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**Review Article** 

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# **GESTOSIS AN AYURVED VIEW**

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# **ABSTRACT**

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Ayurveda has mentioned prevention and cure for all disorders which are described. This is described as aim of Ayurveda. In Ayurveda, the unique concept of Ashtanga Ayurveda includes Kaya, Bala etc 8 branches in which Prasrutitantra and Streeroga comes under the branch of Kaumarbhritya. In this branch various disorders related to women includes study of Garbha, Garbha Garbhopadravas. Gestosis refers to the disorders presents in pregnancy i.e. Garbhini in Ayurveda. This resembles Garbhopadravas in Ayurveda. Gestosis also known as Pre-eclampsia which is a condition in which BP increases with presence of protein in the urine. Here in this review article we studied the various Garbhopadravas according to Ayurveda, its modern aspect, its Nidana, Roopa, Samparpti and Chikitsa according to different Acharya's.

**KEYWORDS:** Gestosis, *Ayurveda*, Conceptual study.

# INTRODUCTION

Ayurveda is the science which mentioned various principles for prevention and treatment of disease. Ayurvedic system of medicine was deals with treating the various diseases but also aims to prevention the disease. [1] Ayurveda has mentioned Ashtanga Ayurveda which includes different eight branches in which Prasrutitantra & Streeroga includes under the branch of Kaumarbhritya Tantra. [2] It includes various disorders study of Streerogas, Study of Garbhini, Garbha, Garbha Vikruti, Garbhopadravas.

'Gestosis' defined as the disorders develops in the state of pregnancy [Garbhini] which includes Pre-eclampsia with Protienuria i.e. Presence of protein in the urine. [3] Garbhopadravas, Jarayudoshas can be compared or correlated with the Ayurveda.

Gestosis also called as 'Pre-eclampsia'. This is a condition which is characterized by Hypertension i.e. Blood pressure increases above 140/90 mm of Hg and Proteinuria i.e. Presence of protein in the urine. This condition usually develops after 20 weeks of Gestation.<sup>[3]</sup>

This condition Gestosis also refers as 'Toxaemia of Pregnancy' which includes any disorders which are develops during the pregnancy.

In this review or conceptual study includes study of Gestosis its various disorders, treatment and its *Ayurvedic* aspect i.e. *Garbhopadravas*, its types, *Nidana, Roopa, Samparpti* and *Chikitsa* according to different *Acharya's*.

#### **OBJECTIVES OF THE STUDY**

To study the Gestosis according to Ayurveda and Modern science.

#### **METHODOLOGY**

# Concept of Gestosis according to Ayurveda and Modern science

# Various definitions regarding Gestosis<sup>[3]</sup>

- ➤ **Hypertension** an absolute rise of blood pressure of at least 140/90 mmHg if previous BP is not known or rise in systolic pressure of at least 30mmHg, or a rise in diastolic pressure of at least 15 mm of Hg over the previously known BP is called 'Pregnancy induced hypertension'.
- ➤ **Pre- eclampsia -** is a multi-system disorder of unknown etiology characterized by development of HTN to the extent of 140/90 mm Hg or more with proteinuria after 20<sup>th</sup> week in a previously normotensive and non proteinuric women.
- ➤ Eclampsia Pre-eclampsia when complicated with general tonic-clonic convulsion and/or coma is called eclampsia.

#### Correlation Between PIH & Ayurveda

Ayurveda has mentioned Garbhopadravas which includes Upavishtaka, Nagodara etc.

# A] In Harita Samhita, he mentioned Garbhopadravas as follows

Garbhopadravas includes Shosha [Emaciation], Hrullasa [Nausea], Chardi [Vomiting], Shopha [Oedema], Jwara [Fever], Aruchi [Anorexia], Atisara [Diarrhoea], Vivarnatava [Discolouration].

#### B] Jarayudosha according to Sharangdhara Samhita

According to Sharangdhara Samhita, Acharya Sharangdhara has mentioned Garbhopadravas as Jarayudoshas.

### **Introduction to** *Garbhopadravas*

# Upavishataka

# 1] According to Acharya Vagbhata<sup>[6]</sup>

Acharya Vagbhata - II – mentioned that after Sanjatasara (Garbha is grown) due to Yoni Srava (discharge or bleeding per vaginum), the foetus does not grow but quivers staying inside the uterus, Udara (abdomen) does not grow either.

# 2] According to Arunadutta<sup>[7]</sup>

Arunadatta explains that after development of Sanjatasara or Balavana Garbha (i.e. after 5<sup>th</sup> - 6<sup>th</sup> month) there is discharge per vaginum which is usually blood or some other kind of vaginal discharge, consequently the foetus does not grow and quivers staying inside the uterus. Vatadi doshas aggravates because discharge blocks Rasavaha Nadi, preventing nourishment to the foetus.

# 3] According to Kashayapa<sup>[8]</sup>

#### Kroshana jataharini-

The fetus is situated in the *Kukshi* (uterus) creates various complication and with the delivery of fetus (& placenta), most symptoms disappears.

# Nidanapanchaka of Garbhopadavas

# Nidana [Aetiology of Gestosis]

# A] According to modern science

- 1. Endothelial dysfunction intense vasospasm.
- 2. Failure of trophoblastic invasion (abnormal placentation).
- 3. Inflammatory mediators(cytokines).

# B] According to Ayurveda it can be taken as

1. Garbha as Shalya<sup>[9]</sup>

Vata mutra purisha garbhasangreshu pravahanamuktam..."

----[Sushruta sutra 27/5]

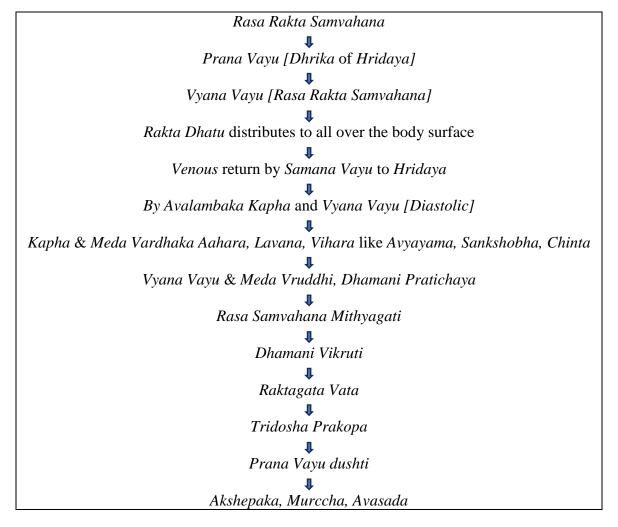
Acharya Sushruta has denoted Garbha as Shalya (foreign body), thus creates Shotha (inflammatory response) in maternal body.

- 2. Jarayudosha.
- 3. Garbha upaghatakar bhava.

# Samprapti [Pathophysiology]

The pathogenesis or Samprapti of Gestosis according to Ayurveda is as follows:

#### Flow chart



## **Roopa** [Clinical features]

# A] According to modern science<sup>[10]</sup>

# I. In pre-eclampsia

- 1) Mild symptoms oedema, proteinuria
- 2) Alarming symptoms Headache, disturbed sleep, diminished urinary output, epigastric pain, eye symptoms
- **II. Signs** Abnormal weight gain, rise of BP, oedema, abdominal examination- scanty liquor, growth retardation.
- **III. In eclampsia** Generalized tonic clonic convlsion and/or coma.

# B] According to Ayurveda

# I] Shotha

# Nirukti of Shotha[11]

'सर्वमृत्सेधं शोथमाहुरित्यर्थः। (मधुकोष)

Shotha defined as *Utasedha* which is round one comes over the skin surface area.

#### Roopa

#### 1] Roopa [Clinical features] of Shotha

Shotha has 2 types; Nija and Agantuja. Nija Shotha develops due to the excessive intake of Lavana Rasa, Garbhasampidana, Garbhaprapatana, Mithyachara, and Dosha Prakopa or vitiation causes formation of Nija Shotha.

According to Acharya Charaka and Madhava Nidana, Vishama Prasruti is one of the causative factor for development of *Shotha* or *Shavayathu*.

According to Ashtanga Sangraha, it includes Garbha Visarpa, Panduta, Prasara, Jwara, Panduta, etc.

#### 2] Vivarnata [Pallor]

It can occur due to APH in form of abruptio- placentae which is commonest complication of pre-eclampsia.

#### 3] Viparitendriyartha [Abnormal functioning of sense organs]

According to Sushruta and Vaghbhata have discribed it in Asadhya lakshana of Mudhagarbha can be co related to visual disturbances.

## 4] Garbha Shosha

Obstruction to *Rasavaha Nadi* causes improper flow of *Rasa* and the feotus do not develop properly.

# 5] Mutragaraha

Acharya Kashyapa and Harita have mentioned treatment of Mutragraha in Garbhini.

# Upadarava of Garbhini Shotha [Complications]

- Garbhini Akshepaka
- Garbhini Moorchha
- Garbhini Sanyaasa

# Chikitsa of Garbhini Shotha

#### A] According to Harita

Swedana with hot water is advisable especially for sopha developing as Garbha upadrava. Virechana is strictly contraindicated.

# B] According to Yogaratnakara

Lepa of chandana, madhuka, usira, nãgapuspa, tila, ajaśrngi, manjisthä, ravimüls and punarnavā.

#### C] According to Rasa Ratnasamucchaya

Punarnava, vacha kalka made into paste with kanji when applied externally cures severe oedema.

#### D] Various Yogas according to different Acharya's

Following different *Yoga's* are mentioned for the management of *Garbhopadravas* which are as follows:

- 1) Kwatha of Punarnava moola with deodara.
- 2) *Kwatha* of *Bhadradaru* with honey.
- 3) Kwatha of Prushniparni, bala and vasa.
- 4) *Kwatha* of *Anya* and *ardraka* mixed with *ghṛita*, milk, jaggery and *pippali churna* should be given for *shotha* and alleviation of *pitta vikara*.

# Various Kalpas for Garbhini Shotha

Gokshuradi Guggulu

- ➤ Gokshuradi Churna
- Punarnava Mandoora
- Sarpagandhadi Yoga
- Yashtimadhu Churna + Guduchi Satva
- Bala Jeerakadi Kashayam
- Punarnavadi Kashayam
- Suvarna Malinivasant Rasa
- > Prabhakara Vati
- Pippalyadi Ghritam
- Kalyanaka Ghritam
- Mahapaishachika Ghritam
- Panchagavya Ghritam

# Shotha Nishedha [contraindications in Shotha]

Strong purgatives should never be given in Shotha. Purgation removes fluid or dosha or mala from Koshtha whereas Shotha is fluid in subcutaneous or peripheral tissue, hence purgation will be harmful.

#### Chikitsa of Garbhini Mutraghata

- ✓ Use of decoction or paste of Shatavari, root of Darbha, madhuka, kşiramorata, pasunabheda, ushira and seeds of kataka relieves retention of urine; milk medicated with these drugs is also beneficial.
- ✓ Powdered seeds of *Ervaru* (snake-cucumber) and *trapusa* (cucumber), *magadhi*, Shilabheda and sugar if taken with rice water cure urinary retention.

#### Chikitsa of Garbhini Akshepaka

Acharya Kashyapa has mentioned Chikitsa [Line of treatment] for Garbhini Akshepaka which are as follows:

- ❖ Matulunga swarasa + vidaand saindhava lavana.
- ❖ Agnimantha or varunakwatha
- ❖ Sneha of läva/tittira withmamsa rasa.
- ❖ Vadula swarasa or Kwatha
- \* Kwatha of vata Shamana dravya.

## Chikitsa of Pitta Upasrushta Akshepaka in Garbhini

- 1) Sweetened Jangala mamsarasa.
- 2) Madhura varga dravya kashaya with dadima.

# Chikitsa of Vata shleshma samuttha Akshepaka in Garbhini

- ➤ Amla and katu rasa prayoga.
- Yavakshara with jangalamamsa rasa.
- > Swedana with warm palms.
- > Swedana with Ghrita especially in late pregnancy.
- ➤ Hot/cold fomentation is given with due consideration to the status of the disease.

# Garbhajanya Vishamayata Garbhapata Nirdesha

# [Indications for termination of Pregnancy]

*Sushruta* clearly explains that if disease/disorder is intolerable, then pregnancy should be terminated. He further adds that before the condition of pregnant woman deteriorates one must take action in *praptakala* (the Golden hour should not be missed).

*Dalhana* explains in the event of failure of sastra and mantra *chikitsa*, termination of pregnancy is the only choice to save the pregnant.

# **Pratibandha** [Prevention]

- 1) Masanumasika Garbhini Paricharya.
- 2) Extreme age for conception Elderly Primi & Teenage Pregnancy.
- 3) Long Interval between pregnancy More than 10 years of interval leading to DNA degeneration causing defect in placenta.
- 4) Socioeconomic factor.
- 5) Nutrition.
- 6) Environmental Factor.
- 7) Alcohol Intake, Smoking, Obesity.
- 8) Psychological Factor Chinta, Bhaya, Shoka.

### **DISCUSSION**

In this review study, Gestosis was compiles according to Modern science and according to *Ayurveda*. It includes disorders which are forms during the coarse of pregnancy state in women. It is one of the important concept which need to be studied by every physician. This

needs immediate action, treatment which helps to cure pregnancy, pregnant women as well as her baby. Therefore, in this study, various *Garbhopadravas*, *Jarayudoshas* etc. was compiled, studied, review according to different *Acharya's* its *Nidana*, *Roopa*, *Samprapti*, its *Pratibandha* [Prevention] was included. *Yogaratnakara*, *Kashyapa*, *Charaka*, *Madhava Nidana*, *Sushruta*, *Harita Samhita*, *Rasaratnasammuchaya*, *Ashtanga Hridaya*, *Arunadutta* and *Dalhana* commentary and there opinion regarding *Garbhopadravas* are mentioned in this article. This article includes details about *Upavishtaka*, *Garbhini Shosha*, *Garbhini Akshepaka* etc. disorders which develops during the pregnancy.

#### **CONCLUSION**

In this Review study, concluded that Gestosis view and its clinical importance as well as its management was important in today's era due to the increase incidences of *Garbhopadravas*. Therefore, overlook on the all *Garbhopadravas* according to different *Acharya's*, there opinion, *Nidana*, *Roopa*, *Chikitsa* also its prevention was important part of this article.

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