

CASE STUDY

A Case Study on the Role of Preventive *Ayurveda* Therapy in *Garbhini Kikkisa* W.S.R Striae Gravidarum

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ABSTRACT

Garbhini Kikkisa, described in *Ayurveda* as reddish or blackish itchy streaks on the abdomen and other areas during pregnancy, correlates with *striae gravidarum* in modern science. Though not harmful, it causes discomfort and cosmetic concern. It is attributed to the vitiation of *Vata* and *Kapha* doshas and weakening of *Twak*, *Mamsa*, and *Rakta dhatus*. *Ayurvedic* classics emphasize preventive *chikitsa* during pregnancy to maintain maternal comfort and fetal health. To evaluate the effectiveness of *Ayurvedic* preventive measures in the management of *Garbhini Kikkisa* with special reference to *striae gravidarum*, through a single case study. A 24-year-old primigravida presented with 5month amenorrhea & complaints of itching and burning sensation over the abdomen. She expressed anxiety about developing stretch marks and sought *Ayurvedic* preventive therapy for the same. The preventive regimen with *Varuna Taila* local application thrice a day helped in reduce itching, improved skin elasticity, and controlled the spread of *striae*. The patient reported significant relief and satisfaction, with no adverse effects throughout the intervention. Follow-ups were conducted over three months. Preventive *Ayurvedic* management of *Garbhini Kikkisa* is safe, effective, and enhances maternal well-being. Early intervention with classical measures not only supports skin health but also contributes to a comfortable pregnancy experience. This case reflects the potential of *Ayurveda* in addressing common gestational concerns through holistic and natural approaches.

Keywords: *Garbhini Kikkisa*, *Striae Gravidarum*, *Varuna Taila*, *Amenorrhea*

Received 12.09.2024

Revised 01.10.2024

Accepted 26.11.2025

How to cite this article:

Margi P, Shriniwas J. A Case Study on the Role of Preventive *Ayurveda* Therapy in *Garbhini Kikkisa* W.S.R Striae Gravidarum. Adv. Biores., Vol 16 (6) November 2025: 399-405.

INTRODUCTION

Ayurveda is science of life, which gives importance to both preventive and curative aspects of disease. *Garbhini paricharya* (Ante natal care) is the one which keeps the pregnant woman and fetus healthy. [1] Pregnancy is a remarkable period in a woman's life, and the primary goal of antenatal care is to ensure the well-being of both the mother and the baby. However, it's important to acknowledge that women may experience psychological effects related to stretch marks, also known as *striae gravidarum*, during this phase.

In *Ayurveda*, our *Acharyas* have detailed various alterations and conditions that can affect pregnant women, including *Chhardi* (vomiting), *Sotha* (edema), *Vivarnata* (discoloration), and *Kikkisa* (*striae gravidarum*). Among these, *Kikkisa* is a significant concern during pregnancy, as it can impact a woman's appearance and beauty.

Kikkisa is a *tridosaja vyadhi* which manifests in seventh month of pregnancy. According to *Acharya Charaka*, the woman says that because of appearance of hair on fetus, the pregnant woman suffers from burning sensation. But *Acharya Atreya* says that due to growth of the fetus, *Pitta*, *Kapha* reaching the *urah* (chest) give rise to *daha* (burning sensation), which causes *kandu* (itching) and the disease *kikkisa* is a result of *kandu* (itching). [2]

Acharya vagbhata has narrated like "रेखास्वरूपस्त्वकसंकोचः किक्किसमं ।" [3]

Kikkisa can be correlated with Striae gravidarum from modern point of view. The etiopathogenesis involves a combination of genetic factors, hormonal factors, and increased mechanical stress on connective tissue. [4]

The endocrine, metabolic, and immunological changes that take place during pregnancy result in various inherent skin transformations, one of which is the occurrence of *Kikkisa*.

A CASE REPORT

A 24-year-old primigravida female visited the OPD of Prasuti Tantra evam Stree Roga, Parul Ayurveda Hospital, Vadodara, Gujarat, in October 2024 with history of 5 months amenorrhea. Period of gestation 19 weeks with complaints of itching and burning sensation over the abdomen for the past 2 weeks.

Present history: A 24-year-old primigravida female presented to the OPD of Prasuti Tantra evam Stree Roga, Parul Ayurved Hospital, Vadodara, Gujarat, in October 2024 with a history of 5 months of amenorrhea. She is currently at 19 weeks of gestation. The patient complains of itching and burning sensation over the abdominal region for the past 2 weeks. The symptoms are gradually progressive and more prominent over the lower abdomen. She appears anxious and expresses concern regarding the development of stretch marks during pregnancy. She wants Ayurvedic preventive measures for the same.

Past History: No significant history

Family History: No significant history

Personal History:

Diet- Mixed,

Appetite- decreased

Bowel- 1 time/day, Occasionally Unsatisfactory bowel habit,

Micturition- 6 to 8 times /day 2 to 3 times/night

Sleep- sound

LMP: 12/06/2024

EDD: 19/03/2025

POG: 19 weeks

Past Menstrual History:

Duration: 4-5 days

Interval: 28 +- 5 days

Regularity: regular

Pain: moderate

Foul smell: absent

Clots: absent

Quantity: 2-4pads/day

Obstetrical History: Primi gravida

G1 P0 L0 A0 D0

AML: 2years

Ashtavidha Pareeksha: (Eightfold diagnostic examination)

Table no: 01 (*Ashtavidha Pareeksha*)

<i>Nadi</i>	98/min
<i>Mala</i>	1 time/day Occasionally Unsatisfactory bowel habit
<i>Mutra</i>	6 to 8 times /day 2 to 3 times/night
<i>Jihva</i>	<i>Lipta</i>
<i>Drik</i>	<i>Prakrut</i>
<i>Sabda</i>	<i>Prakrut</i>
<i>Sparsha</i>	<i>Anushna-sheeta</i>
<i>Akriti</i>	<i>Madhyama</i>

Dashavidha Pareeksha: (Tenfold diagnostic examination)

Table no: 02 (Dashavidha Pareeksha)

Prakruti	Vatapradhan pitta
Vikriti	Kapha-vata
Sara	Mamsasara
Samhanana	Madhyama
Pramana	Madhyama
Satmya	Madhyama
Satva	Pravara
Ahara Shakti	Avara
Vyayam Shakti	Madhyama
Vaya	Madhyama

General Examination:

Table no: 03 (General Examination)

Built	Moderate
Nourishment	Moderate
Temperature	98.3 °F
RR	20/min
Pulse Rate	89/min
Blood Pressure	110/70mmHg
Height	153 cm
Weight	44 kg

Systemic Examination:

Table no: 04 (Systemic Examination)

RS	B/L, A/E clear
CVS	S1 S2 audible, no added sounds
CNS	Well-oriented to person, place, and time

Blood investigation: (24/11/2024)

Haemoglobin – 10.7 g/dl

Total RBC Count – 3.93 mill/cmm

Total WBC Count – 10150 /cmm

Platelet Count – 229000 /cmm

Blood group & Rh: AB +ve

RBS: 68.33 mg/dl

Sr. TSH: 1.733 µU/ml

SGPT: 22.27 U/L

HIV – Negative

HBsAG – Non-reactive

VDRL - Non-reactive

RBS: 91 mg/dl

Sr.Creatinine: 0.94 mg/ml

Vitamin B12: 148.00 pg/ml

Urine routine and micro: Epithelial cells: 2-3/hpf

Pus cells: 1-3/hpf

RBC: absent

Figure 01: Before and After Preventive treatment of Garbhini Kikkisa



ANTENATAL CHECK UP:

Table no: 05 (ANTENATAL CHECH UP)

	BEFORE TREATMENT (DAY 0)	1ST FOLLOW UP (DAY 30)	2ND FOLLOW UP (DAY 60)	3RD FOLLOW UP (DAY 90)
Date	22/10/24	22/11/24	23/12/24	21/01/25
Weight	44 Kg	46 Kg	47 Kg	50 Kg
B.P (mmHg)	100/60 mmHg	110/70 mmHg	120/80 mmHg	120/70 mmHg
Pulse (per min)	86/min	80/min	82/min	83/min
R.R (per min)	18/min	16/min	19/min	16/min
Temperature	97.2 °F	96.0 °F	97.2 °F	96.6 °F
Feet-Ankle Oedema Generalise / Anaemia	Absent	Absent	Absent	Absent
Fundal Height (cm)	13 cm	19 cm	24 cm	31 cm
Abdominal girth (inch)	30 inch	30.5 inch	32 inch	33 inch
Any High Risk	No	No	No	No
FHS	135 bpm	140 bpm	138 bpm	146 bpm

IMMUNISATION: Inj. Tetanus Vaccine: - 1st dose: 12/09/24
2nd dose: 14/10/24

Treatment:

Table no: 06: Treatment follow-up

Visit	Medicine	Duration
1st visit DAY 0 22/10/24	1] <i>Phala ghrita</i> 1 tsf, B/F with warm milk OD 2] <i>Varuna taila</i> , Q.S, 3times / day, Local application over abdomen and thigh region	30 days
1st follow up 22/11/24	1] <i>Phala ghrita</i> 1 tsf, B/F with warm milk OD 2] <i>Varuna taila</i> , Q.S, 3times / day, Local application over abdomen and thigh region	30 days
2nd follow up 23/12/24	1] <i>Phala ghrita</i> 1 tsf, B/F with warm milk OD 2] <i>Varuna taila</i> , Q.S, 3times / day, Local application over abdomen and thigh region	30 days
3rd follow up 21/01/25	1] <i>Phala ghrita</i> 1 tsf, B/F with warm milk OD 2] <i>Varuna taila</i> , Q.S, 3times / day, Local application over abdomen and thigh region	30 days

Advise: One should not scratch (in spite of urge for itching) to avoid disfigurement or skin stretching.

Pathya: *Mrudu, Madhura, Sheeta veerya* diet should be given. Diet should be sweet, capable of suppressing *vata*, either fat and salt free or with little quantity [5].

ASSESSMENT OF CARDINAL SYMPTOMS IN THE STUDY

Table no: 07 (ASSESSMENT OF CARDINAL SYMPTOMS IN THE STUDY)

	SCORE Day 0 B.T	1st F. U	2nd F. U	3rd F. U
Subjective Parameters:				
A] Kandu				
No Kandu (Normal activities)	0	2	1	0
Mild Kandu (1 - 2 times in a day and is ignored by the patient)	1			
Moderate Kandu (3- 4 times in a day but not disturbing normal activities or sleep)	2			
Hyper Moderate (5- 6 times in a day Disturbing normal activities but not disturbing sleep)	3			
Severe Kandu (Also disturbing normal Activities and normal sleep)	4			
B] Vidaha				
No Daha Patient feels in the body	0	1	0	0
Mild Daha (1- 2 times in a day and is ignored by the patient)	1			
Moderate Daha (3 -4 times in a day but not disturbing normal activities or sleep)	2			
Hyper- Moderate Daha (5 - 6 times in day night and disturbing normal activities but not disturbing sleep)	3			
Severe Daha (Also disturbing normal activities and normal sleep)	4			
Objective Parameters:				
A] Rekha Swarupa Twaka Sankocha				
No RSTS (Normal Skin)	0	0	0	0
Mild RSTS (Mildly observed on the abdomen)	1			
Moderate RSTS (< 40 % area of abdomen is involved, sometimes irritating the patient, not disturbing the normal activity)	2			
Hyper- Moderate RSTS (<60 % area is involved and irritating the patient continuously, Not disturbing normal activity but Patient feels cosmetic problem but not disturbing sleep)	3			
Severe RSTS (>60 % area is involved and irritating the patient continuously, feels mental distress, severe cosmetic problem & disturbing normal sleep)	4			
B] Length of most prominent RSTS				
0-3cm	0	0	0	0
4-7cm	1			
8-11cm	2			
12-15cm	3			
More than 15cm	4			
C] Breadth of most prominent RSTS				
0-3mm	0	0	0	0
4-7mm	1			
8-11mm	2			
12-15mm	3			
More than 15mm	4			
D] Number of Kikkisa				
0-5 Number of Kikkisa	0	0	0	0
5-10 Number of Kikkisa	1			
10-15 Number of Kikkisa	2			
15-20 Number of Kikkisa	3			
More than 20 Number	4			
TOTAL	3	1	0	0

RESULTS

The present case study assessed the effect of preventive Ayurvedic management using *Varuna Taila* local application in a primigravida woman presenting with early features of *Garbhini Kikkisa* (striae gravidarum). The patient was followed for a total duration of 90 days with periodic assessments at baseline and subsequent follow-ups.

Effect on subjective symptoms

At baseline (Day 0), the patient reported moderate itching (*Kandu* score: 2) and mild burning sensation (*Vidaha* score: 1) over the abdominal region. After initiation of treatment, a progressive reduction in subjective symptoms was observed.

- *Kandu* (itching) reduced from score 2 at baseline to score 1 at the first follow-up (Day 30) and was completely relieved (score 0) by the second follow-up (Day 60), with sustained relief at Day 90.
- *Vidaha* (burning sensation) showed complete resolution by the first follow-up itself and remained absent throughout subsequent follow-ups.

This indicates early symptomatic relief with the preventive Ayurvedic regimen.

Effect on objective parameters

Objective assessment of *Garbhini Kikkisa* was carried out using standardized parameters such as *Rekha Swarupa Twaka Sankocha*, length, breadth, and number of *Kikkisa*.

- *Rekha Swarupa Twaka Sankocha (RSTS)* was absent at baseline and remained absent throughout the follow-up period, indicating prevention of progression.
- Length and breadth of the most prominent *Kikkisa* remained within normal limits (score 0) at all assessment points.
- Number of *Kikkisa* did not increase during the entire study duration.

The total assessment score reduced from 3 at baseline to 1 at first follow-up and 0 by second follow-up, which was maintained till the end of observation.

Throughout the treatment and follow-up period, antenatal parameters such as weight gain, blood pressure, fundal height, abdominal girth, and fetal heart sounds remained within normal physiological limits. No high-risk features were observed during the study period.

The patient reported improved comfort, reduced anxiety related to stretch marks, and satisfaction with the therapy. No adverse effects were observed with the intervention.

DISCUSSION

Cosmetics play an important role in the women's life. *Kikkisa* is a common dermatological condition occurring during pregnancy, *Charaka* while describing the *Garbhini paricharya* mentions the manifestation of *Kikkisa* in 7th month and its management. *Kikkisa* firstly expressed by *vidaha* (burning sensation) followed by *kandu* (itching) results in *charma vidarana*. *Vidaha* is due to vitiation of *pitta*, *kandu* is due to vitiation of *kapha*. *Charma vidarana* is due to vitiation of *vata*. *Kikkisa* can be correlated with striae gravidarum. Vitiated *Vata Dosha* causes *Twak prasaran* (stretching of skin), *Pitta* leads to *Vidaah* and *Vaivarnya* (burning and depigmentation) and *Kaph* causes itching and the combination of these changes as *Kikkisa*[6][7]. Striae are formed with gross stretching of the skin with rupture of the elastic fibres present in dermis. At this point microscopic bleeding occurs along with the tissue inflammation, which gives us the raised reddish colour of newly formed stretch marks. As the dermis is stretched, the outer layer of skin. The epidermis also stretches making it translucent enough that you can see the reddish-purple stretch mark forming. As these marks heal, scar formation occurs. Striae gravidarum occur in pregnant women in third trimester. Individual hormones are responsible for many cutaneous changes during pregnancy. Symptoms such as Itching, burning sensation over abdomen, buttocks and thighs can be seen as pregnancy progresses in modern science, there is no specific treatment mentioned to prohibit these skin changes but massaging the abdominal wall by lubricants like olive oil etc may be helpful in reducing their formation [8]. Ayurvedic text explains the treatment modalities such as *Abhyantar* and *bahya chikitsa* where *abhyantar chikitsa* comprises of different *yogas* (ayurvedic formulations) for internal consumption whereas *bahyachikitsa* comprises of local application and irrigation with different medicines [9]. *Varuna taila* in treatment of *Kikkisa* is mentioned in *Bhaishhya ratnavali*, *Adarsha Nighantu* & *Madanpala Nighantu* [10][11][12]. *Varuna* (*Crataeva nurvala*) *RASA: Tikta, Kashaya, GUNA: Laghu, Ruksha, VIRYA: Ushna, VIPAKA: Katu, KARMA: Vata- Kapha hara, Pitta vardhaka* [13], chemical constituents like *Ruthin* helps to supply oxygen and nutrients to skin cells, minimize uneven skin tone and production of new cells, stearic acid and linoleic acid maintains the skin elasticity, moisturizes the skin and removes the discoloration. β Sitosterol helps for reducing the scratch wounds [14]. *Tila Taila* which is the base of *Varuna Taila* will help in retaining the moisture content of the skin, thereby protecting the skin hydration from being lost [15]. This case demonstrates the efficacy of *Varuna Taila* as a preventive measure for *Kikkisa*, aligning well with Ayurvedic principles. It offers a safe, non-invasive, and patient-friendly approach.

CONCLUSION

Kikkisa (striae gravidarum) is a condition of disfiguring cutaneous condition generally develops in the last trimester (after 28 weeks) of pregnancy in about 90% of cases. *Ayurveda* emphasizes the preventive aspects and treatment modalities during antenatal care. On the basis of above case study, the local application of *Varuna Taila* demonstrated significant improvement in the prevention and reduction of *Kikkisa* (stretch marks) in primigravida. The formulation showed promising results in relieving symptoms such as itching and burning sensation over the abdominal area. The patient reported visible improvement in skin texture and a reduction in anxiety regarding stretch marks. This suggests that Ayurvedic preventive management, particularly the use of *Varuna Taila*, can be an effective and safe approach in managing *Kikkisa* during pregnancy.

Funding: Not any

Acknowledgment: I gratefully acknowledge the Parul Institute of Ayurved & Parul Ayurved Hospital, Parul University.

Conflict of interest: No conflicts of interest to declare.

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