

EFFECT OF KUTAJADI CREAM IN THE MANAGEMENT OF GARBHINI KIKKIS: A SINGLE CASE STUDY

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ABSTRACT

Rapid abdominal distension in pregnancy, combined with decreased elasticity in the skin's dermal layer, commonly leads to *Garbhini Kikkisa* (striae gravidarum). Classical Ayurvedic literature identifies *Kikkisa* as a *twak-vikara* (skin pathology) brought on by perturbed *Vata* and *Kapha doshas*, clinically characterized by *kandu* (itching), *vidaha* (localized burning), and *vaivarnyata* (altered skin tone). To address these symptoms, a single-case evaluation was conducted on a second-trimester primigravida presenting with abdominal stretch marks. The patient applied a classically formulated Kutajadi cream—combining Kutaja, Arjaka Beeja, Musta and Haridra—topically twice in every 24 hours over a 60-day period. The selected herbs possess recognized *Kandughna* (Anti-pruritic), *Dahaprashamana* (Soothes Burning Sensation), *Varnya & Twachya* (Complexion & Skin Health),

Twakvidaranahara (Prevents Skin Tearing) properties. Progress was monitored using objective measurements of a designated prominent lesion (length, width, surface area) alongside standardized clinical scoring for striae count and subjective discomfort. The patient reported rapid attenuation of both *kandu* and *vidaha* within the initial follow-up window.

Discoloration (*vaivarnyata*) attenuated progressively throughout the study, leading to visible lightening of the affected area. By Day 60, the total lesion count had dropped slightly, while the targeted primary striae exhibited clear physical contraction in length, width, and surface area. Overall treatment response was categorized as markedly improved. These clinical benefits are attributable to Kutaja's anti-inflammatory and regenerative capacity, Arjaka beej's *snehana* and tissue-rejuvenating influence, Musta's *Raktaprasadaka* and radical-scavenging properties, and Haridra's *Varnya* property which together facilitate collagen reorganization and reduce dermal irritation. Kutajadi cream appears to be a viable, safe phytotherapeutic candidate for striae gravidarum, warranting larger controlled investigations.

INTRODUCTION

Pregnancy stretch marks, medically designated as striae gravidarum, represent one of the most widespread dermatological features of gestation, affecting an estimated 50% to 90% of expectant mothers. These linear, slightly indented bands typically appear across areas subjected to maximum mechanical tension, including the abdomen, breasts, thighs, and buttocks.^[1]

The underlying etiology combines rapid structural stretching of the dermis with systemic hormonal alterations—most notably elevated levels of circulation glucocorticoids^[1], which reduce skin elasticity and collagen integrity. Although non-pathological and physiologically benign, striae gravidarum frequently cause physical discomfort, including localized pruritus (itching) and burning sensations, alongside psychological distress regarding body image and cosmetic appearance.

In Ayurveda, *Kikkisa* is considered a disorder of the skin (*twak-vikara*) associated predominantly with the vitiation of *Vata* and *Kapha doshas*. Clinically, it may manifest with symptoms including *kandu* (itching), *vidaha* (localized burning), and *vaivarnyata* (altered skin tone). According to the classical Ayurvedic understanding, excessive stretching of the abdominal skin (*udara-kosha*) contributes to disturbance of the skin and muscle tissues (*twak and mamsa dhatu*), ultimately producing thin, elongated, and discoloured linear markings.^[2] Various classical formulations have been advocated for the external management of *Kikkisa*, particularly preparations possessing *kledashoshana* (moisture-reducing), *varnya* (complexion-enhancing), *tvachya* (skin-supportive), *shothahara* (anti-inflammatory), and *vranaropana* (wound-healing) properties.^[3]

The Kutajadi Cream is group of herbs—including Kutaja (*Holarrhena antidysenterica* bark),

Arjaka Beeja (*Ocimum basilicum* seeds), Musta (*Cyperus rotundus* rhizome), Haridra (*Curcuma longa* rhizome) is traditionally recognised for its role in managing skin disorders.^[3] These herbs exhibit antimicrobial, antiinflammatory, antioxidant and wound-healing actions, making them suitable for treating striae-associated symptoms. Their combined effect may support collagen remodelling, improve local circulation and restore normal skin texture.

Although striae gravidarum is frequently observed during pregnancy, the available contemporary treatment options are relatively limited, and the safety of several topical preparations may be a concern for pregnant women. Therefore, there is a need to investigate safe, herbal, and pregnancy-compatible therapeutic approaches. The present single-case study was undertaken to assess the therapeutic efficacy of Kutajadi Cream in reducing the clinical symptoms associated with Garbhini Kikkisa, while also evaluating its effect on the colour, appearance, and dimensions of pregnancy-related striae.

CASE REPORT

A 28 year old Primigravida, with 26 weeks gestation visited our OPD with complaints of stretch marks associated with itching and burning sensation over the lower abdomen. After detailed case taking and examination, the case was diagnosed as Kikkisa. Diagnostic Criteria Diagnosis and assessment was made on the basis of following symptoms of Kikkisa occurring in a pregnant woman.

Subjective Parameters

1. Kandu (Itching)

Grade 0 - No itching.

Grade 1 – Mild itching not disturbing normal activity.

Grade 2- Occasional itching disturbing normal activity.

Grade 3- Itching present continuously & disturbing normal activity.

2. Vidaha (Burning)

Grade 0 - No burning sensation at all.

Grade 1 - Mild burning sensation not disturbing normal activity.

Grade 2 - Occasional burning sensation disturbing normal activity.

Grade 3- Burning sensation present continuously & disturbing normal activity.

3. Vaivarnya (Discoloration)

Grade 0-Even skin tone.

Grade 1-Pink skin tone.

Grade 2-Purple skin tone.

Grade 3-Whitish or silver skin tone.

4. Number of kikkis (Scar) present on lower abdomen.

Grades	Number of Scars
0	0
1	0-5
2	5-10
3	>11

Objective Parameters

1. By taking a single prominent lesion following parameters were assessed

	Day 0	Day 7	Day 15	Day 30	Day 45	Day 60
Length of the lesion (in cm)						
Width of the lesion (in cm)						
Area of the lesion (in cm ²)						

Management

- Drug: Kutajadi Cream
- Mode of administration: Topical application
- Duration of treatment: Twice a daily for 2 months.

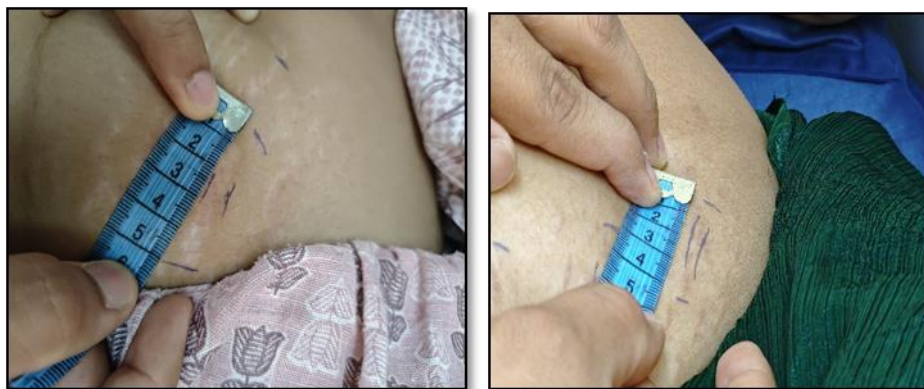
RESULTS

1. Subjective Parameters

	Day 0	Day 7	Day 15	Day 30	Day 45	Day 60
Kandu	3	3	2	2	1	0
Vidaha	3	3	2	2	1	0
Vaivarnya	2	2	2	2	1	1
No of scars	1	1	1	1	1	1

2. Objective Parameter

	Day 0	Day 7	Day 15	Day 30	Day 45	Day 60
Length of the lesion (in cm)	4.8	4.8	4.8	4.6	4.4	4.3
Width of the lesion (in cm)	0.5	0.5	0.5	0.4	0.3	0.3
Area of the lesion (in cm ²)	2.4	2.4	2.4	1.84	1.32	1.29



Before

After

DISCUSSION

Discussion on Disease

According to most classical Ayurvedic authorities, *Kikkisa* is described as a condition that develops during the later part of pregnancy, commonly around the seventh month.^[4] It is considered to occur as a consequence of *Garbhotpidana*, along with the aggravation of *Vata* and other associated *doshas*.^[4] However, Acharya Sushruta has not specifically described *Kikkisa* in his texts. The characteristic manifestations include *Kandu* (itching), *Vidaha* (burning or irritation), and *Rekha-swaroopa Twak-sankocha*, referring to linear or streak-like alterations in the skin. These clinical features show considerable similarity to the condition recognized in contemporary medicine as striae gravidarum.^[5]

From the modern perspective, striae gravidarum generally become noticeable during the second half of pregnancy and are commonly observed over areas such as the abdomen, breasts, thighs, and other regions subjected to considerable stretching. The development of these marks is primarily associated with progressive stretching of the skin as maternal body dimensions increase with advancing pregnancy. Nevertheless, the pathogenesis cannot be attributed to mechanical stretching alone. Changes associated with pregnancy-related hormones, together with individual genetic susceptibility and variations in the structural properties of the skin, are also believed to contribute to their formation.^[1]

Pregnancy brings about extensive physiological and anatomical changes in the maternal body to accommodate the growing fetus and prepare for childbirth. Among these changes, the development of stretch marks can be a source of considerable concern for many pregnant women, particularly because the lesions may persist even after delivery and may produce long-lasting alterations in the appearance of the skin. Despite the frequency with which striae

occur, there is currently no universally established treatment that can reliably prevent or completely eliminate them. Numerous moisturizers, emollients, and commercially available topical preparations are routinely used during pregnancy with the intention of preventing striae or reducing their severity. However, the available evidence supporting their preventive or therapeutic benefit remains inconsistent and limited, despite the considerable expenditure of time and money on such products.^[6]

Various dermatological procedures, including laser-based therapies, chemical peels, and microdermabrasion, have also been explored for the management of striae. However, their applicability during pregnancy may be restricted by considerations related to safety, tolerability, cost, and accessibility. In contrast, Ayurveda describes several approaches for the management of *Kikkisa*, including *Pana*, *Lepa*, *Abhyanga*, and *Parisheka*.^[4] These approaches utilize medicinal substances through internal administration as well as different external applications and are traditionally considered practical and comparatively economical.

In this context, the present study focuses on the therapeutic role of the selected Ayurvedic formulation, *Kutajadi* Cream, as a topical intervention for *Garbhini Kikkisa*. The discussion of the formulation is therefore important to understand the properties of its individual ingredients, their probable mode of action, and their relevance in the management of the clinical features of *Kikkisa* and striae gravidarum.

Probable mode of action

According to Ayurveda, Garbha Vriddhi causes Twak Prasara, resulting in vitiation of Vata, Pitta and Kapha at the level of Twak. This manifests as Kandu, Vidaha, Vaivarnya and linear striae. Kutajadi Cream interrupts this Samprapti through the synergistic action of its ingredients.

- Kutaja (*Holarrhena antidysenterica*) - Kutaja possesses Tikta and Kashaya Rasa, Laghu and Ruksha Guna, Sheeta Veerya, Katu Vipaka, and is Kapha-Pittahara. It exhibits Kandughna, Vranaropaka, Raktashodhana and Raktastambhaka properties, which help relieve Kandu, reduce inflammation and promote healing of stretched skin. The Kashaya Rasa strengthens the skin and supports restoration of dermal integrity. Modern studies attribute anti-inflammatory, antimicrobial and antioxidant activities to alkaloids such as Conessine, which aid tissue repair and protect the skin from oxidative damage,^{[7][11]}

- Arjakabeeja - Arjakabeeja possesses Katu and Tikta Rasa, Laghu and Snigdha Guna, Ushna Veerya, Katu Vipaka, and is Kapha-Vatahara. It exhibits Snehana, Daha-Prashamana, Shothahara, Vranaropaka and Krimighna properties. It helps maintain skin hydration and elasticity, relieves burning sensation, reduces inflammation and promotes wound healing. Modern studies report antioxidant, anti-inflammatory, antihistaminic and wound-healing activities, which reduce itching and support collagen protection and tissue repair,^{[8],[12]}
- Musta (*Cyperus rotundus*)-Musta possesses Tikta, Katu and Kashaya Rasa, Laghu and Ruksha Guna, Sheeta Veerya, Katu Vipaka, and is Kapha-Pittahara. It exhibits Kandughna, Shothahara, Raktaprasadaka and Daha-Prashamana properties, helping relieve itching, burning and inflammation while improving skin health. Modern pharmacological studies demonstrate anti-inflammatory, analgesic and antioxidant activities that support dermal repair and reduce local discomfort,^{[9],[13]}
- Haridra (*Curcuma longa*)-Haridra possesses Tikta and Katu Rasa, Laghu and Ruksha Guna, Ushna Veerya, Katu Vipaka, and is Kapha-Vatahara. It exhibits Varnya, Kandughna, Kushthaghna, Vedanasthapaka, Vranaropaka and Vranashodhaka properties, which help reduce itching, improve Vaivarnya and promote wound healing. Its active constituent Curcumin possesses anti-inflammatory, antioxidant, antibacterial and wound-healing activities, promoting collagen remodelling and dermal tissue regeneration.^{[10],[14]}

From a modern pharmacological perspective, the formulation provides anti-inflammatory, antioxidant, antihistaminic, antimicrobial and wound-healing effects. These activities reduce inflammatory cytokines, decrease oxidative stress, protect collagen and elastic fibres from degeneration, improve local microcirculation and promote collagen remodelling and dermal regeneration. The emollient effect of Arjakabeeja further maintains hydration and skin elasticity, reducing the progression of striae.

Thus, Kutajadi Cream acts through a multimodal and synergistic mechanism by pacifying the vitiated Vata, Pitta and Kapha, relieving Kandu and Vidaha, improving Vaivarnya, maintaining skin hydration and elasticity, promoting collagen remodelling and dermal tissue repair, and restoring the structural integrity of the skin. By acting simultaneously on the Dosha, Twak, and dermal connective tissue, it interrupts the Samprapti of Kikkisa and produces overall clinical improvement in Striae Gravidarum.

CONCLUSION

Kutajadi Cream showed clear therapeutic benefit in this case of Garbhini Kikkis, with marked reduction in itching, burning and discoloration, along with measurable improvement in the width, length and area of the striae over 60 days. The combined anti-inflammatory, healing and skin-restorative actions of Kutaja, Arjaka, Musta and Haridra contributed to progressive symptomatic relief and dermal repair, without any adverse effects. These findings suggest that Kutajadi Cream is a safe and effective Ayurvedic option for managing striae gravidarum, though larger studies are needed to confirm its broader clinical applicability.

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