

GARBHINI PANDU: A LITERATURE REVIEW

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ABSTRACT:

Pregnancy is milestone event of a woman's life which transforms her from woman to a mother. Though it is a joyful journey, it is associated with lots of physical and physiological alterations which give rise to some health issues. Anaemia is one of common health issue occurring on large scale in developing countries.

Ayurveda enlists some complications of pregnancy under the title of *Garbhodras*. *Garbhini Pandu* is most common *Upadrava* among them. Though *Garbhini Pandu* is not mentioned as a separate *Vyadhi* in classics, by studying various reviews from *Samhitas* regarding to *Pandu* and its relation in *Garbhini Awastha*, we can illustrate probable pathophysiology of *Garbhini Pandu*.

Keywords: Anaemia in pregnancy, *Rasavaha Strotas*, *Pandu* and *Garbhini Pandu*.

INTRODUCTION:

Motherhood is a life changing event of every woman's life. From conception to delivery, it is associated with tremendous physiological and psychological alterations. Women have to face various problems. There is increased nutritional demand in pregnancy and due to any kind of deficiency leads to various complications. During pregnancy there are so many complications that may arise. *Ayurveda* enlists such complication under the title of *Garbhodras*¹. *Garbhini Pandu* is most common *Upadrava* among them. In *Harita Samhita* *Haritacharya* described *Ashta Garbhodras*². He enlisted *Vivarnatva* which can be taken as *Pandutva*.

Agnimandya is main reason for *Aam* which is the prime source of *Vyadhi utpatti*³. Due to *Pandu* many feto-maternal complications may arise during antenatal and postnatal period.

In today's sedulous life, due to sedentary and changed lifestyle, changed food habits that is *Apathyakara Ahar-Vihar*, there is *Aamotpatti* which causes *Rasadhatu Dushti* which further leads to *Uttarottar Dhatuhaani* as a *Samprapti* of *Pandu*. In *Ayurveda* great importance has been given to the *Garbhini Paricharya*⁴ which includes regimen of *Ahar-Vihar* and *Pathyapathya* in *Masanumasik Paricharya*. Whatever food a woman takes is digested by *Agni* and *Rasadhatu* is formed. *Prasad Bhaga* of this *Rasadhatu* nourishes to both mother and fetus. *Stanya* that is breastmilk is considered as an *Upadhatu* of *Rasadhatu*. Hence *Garbha* is often known as *Rasaja-*

*Rasajashch Ayam Garbhaha*⁵. According to *Charakacharya*, *Rasa* contributes for the formation of *Garbha*. As fetuses fulfill its need through mother and there is extra need of nutrients, mother suffers from nutritional deficiencies. *Charakacharya* counts *Pandu* as *Rasapradoshaj Vyadhi*.

In modern science, anaemia in pregnancy is defined as haemoglobin concentration lower than 11gms/dl⁶. It is commonest haematological disorder that may occur in pregnancy. Pregnancy is a state of haemodilution, hence haemoglobin concentration less than 10gms/dl at any time during pregnancy considered as anaemia.

INCIDENCE:

According to W.H.O., the incidence of anaemia in pregnancy ranges widely from 40-80 per cent in the tropics compared to 10-20 percent in the developed countries. Its prevalence in developing countries is 51%, while in India it is estimated as 65-75%⁷. India contributes to about 80% of the maternal deaths due to anaemia.

OBJECTIVE:

Literature study to understand all Ayurvedic aspect of *Pandu* and its correction through implementation of Ayurvedic *siddhants* of *Rasavaha strotodushiti* and its *Chikitsa*.

MATERIALS AND METHODS:

Literature review has been done from Ayurvedic classics, texts like *Charaka Samhita*, *Sushruta Samhita*, *Ashtang Hridaya*, *Madhava Nidana*, *Kashyapa Samhita* and textbook of *Prasutitantra evum Streeroga*, modern texts, research studies and internet source.

RIVIEW OF LITERATURE:

Concept of *Pandu*-

The word *Pandu* is derived from *Dhatu Padi Gatou* and *Ku Pratyaya*. The word literally means *Pandurta* that is paleness. In literature this discoloration is described as *Ketakidhulisannibha* which means pale core of *Kewada*.

*Nidaan of Pandu*⁸

Ahar- Kshar, Amla, Ushna, Teekshna, Viruddha and Asatmya, Vidahi ahar sevana

Vihar- Divaswap, Ativyayam, Maithun, Vegvidharana

Manas- Kaam, Chinta, Bhaya, Krodh, Shoka

Types of Pandu - *Vaataj, pittaj, Kaphaj, Saannipataj and Mridbhakshanjanya Pandu*.

There is no direct citation available about *Garbhini pandu* in Ayurvedic classics. By studying basic concepts of *Dosha* and *Dhatu* and its implementation in *Garbhini awastha*, we can collaborate the concept of *Garbhini Pandu*.

In pregnancy *Rasa Dhatu* is increased its role at *Garbha*, *Garbhini* and *Stanyotpatti*⁹. Due to *Rasadushti* it causes *Dushti* of subsequent *Dhatus* as *Rakta*, *Mansa*, *Meda* etc. which leads to *Dhatukshaya* and *Dhatushaithilya*.

According to *Sushrutacharya*, *Pandu* is related to *Raktavaha Strotas*. Due to *Agnimandya* there is *Pittadushti*, particularly *Ranjak pitta dushti*, which leads to inability of *Rasadhatu* to transform into *Raktadhatu* which results in *Raktakshaya*. Due to this there is *Bhekavarna* and *Dhatushaithilya* which are the features of *Pandu*.

According to *Kashyapacharya*¹¹, *Rasavaha strotas* are scattered around umbilicus. As the fetus grows, it compresses these *Strotas* which obstructs flow of *Rasa*. It results in pale discoloration. We can implement this as a *Samprapti* of *Garbhini Pandu*.

According to *Haarita*, some diseases arise due to pregnancy and hence called as *Garbhodrava*. Among these he includes *Vivarnata*. As *Vivarnata* is the main symptom of *Pandu*, this can be considered as *Garbhini Pandu*.

In *Garbhini, Pandu* manifests in *Rasavaha Strotas*, but shows catastrophic effects on succeeding *Dhatu*s and ultimately on whole body. From 5th month onwards, there is increased growth of fetus while mother becomes emaciated. *Bala* and *Varna* increases in fetus while *Garbhini* suffers from *BalaVarna Haani*¹².

In modern medicine¹³-

In pregnancy, there is disproportionate increase in plasma volume, RBC volume and haemoglobin mass and there is marked demand of extra iron in the need of growing fetus. Only diet could not fulfill it. As a result haemoglobin level falls and haematocrit value also. It is due to haemodilution and increased rate of iron absorption. Thus, this condition is known as physiological anaemia which is normocytic and normochromic in nature.

Though *Garbhini Pandu* is a common *Updrava*, it may results in threatful complications like preterm labour, postpartum haemorrhage, cardiac failure, shock etc.

To avoid these complications, proper treatment should be started as early as possible. In modern science, there are limited treatment principles to raise the haemoglobin concentration by proper diet, dietary supplements like Vit.B12, Folate, ferrous molecules, intravenous iron infusion and in severe cases by giving blood transfusion.

In *Ayurveda*, there are so many principles of treatment for correction of haemoglobin with added aspect of *Rasdushti*, *Dhatukshaya* which includes *Aampachana*, *Agnideepana*, *Pittashamak*, *Dhatvagnivardhana*, *Raktavardhaka*, *Rasayana* etc.

| Chikitsa | Action |
|-----------------------------|--|
| <i>Aampachana</i> | Digests Aam |
| <i>Deepana</i> | Enhances Agni which improves <i>Dhatunirmiti</i> and <i>Uttarottar DhatuPushti</i> |
| <i>Pittashamana</i> | Makes <i>Samprapti Vighatana</i> |
| <i>Raktavardhak Dravyas</i> | Reduces paleness and other features |
| <i>Rasayana Chikitsa</i> | Improves general condition of both mother and fetus |

Chikitsa Siddhant¹⁴:

As pregnancy is a delicate stage, treatment should be *Snigdha*, easily digestible and *Soumya* in nature.

Ghrutas- *Dadimadi ghruta*

Katukadi ghruta

Draksha Ghruta

Panchatikta Ghruta

Mahatikta ghruta

Bhasmas- *Lohabhasma*

Roupyabhashma

Abhrakabhasma

Vangbhasma

Mandoor bhasma

Swarnamakshik bhasma.

Kalpas- *Tapyadi loha*

Navayas loha

Vasant kalpas - Laghumalini vasant

Madhumalini vasant.

These *Dravyas* enhances *Agni*, both *Jatharagni* and *Dhatvagni* and relieves *Dhatushaithilya*.

Ahar-

Yava, Shastikshaali, Mudga, Masur, Jaangal Mansrasa are easy to digest.

Kharjur, Gud, Mrudvika

DISCUSSION:

• Discussion on modern review-

Definition- Anaemia is a state in which body parts becomes pale due to haemoglobin in peripheral blood less than 11gms/dl.

In pregnancy, the systems undergo physiological changes. In hematological changes blood volume increases which causes haemodilution which leads to physiological anaemia in pregnancy.

• Discussion on Ayurvedic review-

Rasa Dhatu-

It is a first *Dhatu* made up of *Prasada Bhag* of *Ahararasa*. It is precursor of *Uttar Dhatus*. Due to *Rasa* and *Rakta*, *Garbha* gets its nourishment. Hence *Rasa Dhatu* plays major role. Obstruction in *Rasavaha Strotas* leads to unwanted outcomes giving rise to *Vyadhis*.

Pandu-

It is the condition in which there is pallor or faint discoloration of skin, nail bed and conjunctiva. In severe cases *Akshikuta Shotha* that is peri- orbital oedema can be seen.

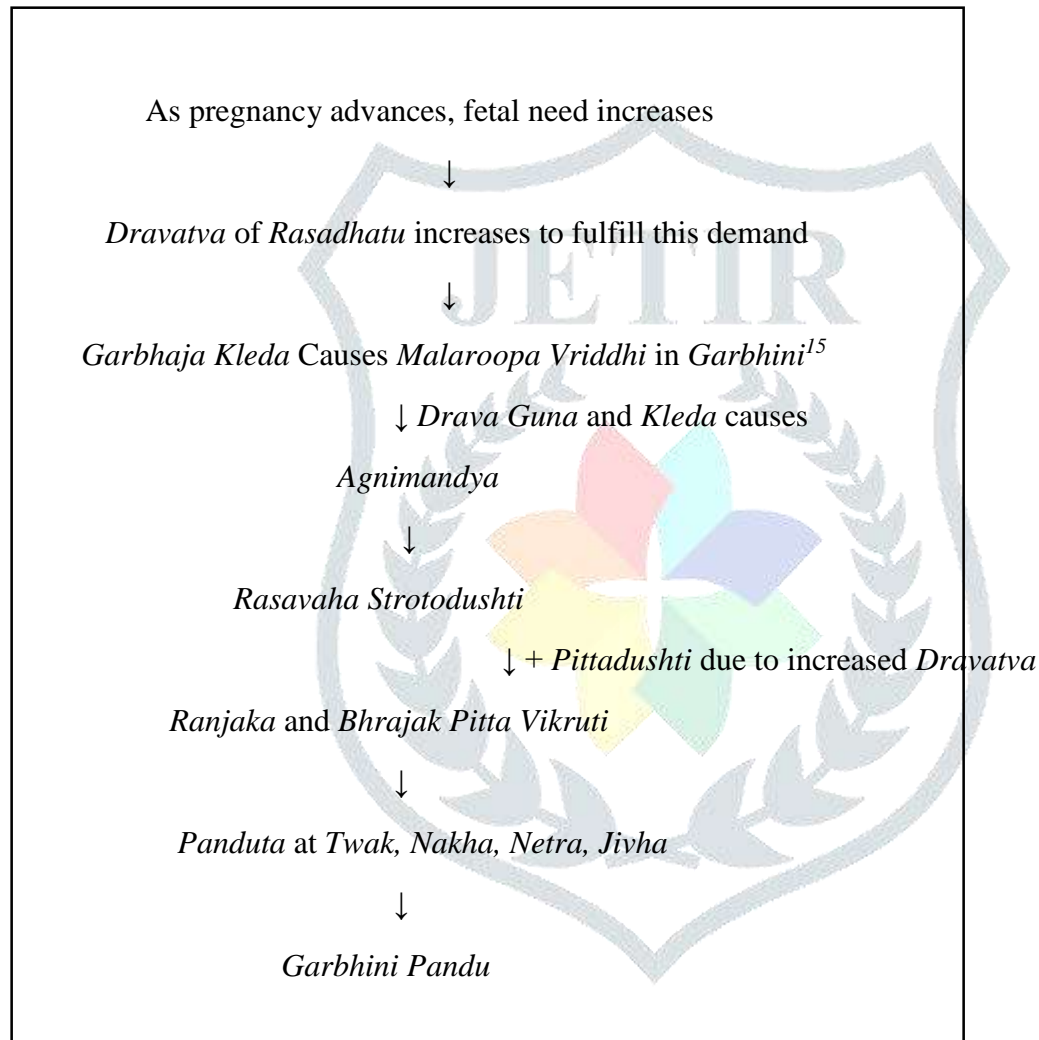
Types of *Pandu-*

There are 5 types mentioned in classics as- *Vaataja, Pittaja, Kaphaja, Sannipataja* and *Mridbhakshanjanya Pandu*.

Garbhini Pandu is not mentioned separately.

By reviewing the literature regarding to *Nidanpanchak* and theories correlation in *Garbhini*, *Samprapti* of *Garbhini Pandu* can be stated as-

- Dominance of *Pitta Dosha* increase *Dravabhava* of *Rasa Dhatu*.
- *Rasadushti* leads to *Uttarottar Dhatunirmiti*.
- This causes *Vaivarnya* and *Dhatushaithilya*.



Treatment aspect-

-*Kashyapacharya* states that, *Garbhini Pandu* is not different than *Pandu*; hence *Chikitsa* mentioned in classics can be applied in *Garbhini* except *Teekshna Shodhana*.

-*Garbhini Paricharya* should be followed.

Thus, *Garbhini Pandu* can be reviewed with anaemia in pregnancy with the help of *Ayurvedic* classics.

CONCLUSION:

As *Pandu* arises due to *Agnimandya*, *Aam* and *Rasadushti*, *Ayurveda* may give more authentic solutions, provided that *Ayurvedic* iron supplements should undergo researches. Though severe anaemia could not be able to manage with *Ayurvedic* therapy, but have lots of hopes in deficiency related anaemia. Through improvement of digestion and correction of *Rasa-Aadyadhatu* for better nourishment and subsequent *Dhatunirmiti* which can provides a healthy motherhood.

Ayurvedic principles of correction of anemia can be introduced in health streammat ground level under national health mission. Hence *Ayurved* can contribute to maternal and child health program at global level.

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