



## MANAGEMENT OF *KIKKISA* (STRIAE GRAVIDARUM) IN *GARBHINI PARICHARYA* (ANTENATAL CARE)

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### ABSTRACT

Motherhood is the crowning act in the feminine role of life. She cannot escape from the happenings occurring in reproductive age. Stretch marks are one such type of happenings that occurs at the time of pregnancy. Striae gravidarum are linear lesions that frequently appear during pregnancy and are commonly found in the abdomen and breast. *Kikkisa* (striae gravidarum) occurs during 7<sup>th</sup> month of pregnancy with the main symptom of itching sensation. The fully manifested *kikkisa* creates more discomfort, disturbance of mood and lack of concentration in day-to-day activities. *gravidarum*, a physiological skin change is a cosmetic feel and discomfort needs medical measures. Ayurveda describes several treatment modalities against the *Kikkisa*. *Oushada sevana, parisheka, abhyanga, lepa, pathyapathya* are best-established therapies available for *Kikkisa*. In the present study the pathophysiology and treatment aspects of *Kikkisa* in view of *gravidarum* has been mentioned.

**KEYWORDS:** Striae gravidarum, *Kikkisa*, *Oushada sevana, parisheka, abhyanga, lepa, pathyapathya*.

### 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. Physiological, hormonal and metabolic changes occur during pregnancy causes some of the ailments like striae gravidarum seen in about 90% of total women population. These are slightly depressed linear marks with varying length and breadth. Predominantly found on the abdomen, below the umbilicus some times over the thighs and breasts. Ayurveda explains the same as *Kikkisa*. It occurs in pregnant woman during 7th month. Growth of scalp hair of the fetus in 7th month, the mother gets *vidaha* resulting into development of *Kikkisa*.<sup>[1]</sup> In seventh month the fetus attains over all maturity, the woman feels excessively exhausted or has relatively more or loss of flesh and blood. The woman possessing two hearts (one of her own and other of the fetus) is called *dauhrdini*.<sup>[2]</sup> The desires of the fetus are expressed through the mother hence *dauhrda* should always be fulfilled. The fulfillment of *dauhrda* gives birth to a very handsome, valiant, intelligent and well-behaved child. *Acharya Atreya, Chakrapani* and *Vagbhata* describe elaborately the clinical features and treatment aspects.

### MATERIALS AND METHODS

The present study is "A pathophysiological study of *Kikkisa* in comparison with Striae gravidarum in antenatal care and treatment modalities. *Acharya Atreya* says that the fetus displaces the doshas upwards thus these *vata, pitta* and *kapha* reaching *uras* produce burning sensation, which causes itching. The disease *Kikkisa* is the result of this itching. But *Chakrapani* opines that as these start developing from 3rd month itself. He uses the word "*charma vidaranam*" for this. "*Kikkisaccha charma vidaranam*" (*Ch.Sa.8/32 Chakrapani teeka*). According to *Vagbhata* at 7th month of pregnancy due to growing fetus the *doshas* reaches *hrudaya* and produce burning sensation and itching sensation. This produces *Kikkisa*.<sup>[3]</sup> *Vagbhata* includes burning sensation at palms and soles and the presence of lines on *uru, sthana* and *udara*. He says *shooka kairieva poornatha*. "*Rekhakaara stakale prayo jayante te Kikkisasamgnaha*" (*A.H.sa1/58Arundattateeka*). *Bhela* had same opinion as *Charaka*.<sup>[4]</sup>

### *Samprapthi- Pathophysiology*<sup>[5,6]</sup>

The fetus in the 7th month quickly develops in the womb to larger extent, it becomes *midana* as it tends to produce pressure from within, and it produces *sanchaya* of *doshas* in the *koshta*. The *prakupitha doshas* undergo

*vimargagamana* and moves upwards towards the *uras* produce the symptom *vidaha*. The doshas that move outwards from the innermost layer of the skin *mamsadhara* to the outer most *avabhasini* affect the manifesting the symptoms like *kandu* and *charma vidarana*. The vitiated *pitta* is seen to produce its effect first, causing *vidaha* and subsequently *kandu* which is due to vitiation of *kapha*. These two doshas when they vitiate the *vaata* to a greater extent and then produce *vidharana* of the *twak*. Hence three *prakupitha doshas* are subjected to *prasara* state in the *sarva shareera* which later take *sthana samshraya* in the *twak* there by taking away the *praakrita* features of it especially of the areas like *uru*, *sthana* and *udara* producing *vidarana* or *sputana*, giving it an appearance of wrinkle or *vali* and become *vyakta* as *Kikkisa*. The woman possessing two hearts (one of her own and other of the fetus) is called *dauhrdini*. The desires of the fetus are expressed through the mother hence *dauhrda* should always be fulfilled. The fulfillment of *dauhrda* gives birth to a very handsome, valiant, intelligent and well-behaved child.

### Physiological Changes during pregnancy<sup>[7]</sup>

**Cutaneous changes:** Pigmentation: The distribution of pigmentary changes is selective Face: (Chloasma gravidarum or pregnancy mask): It is an extreme form of pigmentation around the cheek, forehead and around the eyes. It may be patchy or diffuse, disappears spontaneously after delivery. Breast: Nipples and areola pigmented. Abdomen: Linea nigra: It is a brownish black pigmented area in the midline stretching from the xiphisternum to the symphysis pubis. The pigmentary changes are probably due to melanocyte stimulating hormone from anterior pituitary. However oestrogen and progesterone may be related to it as similar changes are observed in women taking oral contraceptives. The pigmentation disappears after delivery.

**Striae gravidarum:** Striae gravidarum occur in pregnant women in third trimester. These are slightly depressed linear marks with varying length and breadth. Predominantly found on the abdomen, below the umbilicus some times over the thighs and breasts. An incidence of 90% pregnant woman by third trimester and observed the high incidence is in fetal macrosomia, obesity, family history. The exact cause is not known but the responsible factors are mechanical stretching of the skin, Increase in aldosterone production but formation of striae more in fetal macrosomia, obesity and family history. Initially striae gravidarum are pinkish but after delivery the scar tissues contract and obliterate the capillaries and they become glistening white in appearance and are called striae albicans. In multiparous women, in addition to the reddish striae of the present pregnancy, glistening silvery white lines are present. These lines represent the previous striae are frequently seen. Individual hormones are responsible for many cutaneous changes during pregnancy. The changes are pigmentation, hair growth, striae over the abdomen.

**Manifestation:** Striae are formed with gross stretching of the skin with rupture of the elastic fibers present in dermis. At this point microscopic bleeding occurs along with the tissue inflammation, which gives us the raised reddish purple outlook 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. Signs- Red, pink or purple depressed atrophic bands or streaks.

Symptoms-Itching sensation, burning sensation. Distribution- Abdomen, buttocks and thighs.

Differential Diagnosis-Cushing's syndrome, cholestasis of pregnancy and prurigo gestationis.

Treatment-There is no specific treatment. Massaging the abdominal wall by lubricants like olive oil etc may helpful in reducing their formation. During Ante partum-Massage with the lubricants contains tocopherol, fattyacids, hyaluronic acid and during postpartum- Laser therapy and cosmetic surgery is indicated.

### Treatment of Kikkisa

1. Internal medication of following sets of medication useful in *Kikisa*.

- Butter treated with drugs of *madhura* group should be given to pregnant woman frequently in the dose of *panitala matra* (about 20gms) or else the butter medicated with decoction of stem bark of *badari* and *madhura* group of drug should be given.<sup>[8]</sup>
- Powdered stem bark of *sirisa*, flowers of *dhataki*, *sarshapa* and *madhuyasti*.<sup>[8]</sup>
- Pestled bark of *Kutaja*, seeds of *Arjaka*, *Musta*, and *Haridra*.<sup>[8]</sup>
- Triphala* pestled with the blood of *prisata* or *ena* (deer) and rabbit or only *prasata* deer or else *triphala* pestled with the blood of rabbit.<sup>[8,9]</sup>
- Water medicated with *punarnava*, flowers of *malati* and *madhuka* and mixed with blood of deer and rabbit.<sup>[8]</sup>
- Pesteled leaves of *varuna* with ghee or *Gomaya*.<sup>[8]</sup>

### 2. Lepa

- Expternal application of the** Either the paste of *Chandana*, *Mrunala* or *Chandana* along with *Usheera* should be rubbed over the abdomen and breasts.<sup>[10]</sup>
- Oil prepared with pestled leaves of *karaveera* along or with *karanja*.<sup>[10,11]</sup>
- Pestled leaves of *nimba*, *badari* and *suras* with *manjistha*. Oil is prepared by using these drugs and named it as "*Surasaadi tailam*". (A.S.sa 3/10) are very useful.<sup>[10,12]</sup>

3. **Parisheka or irrigation** of abdomen and breasts should be done with decoction of either *patola*, *nimba*, *manjistha* and *suras* or leaves and flowers of *malati* and

*madhuka* or else repeated cleansing with decoction of *daruharidra* and *madhuka* should be done.<sup>[13]</sup>

**4. Advise:** One should not scratch (in spite of urge for itching) to avoid disfigurement or skin stretching. If the itching becomes irresistible then above mentioned powders should be rubbed or an ointment or both should be taken with *chandana* which will suppress itching sensation due to its coolness.<sup>[13]</sup>

**5. Pathya:** Mrudu, madhura, seeta veerya diet should be given. Diet should be sweet, capable of suppressing *vata*, either fat and salt free or with little quantity.<sup>[13]</sup>

## DISCUSSION

Cosmetics play an important role in the women's life. *Charaka* while describing the *Garbhini paricharya* mentions the manifestation of *Kikkisa* in 7<sup>th</sup> 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. Discomfort from itching sensation and cosmetic value from pigmentation, stretch marks etc are the initiation for treatment. Vitiated *Vata Dosha* causes *Twak prasaran* (stretching of skin), *Pitta* leads to *Vidaah* and *Vaivaranya* (burning and depigmentation) and *Kaph* causes itching and the combination of these changes as *Kikkisa*. In *Ayurvedic* classics therapies like *oushada sevana*, *parisheka*, *lepa* etc are available for *Kikkisa*. They are safe for both mother and fetus during pregnancy period. *Lepa*, *urmarkhana*, and *mardhana* are a variety of *abhyanga* comes under *Bahya snehana*. *Abhyanga* is a process by which the person's body is oiled with medicated oil. *Abhyanga* with *Snehana* causes *snigdghata*, *mruduta*, *dravata* and *picchilata* in the body. *Snehana karma*, one of the *shadupakramas* mentioned in *Ayurveda* is an important method of *purvakarma* best treatment for *vata* disorders. *Vayu* dominates in the tactile sensory organ, and this sensory organ is loaded in the skin. The massage is exceedingly beneficial to the skin. The *Ayurvedic* treatment prevents the changes occurring during pregnancy. *Abhyang*, *lepana* internal medication shows the properties of anti pruritic, anti inflammatory and anti bacteria to prevent from secondary infections. *Ayurvedic* treatment modalities prevent the sequel of pathological changes like hypo pigmentation, scar formation, promotes the healing process and keep the luster of the skin.

## 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. *Ayurvedic* formulation will relieve the burning sensation, and itching. *Ayurvedic* cosmetic drugs will reverse the

manifested stretch marks. Local application of herbal drugs and internal use of herbal formulation is safe to the motherhood and child.

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