

‘STUDY THE EFFICACY OF MALATI-MADHUKA OINTMENT IN KIKKISA’

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Article Received on
24 Dec. 2016,

Revised on 14 January 2017,
Accepted on 05 February 2017

DOI: 10.20959/wjpr20173-7887

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ABSTRACT

Kikkisa is type of Skin Disease that occurs during pregnancy and mentioned in disorders of pregnancy, according to ayurveda in seventh month due to growing fetus doshas displaces upwards tridoshas are reached at stana ura and udar and cause kandu utpatti. In Modern science it is known as ‘Striae Gravidarum’ it is a specific form of scarring of the skin of the abdominal area. It develops when abdominal belly is rapidly expanding to accommodate a growing fetus. Some women also get them on thigh breast and hips. About 90% women are affected due to kikkisa. It is a physiological condition but it gives a lot of stress to women in the cosmetic view. It can be well prevented and managed

by ayurveda through ‘Garbhini Paricharya’ and various formulations described in samhitas from that ‘Malati Madhuka Ointment’ shows good results in management of kikkisa.

KEYWORDS: Kikkisa, Pregnancy, Trodosha, Striae Gravidarum, Garbhini Paricharya.

INTRODUCTION

Beauty is desire of every woman to give pleasure to the sense. Beautiful women is always praised in our ancient text as virtue, wealth, affluence and creation depend on women are blessed with most valuable gift of “MOTHERHOOD”. Mother plays a divine role in Utpatti, Dharan and Poshan of Garbha.

अपत्यानाम मूलम नार्या परम नृणाम ॥

(च .चि.३०)

Acharya Sushruta is the pioneer of plastic surgery which plays major role in today's beauty world. They described shashthi upakrama for effective wound care, in which savarnikaran, krushnakarma, pandukarma are described. Also in many ayurvedic samhitas varnya mahakashaya, twak prasadan gana, abhyanga, udwartan, utsadan are described. For healthy skin more precisely it can be said that, physical, mental and spiritual beauty as a combination unit project the cosmetic sense of Ayurveda.

As motherhood is a very joyous event of woman but it has many downsides. Pregnancy creates many changes as well as mental like weight gain, breast changes, cutaneous changes, stretch marks i.e. kikkisa and women are more concerned about the stretch marks. Stretch marks can make a woman self-conscious and uncomfortable about her appearance fortunately. Stretch marks appear from 7th month of pregnancy onwards, as skin stretches. The collagen is weakened and normal production cycle is interrupted and damaged. This ultimately results in fine scars under the top layer of the skin.

Woman is the most beautiful creature of almighty. Usually a woman is very conscious about her beauty so when she sees any mark on her body she becomes anxious. She feels inferiority complex. More than 90% of women are affected by stretch marks on her body particularly on her abdomen, groin and on the chest region during and after pregnancy. It is a physiological condition but it gives lots of stress to a woman in the cosmetic view, it can be well prevented and managed by Ayurveda through garbhini paricharya mentioned in the classics. Vaivarnya, kandu and vidaha are the main symptoms of kikkisa. Many products and invasive techniques like plastic surgery, laser are available. Instead of these Ayurveda gives a golden gift of GARBHINI PARICHARYA. There are many formulations described in samhitas to treat kikkisa. They are natural, cost-effective and easy to use.

While going through text I decided to use one of them for kikkisa treatment which is -

परिषेकः पुर्नमालतीमधुकसिद्धेनाम्भसाः.....
(च.शा. ८/३२)

In this verse Acharya Charaka has described the use of decoction of Malati i.e. Jasminum Officinalae and Madhuka i.e. Glycyrrhiza glabra, which is sprinkled on the site of Kikkisa. But for 3 to 4 month preparation, application and carrying of decoction is not possible in today's fast forward life. So I have decided to make an ointment from these two drugs which is easily available and easy to use and cost-effective so that many patients can take benefit of my work.

AIM AND OBJECTIVES

AIM- To study the efficacy of Malati-Madhuka ointment in kikkisa.

OBJECTIVES

- To study the etiopathogenesis of Kikkisa in detail.
- To collect and study the necessary information about Malati and Madhuka.
- To prepare and standardize Malati-Madhuka ointment.

AETIOLOGY

In the commentary of Chakrapani quoted that in the seventh month Kandu (itching is there) is present and Kandu is due to growing of the foetus (Garbhotpeedana). Due to Kikkisa, charmaavidarana (cracking of skin) between breasts and abdomen (Stanabudram) and in the breasts and abdomen.

HETU

1.Doshaprakopaka aahar and vihar

a) **Vataprakopak hetu:** Katu, tikta and kashay rasatmak aahar, ruksha, shita aahar, diwaswap, ratrou jagar, vegvidharan, langhan, atichankraman leads to vataprakopa.

b) **Pittaprakopak hetu:** ati ushna – tikshna-vidahi bhojan, katu-amla-lavan rasatmak bhojan, atikrodha, upwas causes pittaprakop.

c) **Kaphaprakopak hetu:** Madhur-amla-amla rasatmak aahar, Ati sheeta, snigdha, guru, abhishyandi aahar and diwaswap leads to kaphaprakop. Aahar – vihar of mother plays important role in the formation of kikkisa.

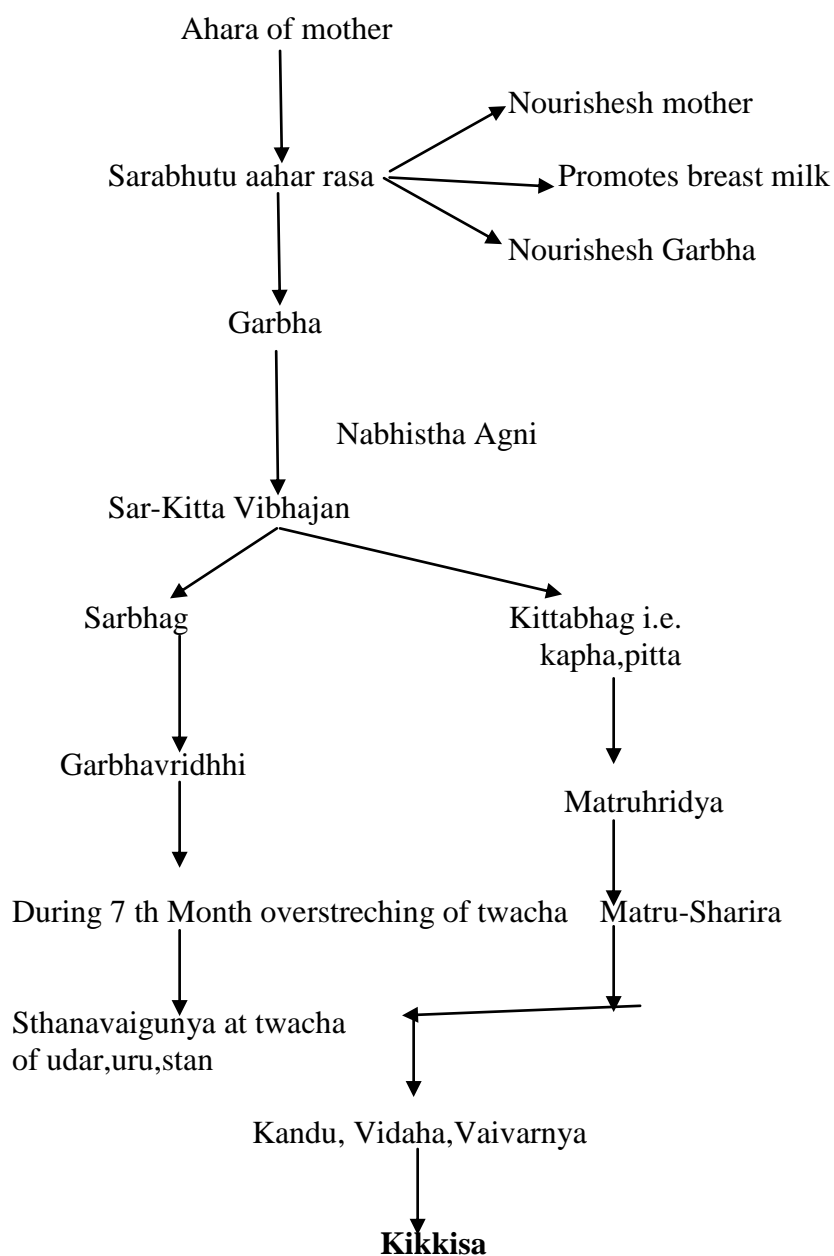
Masanumasic garbhavidhi

सप्तमे मासि गर्भः सर्वभावैराप्याय्यते।

(च.शा.४/२३)

सप्तमे सर्वांगविभागः प्रव्यक्ततरः ।(सु.शा.३/३०)

In seventh month, all the features of foetus get nourished. All Body parts are more conspicuous and developed due to the rasadhatu formed in the sukshmapachan of aahara. In this sukshmapachan malaswarup doshas are also formed. If these malaswarup doshas are not wash out from body they get retained in the abdominal skin mainly where sthana vaigunya already present because of stretching of skin.

SAMPRAPTI**RUPA**

Kandu,

Vidaha and

Vaivarya are mainly occurs.

MATERIAL AND METHODS**Preparation Of Malati-Madhuka Ointment**

Preparation of Kwath – Malati and Madhuka, taken in equal proportion. Then 4 times water added and mixture heated so that 1/4th of water remains.

मृदौ चतुर्गुणं देयं मध्यमे अष्टगुणं तथा ।
द्रव्ये तु कठिने देयं बुधैः षोडशिकं जलम् ।
(द्रव्यगुण विज्ञान उत्तरार्ध यादवजी)



Malati-Madhuka Ointment: Preparation of Ointment –The kwath was used as base which formed approximately 70% of all ointment all ointment agents are added. Heating was done at 80 Degree Celsius. Ingredients allowed mixing properly. then cooling was done. Preservatives and perfumes added. Packing was done under all aseptic precautions. (Reference- Remington Volume 1, 21st Edition, Pg No – 881, Emulsion Formulations.).

Ointment Agents	%	Uses
L.P.P.(Light Liquid Paraffin)	20%	Viscosity Maintainer
Wax	2%	To Increase consistency of ointment, oleaginous
G.M.S. (Glycerine Mono Sterate)	1.9%	Thickening and Emulsifying Agent

Ointment Preservatives	%	Uses
M.P.P. (Methyl Propyl Parathen)	1%	Preseervative
Caustic Potash	0.06%	Used as vehicle
Propylene Glycol	3%	Solvent, Preservative
Glycerine	2%	Solvent
Perfumes	0.04%	Flavoring agents

Standardization of Malati-Madhuka ointment Standardization of the Malati-Madhuka ointment was carried out in a standard pharmacy. Analytical reports are as follows:

1. organoleptic characters

Parameters	Malati-Madhuka ointment
Colour	Yellowish brown
Odour	Aromatic
Texture	Smooth
Touch	Oily

2. physiochemical parameters

Parameters	Malati-Madhuka ointment
Ph	6.5
Total fat	80%
Saponocation value	152.34
Acid value	3.54

3. Phytochemical parameter

Chemical constituent	Malati-Madhuka ointment
Flavanoids	-
Essential oil	+
Tannins	+
Glycosides	+
Alkaloids	-
Resin	-
Steroids	-

Application of ointment

METHOD OF ABHYANGA-Ointment applied in required amount and gentle massage in circular manner is done.

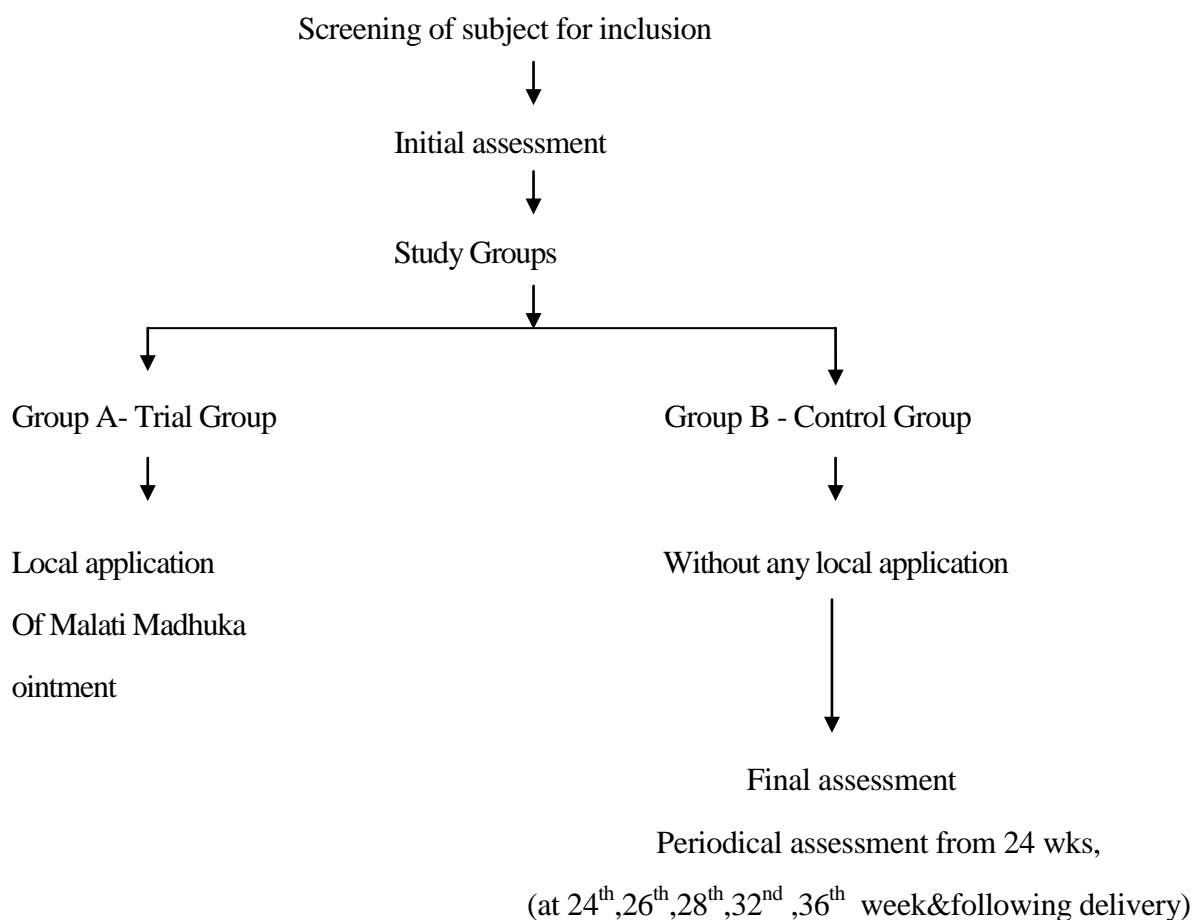
SELECTION OF PATIENT**INCLUSION CRITERIA**

- 1) Patient willing to participate age limit upto 35 years old.
- 2) Primigravida of gestational age 24 wks.

Second or multi gravida having previous gestation before 24 wks.

EXCLUSION CRITERIA

- 1) Multiparity
- 2) Pregnancy with Gestational diabetes.
- 3) Polyhydramnias.
- 4) Skin diseases
- 5) Severe anaemia
- 6) Multiple pregnancies

Clinical trial protocol**Trial design****OBSERVATION AND RESULT****Itching**

Itching	Median						Friedman's Test P-Value
	24wk	26wk	28wk	32wk	36wk	Delivery	
Group A	1	1	0	0	0	0	<0.05
Group B	1	1	0.5	0	0	0	<0.05

Striae at abdomen

Striae at abdomen	Median						Friedman's Test P-Value
	24wk	26wk	28wk	32wk	36wk	Delivery	
Group A	0	0	0	0	1	1	<0.05
Group B	0	1	2	2	3	3	<0.05

Striae at Thigh

Striae at thigh	Median						Friedman's Test P-Value
	24wk	26wk	28wk	32wk	36wk	Delivery	
Group A	0	0	0	0	0	0	<0.05
Group B	0	0	0	0	1	1	<0.05

Area of discolouration on abdomen

Area of discolouration on abdomen	Median						Friedman's Test P-Value
	24wk	26wk	28wk	32wk	36wk	Delivery	
Group A	0	0	0	0	1	1	<0.05
Group B	0	1	1	1	1.5	1.5	<0.05

Since observations are on ordinal scale conducted at 24 week, 26 week, 28 week, 32 week, 36 week and delivery. We have used Friedman's test to test the changes observed over the period of time. From above tables we can observe that P-Values for both groups are less than 0.05 hence we conclude that there is significant change observed in both the groups. For comparison between Group A and Group B we have used Mann Whitney U test. We have observed that there is significant difference between Group A and Group B.

DISCUSSION

- Maximum number of patients i.e. 60% patient of group A and 56.66% of group B were 21-25 years age. This is due to the fact that maximum number of patients in our hospital was from lower middle class. In this class, early marriages and unawareness of contraception is common.
- Almost 93.33% patients were primigravida, 3.33% second gravida and 3.33% third gravida - This is due to inclusion criteria of our study.
- In this study 73.33% of group A & 86.67% from hindu community and 26.66% of group A & 13.33% patients of group B from Muslim community. This due to the fact that most of the patients visiting our hospital were Hindus.
- IN occupationwise distribution patients from group A were 86.66% housewives, 10% in service and 3.33% student. No specific relation of occupation and kikkisa was found.
- All the patients in this study were of Dwidoshas prakruti. out of that 6.66% VP (vatapradhan pittanubandhi), VK (vatapradhana kaphanubandhi) 16.66%, KP (kaphapradhan pittanubandhi) 26.66%, PV (pittapradhan vatanubandhi) 3.33%, KV (kapha pradhan vatanubandhi) 20%, PK (pittapradhan kaphanubandhi) 26.66% Patient of group A & VP (vatapradhan pittanubandhi) 10%, VK (vatapradhana kaphanubandhi) 13.33%, KP (kaphapradhan pittanubandhi) 13.33%, PV (pittapradhan vatanubandhi) 10%, KV (kapha pradhan vatanubandhi) 20%, PK (pitta pradhan kaphanubandhi) 33.33% Patient of group B.

- Itching in group A reduced significantly as per the gestational age than Group B.
- Abdominal striations in group A were much less than that in group as per the gestational age.
- Discolouration over abdomen and thigh in group A was significantly less than that in group B.

Striations over thigh in group A were much less than that in group as per the gestational age. Symptom vidahaa was found in patients of group A and Patients of group B.

CONCLUSION

- In comparative study, it can be concluded that Malati-Madhuka oinment is more effective than group without any application in kikkisa. Malati- Madhuka oinment is found significantly effective in the prevention of stretch marks.
- This oinment is very effective in relieving kandu. It shows its effect from its first application.
- Out of all the symptoms of kikkisa, kandu, vidaha and vaivarnya – vidaha is not found commonly.
- After completion of treatment, it can be concluded that, there are no side effects seen during the course of treatment due to local application of Malati-Madhuka oinment.
- Malati and Madhuka are easily available and cost effective drugs. Preparation of oinment is easy process.
- Malati-Madhuka oinment is found to be cost effective than other preparation available in the market for stretch marks.

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