	

Table 2. Yonigat Shwetastrav

Grade	Criteria	Score
I	No discharge seen on P/S & P/V examination.	0
II	Mild -Occasional discharge on P/S & P/V examination (Slight wetting of garments on & off)	1
III	Moderate- On P/S & P/V examination discharge present (Wetting of garments present as stated by patient)	2
IV	Severe-excessive vaginal discharge as stated by patient and outpouring discharge during local P/S, P/V examination.	3

Table 3. -Yonivedana

Grade	Criteria	Score
I	No pain	0
II	Mild- (occasional) no interference with daily routine.	1
III	Moderate- continuous/ interference with daily work/relief after application of medicated <i>Pichu</i> .	2
IV	Severe- No co-operation during P/S & P/V examination and H/O no relief after application of medicated <i>Pichu</i> .	3

Table 4. Yonikandu

Grade	Criteria	Score
I	Absent	0
II	Mild-(occasional)	1
III	Moderate-Disturbs daily routine work/ increase after specific time like menstruation, micturition / relief after application of medicated <i>Pichu</i> .	2
IV	Severe – Affects routine activity/ No relief after application of medicated <i>Pichu</i> .	3

MATERIALS AND METHODS

Materials

- Diagnosed patients of *Kaphaja Yonivyapada*.
- Drug: *Karanj taila*, *Udumbaradi taila*.
- *Karpas Pichu*.

Methodology

This was an open randomized controlled trial design. 60 diagnosed patients of *Kaphaja Yonivyapad* were selected by random sampling method. These patients were divided in two groups.

Withdrawal Criteria-

- Patients willing to discontinue trial.
- Patients absent for two consecutive days.
- If patient develops any allergic condition / if there are unbearable, Aggravation of symptoms itself.

STATISTICAL ANALYSIS

Results were drawn from observation after application of Wilcoxon sign rank test and Mann – Whitney test.

EFFECT OF THERAPIES

Effect of *Karanj taila*:

In this group, 30 patients of *Kaphaja Yonivyapada* completed the full course of treatment and so the effect of group 'A' therapy quoted from here onwards.

Statistical Analysis:

The null hypothesis H_0 :

The effect of treatment of *Karanj taila* (Group A) on all symptoms in *Kaphaja yonivyapada* is not significant.

The alternative hypothesis H_a :

The effect of treatment of *Karanj taila* (Group A) on all symptoms in *Kaphaja yonivyapada* is significant.

All the values in following tables are calculated by using Wilcoxon sign rank test. Statistical analysis of every symptom is described separately in the following Tables.

Table 5. Effect *karanj taila* on *Yonigat shwetastrav*

Symptoms	<i>Yonigat shwetastrav</i>
N	27
Mean Score, B.T.	2.4
Mean Score, A.T.	1.1
S.D (+), B.T.	0.674
S.D (+), A.T.	0.803
S.E. (+), B.T.	0.123
S.E. (+), A.T.	0.146
W	378
Z	-4.54
P	P<0.001
Result	Very Significant

As the p value is lower than the significance level $\alpha = 0.05$, we should reject the null hypothesis H_0 and accept the alternative hypothesis H_a .

Table 6. Effect *Karanj taila* on *Yonivedana*

Symptoms	<i>Yonivedana</i>
N	19
Mean Score, B.T.	2.067
Mean Score, A.T.	0.967
S.D (+), B.T.	0.739
S.D (+), A.T.	0.85
S.E. (+), B.T.	0.135
S.E. (+), A.T.	0.155
W	190
Z	-3.823
P	P<0.001
Result	Very Significant

As the p value is lower than the significance level $\alpha = 0.05$, we should reject the null hypothesis H_0 and accept the alternative hypothesis H_a .

As the p value is lower than the significance level $\alpha = 0.05$, we should reject the null hypothesis H_0 and accept the alternative hypothesis H_a .

Conclusion

The effect of treatment on all the symptoms *Karanj Taila* (Group A) is significant.

Table 7. Effect *karanj taila* on *Yonikandu*

Symptoms	<i>Yonikandu</i>
N	26
Mean Score, B.T.	2.167
Mean Score, A.T.	0.667
S.D (+), B.T.	0.834
S.D (+), A.T.	0.66
S.E. (+), B.T.	0.152
S.E. (+), A.T.	0.12
W	340
Z	-4.318
P	P<0.001
Result	Very Significant

Effect of *Udumbaradi taila*

In this group, 30 patients of *Kaphaja Yonivyapada* completed the full course of treatment and so the effect of group B therapy quoted from here onwards.

Statistical Analysis:

The null hypothesis, H_0 :

The effect of treatment of *Udumbaradi taila* on all symptoms in *Kaphaja Yonivyapada* is not significant.

The alternative hypothesis, H_a :

The effect of treatment on all symptoms in *Udumbaradi taila* (Group A) is significant.

All the values in following tables are calculated by using Wilcoxon sign rank test. Statistical analysis of every symptom is described separately in the following Tables.

Table 8. Effect *Udumbaradi taila* on *Yonigat shwetastrav*

Symptoms	<i>Yonigat shwetastrav</i>
N	25
Mean Score, B.T.	2.233
Mean Score, A.T.	0.767
S.D (+), B.T.	0.626
S.D (+), A.T.	0.897
S.E. (+), B.T.	0.114
S.E. (+), A.T.	0.163
W	325
Z	-4.37
P	P<0.001
Result	Very Significant

As the p value is lower than the significance level $\alpha = 0.05$, we should reject the null hypothesis H_0 and accept the alternative hypothesis H_a .

Table 9. For Effect *Udumbaradi taila* on *Yoni vedana*

Symptoms	<i>Yoni vedana</i>
N	26
Mean Score, B.T.	2.267
Mean Score, A.T.	0.733
S.D (+), B.T.	0.739
S.D (+), A.T.	0.827
S.E. (+), B.T.	0.135
S.E. (+), A.T.	0.151
W	322
Z	-4.089
P	P<0.001
Result	Very Significant

As the p value is lower than the significance level $\alpha = 0.05$, we should reject the null hypothesis H_0 and accept the alternative hypothesis H_a .

Table 10. Effect *Udumbaradi taila* on *Yonikandu*

Symptoms	<i>Yonikandu</i>
N	23
Mean Score, B.T.	2.033
Mean Score, A.T.	0.967
S.D (+), B.T.	0.764
S.D (+), A.T.	0.927
S.E. (+), B.T.	0.139
S.E. (+), A.T.	0.169
W	276
Z	-4.197
P	P<0.001
Result	Very Significant

As the p value is lower than the significance level $\alpha = 0.05$, we should reject the null hypothesis H_0 and accept the alternative hypothesis H_a .

Conclusion

The effect of treatment on all the symptoms *Udumbaradi taila* (Group B) is significant.

C: COMPARATIVE ANALYSIS:

Statistical Analysis:-

The null hypothesis, H_0 :

The effect of treatment of *Karanj taila* (Group A) is not significant than *Udumbaradi taila* (Group B) in *KaphajaYonivyapada*.

The alternative hypothesis H_a :

The effect of treatment of *Karanj taila* (Group A) is significant than *Udumbaradi taila* (Group B) in *KaphajaYonivyapada*.

All the values in following tables are calculated by using Mann – Whitney test for every symptom separately.

Table 11. Comparative analysis for *Yonigat shwetastrav*

Symptoms	<i>Yonigat shwetastrav</i>
N	52
Mean of Group A	1.44
Mean of Group B	1.76
S.D (+) of Group A	0.64
S.D (+) of Group B	0.59
S.E. (+) of Group A	0.123
S.E. (+) of Group B	0.119
U	240
U ‘	435
P	>0.001

As the p value is greater than the significance level $\alpha = 0.05$, we should accept the null hypothesis H_0 and reject the alternative hypothesis H_a , i.e. *Karanj taila* (Group A) is not significant than *Udumbaradi taila* (Group B) for *Yonigat shwetastrava*.

Table 12. For comparative analysis for *Yonivedana*

Symptoms	<i>Yonivedana</i>
N	60
Mean of Group A	1.737
Mean of Group B	1.92
S.D (+), of Group A	0.805
S.D (+), of Group B	0.702
S.E. (+), of Group A	0.1848
S.E. (+), of Group B	0.1405
U	202.5
U ‘	272.5
P	>0.001

As the p value is greater than the significance level $\alpha = 0.05$, we should accept the null hypothesis H_0 and reject the alternative hypothesis H_a , i.e. *Karanj taila* (Group A) is not significant than *Udumbaradi taila* (Group B) for *Yonivedana*.

Table 13. Comparative analysis for *Yonikandu*

Symptoms	<i>Yonikandu</i>
N	60
Mean of Group A	1.84
Mean of Group B	1.391
S.D (+), B.T.	0.746
S.D (+), A.T.	0.585
S.E. (+), B.T.	0.149
S.E. (+), A.T.	0.121
U	191.5
U ‘	383.5
P	<0.001

As the p value is lower than the significance level $\alpha = 0.05$, we should reject the null hypothesis H_0 and accept the alternative hypothesis H_a , i.e. *Karanj taila* (Group A) is significant than *Udumbaradi taila* (Group B) for *Yonikandu*.

Comparative analysis shows the effect of treatment for the symptoms, *Yonigat shwetastrav* and *Yonivedana*, *Udumbaradi taila* (Group B) is significant than *Karanj taila* (Group A) in *Kaphaja Yonivyapada*.

The effect of treatment for the symptom - *Yonikandu*, *Karanjataila* (Group A) is significant than *Udumbaradi taila* (Group B) in *Kaphaja Yonivyapada*.

Table 14.

Efficacy	Group A		Group B	
	Number of patients	%	Number of patients	%
Excellent (> 75 % relief)	5	16.67 %	6	20%
Moderate (51 – 75 % relief)	14	46.67 %	17	56.67%
Mild (26 – 50 % relief)	9	30%	7	23.33%
Ineffective (< 25 % relief)	2	6.67%	0	0

In Group A of *Karanj taila* out of 30 patients, 14 (46.67 %) were noted moderate relief (51 to 75 % relief), mild relief (26 to 50 % relief) were noted in 9 patients i.e. 30 %; Excellent relief (> 75 % relief) were noted in 5 patients i.e. 16.67 % and 2 patients i.e. 6.67 % were observed as an Ineffective (< 25 % relief).

In **Group B of Udumbaradi taila** out of 30 patients, 17 (56.67 %) was noted moderate relief (51 to 75 % relief), mild relief (26 to 50 % relief) was noted in 7 patients i.e. 23.33 %, excellent relief (> 75 % relief) was noted in 6 patients i.e. 20 % and no one was observed as an Ineffective (25 % relief).

DISCUSSION

Mode of action of the formulation

Karanj taila

In classical text *karanj* is mentioned as, having *Tikta-Katu-Kashaya rasa*, *Laghu* and *TikshnaGuna* and *Ushanaviry* which acts as excellent *kaphashamak* and ultimately lead to *sampraptibhanga i. e. Chikitsa*. In addition to that *bhavaprakash* and *dhanvantarinighantu* explained it as *Yonirogaha* i.e. which cures the disease related to Yoni. *Karanj taila* acts as *kandughna* and *kaphastravanashak* by virtue of its *Tikta- Katu-Kashaya rasa* and *Ushanaviry*.

Udumbaradi Taila

The classical drug *Udumbaradi tail* is one of the formulation which are mentioned in the *Yonivyapachikitsa* in *Charaka samhita*, advised for local application with the help of *pichu* in the management of *Kaphaja, kaladushayonivyapada*. While describing the effectiveness of this oil *Acharya Charaka* mentions that, with the use of this oil *darun Yoni* will be cured in seven days. Analysis of the various contents of *udumbaradi taila* reveals that they possess *shodhana, ropana, vedanasthapak* properties, *shothahara* activity are present in most of drugs, while *lekhana* property is found in less number of drugs. Most of drugs are *kashayarasatmak, vatakapashamak, raktashodhaka, kandughna* and lastly *kalkadravya* which are *niryas* in nature acts as excellent *kaphastravahar*.

Tila taila which is the base of both oil formulations is having *vatakapashamak, yonivishodhana* and *yonishoolnashaka* property. Thus the combined effect of drug is *kaphashoshana, shothaghna, shodhana, lekhana, kandughna* and *ropana*. By virtue of *sukshma, vyavayi* and *vikasiguna* of *tila taila*, the drug is easily absorbed through the vaginal mucosa. *Snigdha* of *tila taila* and *Jaati* helps in correction of *Kha-vaigunya* of *artavavaha srotas*. *Lekhna* and *kaphashamak* property helps to decrease *Yonigat swetasrav* and *vatakapashamaka* properties help in breakdown of the *samprapti* of *Kaphaja Yonivyapada*.

In *Ayurvedic* text it has been mentioned that the *Udumbaradi tail* is *apatyakar*, i.e. it helps in giving healthy progeny. It minimized the infertility as most of the drugs in this *taila* are *garbhasthapana, stambhaka, shitaviry* and *garbhaposhak*.

It probably helps in regulation of the secretory activity of glands with decrease in re-epithelisation process which results in, decrease local glycogen content in vagina. Thus vaginal discharge and vaginal pH is also regulated.

Conclusion

On the basis of the study, following conclusions can be drawn

- In the present study, according collected data, it is observed that both the drugs i.e. *Karanj Taila* and *Udumbaradi Taila* shows significant relief in all the symptoms of *Kaphaja Yonivyapada*.

Table 15.

Symptom	Percentage Relief	
	Group A	Group B
<i>Yonigat Shwetastrav</i>	54.16 %	65.67 %
<i>Yonivedana</i>	53.22 %	71.42 %
<i>Yonikandu</i>	69.69 %	52.45 %

- From the above table we can say that, *Karanj Taila* shows relatively better relief than *Udumbaradi Taila* in *Yonikandu* but *Udumbaradi Taila* has provided relatively better relief than *Karanj Taila* in *Yonigatshwetastrava* and *Yonivedana* symptom of *Kaphaja Yonivyapada*.
- *Karanj taila* can be used instead of *Udumbaradi taila* in the management of *Kaphaja Yonivyapada*. Because ingredient of *Karanj taila* are less in number, cheap, easily available, as compared to *Udumbaradi taila* contents which are much more in number, costly and not easily available.
- *Kaphaja Yonivyapada* has *Kapha-vata* dominance which can be evident by observing its symptoms which are - *Yonigat shwetastrav, Yonikandu, Yonivedana* which mimic with the features of non-pathological *Leucorrhoea*.

REFERENCES

- Charaksamhita- of *Agnivesa* by *Vidyadhar Shukla* and *RavidattaTripathi*. 2007. *Chaukhambha Sanskrit Prakashan, Varanasi*, Reprint.
- Dr. *Mahajan, B.K.* *Jaypee Brothers*, 2009. *Methods in Biostatistics*, 6th Edition.
- DravyagunaVigyana*: Prof. *Sharma, P. V.* and *Chaukhamba Bharati Akadami*, 2009. Vol 2, Reprint.
- Dutta, D. C.* 2008. *Text book of Gynaecology including contraception*, 5th edition.
- Kulkarni, R.N.* and *Durge, P.M.* 1993. Prevalence of *leucorrhoea* in reproductive age group women in *Nagpur city*. *Journal of Public Health*, 14(2) Aug-Sep: 237-9
