

A clinical comparative study to evaluate the efficacy of karveer-karanj patra siddha tail & Triphaladi tail on Garbhini Kikkwis w.s.r. to Striae Gravidarum

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Abstract :

Now a days all females are conscious about skin, its tone and complexion. Every female wants to be mother. During pregnancy each has to suffer with kikkwis i.e. striae gravidarum. As it causes permanent discoloration & hampers the beauty there is need for treatment. Ayurved Acharyas have elaborated the treatment for Garbhini Kikkwis. The treatment includes mainly local applications as the symptoms like kandu & vaivarnya. Amongst these remedies we have tried Triphalasiddha tail and karveer-karanj patra siddha tail for local application over abdomen, the region where the striae are seen predominantly.

Introduction

God “The creator” has empowered every human being to reproduce itself. The function of reproduction is the noblest. God has given this magnanimous gift only to women. The “DESIRE” of women for child is itself a strong feeling of happiness & joy. But this joy is interfered during pregnancy by certain physiological changes which do not cause any physical pain to women but makes much psychological distress to her, this physiological change is described as one of the pregnancy disorder by our Acharyas i.e “Garbhini kikkwis”

Kikkwis is a type of skin ailment that occurs during third trimester of pregnancy¹. According to Acharyas it is Tridoshaja vyadhi clinically characterised by kandu, vidaha, valivishesh and vaivarnya. It can be correlated with Striae gravidarum from modern science. During pregnancy due to growing foetus there is mechanical stretching of skin along with hormonal changes which cause itching, burning sensation & striae in skin. Antenatal itching leads to irritability and disturbance interfering with tranquillity of pregnant women body and mind. postnatal persistence of permanent stretch marks also cause crude appearance, depriving her of confidence and looks. Ayurvedic texts have described a variety of treatment options in the management of Garbhini Kikkwis.

Prevalence :

About 70-90% of pregnant women by third trimester develop stretch marks i.e striae gravidarum (S.G) over abdomen.² The percentage of occurrence of striae and related symptoms are more during first pregnancy, compared to later pregnancies. Genetic factors such as family history and race also seem to be predictive in the appearance of striae.

Need For Study And Project Outcome

Women in 21st century compare herself with delicate flowers and emphasizes her beauty and femininity. During pregnancy, women has to face many cosmetological changes which creates nuisance in her mind so considering it as a major problem of modern cosmetic conscious era it requires medical treatment which is cost effective and with less side effect. Hence there is need for herbal drug that can be used for all pregnant women to tide over this temporary phenomenon.

Karveer-karanj patra siddha tail and karveer patra siddha tail are mentioned in ashtangsangraha³ and ashtang hrudya⁴ for the management of Garbhini Kikkwis. Both drugs are easily available, easy to apply and it is cost effective. So present study is to evaluate the efficacy of Karveer -karanj patra siddha tail in the management of Garbhini Kikkwis is being proposed.

In modern science, this condition is treated antihistaminic drugs and Steroids^{5a} for its

symptomatic relief and second option is surgery i.e abdominoplasty & laser surgery^{5b}. This line of treatment is not only expensive but also have many side effects.

Therefore despite of this, ayurveda has mentioned a wide variety of herbal medicines for the management of Garbhini Kikkwis which are cost effective & with minimum side effects.

Intervention

It is a clinical study, where patients presenting with complaints of classical symptoms of “Garbhini Kikkwis ” were selected.

Aim & Objectives

Aim - To do clinical comparative study for efficacy of karveer-karanj patra siddha tail and Triphaladi tail in Garbhini Kikkwis.

Objectives -

1. To study Garbhini Kikkwis in detail.
2. To study straiе gravidarum from Modern science.
3. To study the efficacy of Karveer- karanj patra siddha tail on the Garbhini Kikkwis.
4. To study the efficacy of Triphaladi tail on Garbhini Kikkwis.
5. To study the assessment criteria of Garbhini Kikkwis before and after treatment.

Review Of Literature

“तदेव स तमेमासेत गभ य। क तुगभ पीडना दात प त लेमाण॥
उरः ा य वदाहम ्जनयि त ततः क डु प जायते, क डुमलाू च
कि वसावा ि तभव त॥”

च. सं. शा. ८/३२.

All the reference of Kikkwis and its drugs will be studied from

• Charaka samhita – sharirsthana -	8 th Adhyaya
• Bhel samhita- sharirsthana -	8 th Adhyaya
• Astanga sangraha-sharirsthana -	3 rd Adhyaya

- Astanga hrudaya-sharirsthana - 1stAdhyaya
 - Use of karveer-karanj patra siddth tail is given in Ashtang Sangraha
 - Use of Triphaladi Taila is given in Rasratnakar.

And Modern Texts books of gynaecology & obstetrics and Web sites related to Kikkwis.

Materials And Methods

Material :

- 1) Diagnosed patients of Garbhini Kikkwis .
 - 2) Drugs:- karveer-karanj patra siddha tail .
Triphaladi tail.
 - 3) DRUG INTRODUCTION:
- a) Karveer - Karanj patra siddha tail. (Trail Group)

Sr . No	Name Of Drug	Latin Name	Ras	Guna	Viry a	Vipak a
	& Part Used					
1)	Karveer ^{6a} (Patra)	Nerium indicum mill	Katu,Tikta	Laghu , Tikshna	Ushna	Katu
2)	Karanj ^{6b} (Patra)	Pongamia pinnata pierre	Tikta,Katu, Kashaya	Laghu , Tikshna	Ushna	Katu
3)	Til Tail ^{6c}	Sesamum indicum linn	Madhur	Guru, Snigdha	Ushna	Madhur

b) Triphaladi tail. (control group)

Sr.No	Name Of Drug& Part Used	Latin Name	Ras	Guna	Viry a	Vipak a
1)	Triphala churna		Katu,Tikta	Laghu , Tikshna	Ushna	Katu
2)	Til Tail	Sesamum indicum linn	Madhur	Guru, Snigdha	Ushna	Madhur

4) DRUG PREPARATION:- Good quality raw material will be collected from market and the drugs will be prepared in Rasa shastra and Bhaishajya Kalpana Dept. as described by Sharangdhara Samhita⁷.

“क का चतगुणीकृ य घतम् ्वा तैलमेव वा । चतगुणे येसा यम ्त य मा ा पलो ि मता ॥”

शा. सं. म. ख ड. ९/१

“अ व नप स देन तैलेना यंगः मद येत ।”

अ.. शा. १/६१

करवीरकर ज प क क स देन च तैलेना यंगः प रषेक...

अ. सं. शा. ३/१०

Method:

A) Selection Of Cases:-

80 diagnosed patients of Garbhini Kikkwis was by selected by random Sampling Method.

These patients will be divided into 2 groups-1) Group A (Trial) – 40 patients with local application of karveer-karanj patra siddha tail.

2) Group B(Control) – 40 patients with local application of Triphaladi tail

B)Drug Regimen:-

	Group A	Group B
NO of Patients	40	40
Drug	Karveer – karanj patra siddha tail	Triphaladi tail
Matra (per day)	10-15ml	10-15 ml
Massage time ⁸	600 matras (by Dalhan) ⁸ (3 min)	600 matras (by Dalhan) (3 min)
Duration	2 months	2 months
Local Application	Twice a day	Twice a day
Follow-up	After 15 days.	After 15 days.
No of follow – ups	4	4

Selection Criteria

Baseline Assessment

This included a detailed history including family history, personal history, habits etc. Clinical examination including all Strotoparikshan, Ashtavidhparikshan,Prakrutiparikshan vishishtparikshan was carried out.

Inclusion Criteria

- Patients willingly participating in the trial and giving consent form.
- Patients with gestational age of 7th month onwards up to delivery.
- Patients having classical sign & symptoms of kikkwis as per prepared proforma.
- Selection of patient will be Primigravida only.

Exclusion Criteria

- Patients having skin diseases.
- High risk pregnancy. (PIH, Twin Pregnancy, Polyhydroamniosis....etc.)
- Any malignancy on affected part will be excluded.
- Hb below 7gm%.

Study Design :

In this research 80 diagnosed patients were randomly selected from O. P.D and I.P.D Dept. of Stree rog Prasuti tantra of Ayurveda rugnalaya and divided into two groups.

Group A (Trial Group) – Karveer karanj patra siddha Tail

Group B (Control Group)- Triphaladi Tail.

- A open randomized clinical trial was carried out.
- A special case paper was prepared to note the history & clinical findings of the patients before during & after the treatment.
- The treatment started on day of counseling 0thday for 15 days and 4 such follow ups were taken on 30th,45th, 60th day and will be be monitored for observations, which were noted in the tabular form.
- During the course of treatment both groups were advised similar dietary & behavioral instructions.

Assessment Criteria of The Work⁹ –

Assessment was done on the basis of following subjective criteria.

Subjective Criteria-

1. Kandu (itching).
2. Vidaha (burning sensation).
3. Valivishesh (stretch marks)
4. Vaivarniyata(discolouration).

Gradation Of Symptoms-

GRADE	ABSEN T	MILD	MODERA TE	SEVERE
Symptoms	(0)	+(1)	++(2)	+++ (3)
kandu ^{9a} (itching)	No itching	Mild itching not disturbi	Occasionai itching disturbing	present continuous

		ng	normal	ly
		normal activity .	activity	and disturbing sleep.
Vidaha ^{9a} (burning sensation)		Mild burning	Occasionai	Burning sensation
	No burning	sensatio n not	burning sensation	present
	sensatio n.	disturbin g	disturbing normal activity	continuously and disturbing sleep.
Valivishesh ^{9b}		Striae present	Striae present in	Striae present
(stretch marks)	Absent	in 2 or less than 2	2-4 quadrants	in all 6 quadrants
on Abdomen		quadrant s		
Vavarniyata ^{9b}	Absent	Striae present	Striae present in	Striae present
(discolourati on)		in 2 or less than 2	2-4 quadrants	in all 6 quadrants
Of Abdomen		quadrant s		

Observations Table-

SYMPTOMS	Score on the 1 st day of examination	Follow up				Final Score
		On 15 ^t h	On 30 ^t h	On 45 ^t h	On 60 th	
1. Kandu (Itching)		day	day	day	Day	
2. Vidaha (Burning Sensation)						
3. Vali Vishesh (Stretch Marks) On abdomen						
4. Vaivarniyata (Discolouratio n) Of abdomen						

Withdrawal Criteria-

- 1) Patient willing to discontinue trial.
- 2) Patient with preterm delivery
- 3) If patient develops any allergy due to study drug.

Statistical Method-

- 1) All observations were noted in observation table.
- 2) Representation of result appeared in both groups.
- 3) Data thus generated was analysed statistically.
- 4) Observation were analysed & statistical study were done by using statistical test i.e. Z test.

Study End Point-

This study was conducted from the baseline up to 2 months of the treatment.

Investigations-

- 1) CBC.
- 2) RBS.
- 3) USG (OBS).

Overall Assessment Of Result -

Sr. No.	Efficacy of treatment	Total Assessment
1	Excellent	>76 % relief
2	Moderate	51 % – 75 % relief
3	Mild	26 % - 50 % relief
4	Ineffective	≤25 % relief

Discussion :-

Kikkis is a one type of skin ailment that occurs during pregnancy and mentioned in the disorders of pregnancy by the various Acharyas. According to the women that growth of the scalp hairs of the foetus in the seven month, the mother gets vidaha resulting into development of the Kikkisa, however Atreya says no, it is not so; the growing foetus displaces the dosas upwards, thus these vata, pitta and kapha reaching Uras (breasts- charka) or Hridya (Heart-Bagbhata) produce burning sensation, which causes itching, and resulting Kikkisa.

In pathogenesis of KIKKISA , Matru hrudaya gaman of Tridoshas and kitta from aahar parinaman is main responsible factors.

Karveer Karanj Tail is tikta-KAtu-Kashay rasatmak drug having katu vipak and ushna virya. Being laghu, ruksha causes Kaphashaman. Being tikta-kashay causes Pittashaman. It acts as aamdoshnashak, saarak ,pachak, kandughna, Ropan, Virechak. Thus suppresses vitiated pitta & kapha. Relieves agnimandata and makes aaharrasa prakrut. Relieves kandu. With ushna virya and laghu- ruksha guna , relieves the increased drava guna of rakta. Thus prakrut aartava & rakta reaches to garbhashaygat rajovaha sira. With prakrut apan vayu controls the daha, twak vidaran and kandu. Thus cures Kikkisa.

Tripthaladi tail is also tikta-KAtu-Kashay rasatmak drug having katu vipak and ushna virya. Being laghu, ruksha causes Kaphashaman. Being tikta-kashay causes Pittashaman. It acts as vranshodhak , kandughna, Ropan, Virechak. It also cures kikkisa curing the twak vaivarnya and twak vidaran. Thus cures Kikkisa.

• **Clinical Study :-**

The discussion regarding the observations of 80 patients is presented as follows.

A) AGE :-

Maximum patients were (53%) from 24-27yrs age group, followed by (26.25%) from 27-30yrs age group, (18.75 %) from 21-24 yrs age group, (1.25%) from 18 -21 yrs age group.

This shows that Kikkisa can be seen in any age group.

B) Religion :-

Majority numbers of patients were from Hindu (82.60 %) community,(5 %) from Muslim

community,(11.25 %) of Budhhist community, (1.25 %) from Christian community.

This may not assigned to any particular reason, but it is due to Hindu dominated population in the area from where the patient is selected.

C) Occupation :-

Majority of patients belongs to Housewife (55 %), (26.25 %) belongs to Labour group, (18.75 %) belongs to Job working group. This type of observation is not documented in modern textbooks.

D) Education :-

Majority of patients (90%) were from Literate group, in which (45%) graduate,(8.75%) R&W, (40 %) HSC,(3.75 %) post graduate and (2.5 %) were from Illiterate group ,i.e. this shows that educated people are more conscious towards health.

E) Locality

(61.25 %) patients belong to urban area and (38.75 %) patients belong to Rural area.

This shows that Kikkisa occurs in females irrespective of their locality.

F) Aakriti:-

Maximum (56.25 %) were having Madhyam aakriti, where as (13.75 %) were having Sthool and (30 %) were having Krush Aakriti.

This shows that krush aakriti is less prone to Kikkisa where as Madhyam & Sthool are more prone.

G) Diet :- (25 %) patients were taking Mixed diet & (75 %) were taking Vegetarian diet which shows reflection of Hindu communities.

Mostly mixed diet is of katu, lavana, amla rasatmak ,guru ,ushna guna which all are responsible for vitiation of rakta, pitta .i.e they are main cause of kikkisa.

H) Kosktha

(32.50%) patients were having Mrudu Kosktha whereas (36.25%) patients were having Madhyam Kosktha & (31.25%) patients were having Krura Kosktha.

This shows that Mrudu kosktha & Madhyam Kosktha are more prone as they causes Pitta dushti.

I) Prakruti :-

Majority of patients belongs to Vata- kapha prakruti i.e (20%), (17.50 %) patients belongs to Pitta-kapha prakruti and (13.75%) belongs to Vata-pitta prakruti, (21.25 %) belongs to Kapha-Pitta prakruti and (17.50%) belongs to Kapha-Vata and (13.75%) belongs to Vata-Pitta prakruti.

This shows that in present study, Vata-kapha dominant prakruti is most affected by this diseases because diseases also occur due to vitiation of Vata-kapha doshas .

Discussion on Results :-

By using statistical Mann Whitney test difference between the mean of two groups when compared with each other shows that Group-A KARVEER KARANJ PATRA SIDDHA TAIL is more effective on all the parameters than Group-B TRIPHALADI TAIL .

The effect of treatment for the subjective criteria such as – Kandu, Vidaha, Valivishesh, and Vaivarnyata of GARBHINI KIKKISA, KARVEERKARANJ PATRA SIDDHA TAIL (Group A) is significant than TRIPHALADI TAIL . (Group B)

Conclusion :-

The entire work entitled “To do clinical comparative study for efficacy of karveer-karanj patra siddha tail and Triphaladi tail in Garbhini Kikkwis..”can be concluded as below.

As total comparison of both Group drugs mentioned that Group A drug is quite effective than Group B drug. So more research in this work is necessary to bind firm conclusion about efficacy of drugs.

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