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**Review Article** 

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# ROLE OF DHATRYAVALEHA IN THE MANAGEMENT OF GARBHINI PANDU

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#### **ABSTRACT**

Anemia is one of the most commonly encountered medical disorders during pregnancy. In developing countries it is a cause of serious concern as, besides many other adverse effects on the mother and the fetus it contributes significantly high mortality. According to United Nation declaration 1997, anemia is a major public health problem that needs total elimination. In modern science many formulations are available for treatment of anemia in pregnancy but it is associated with several complication like Pre-eclampsia, Preterm labor, Postpartum hemorrhage, Cardiac failure, Shock. Acharya Charak mentioned Dhtryavaleha (*Ch.Chi.St.16/100-101*) as one of the shaman yoga for the chikitsa of Pandu. Dhatri and other ingredients may help to enhance absorption of iron salts due to its high contents of Vitamin C

and other ingredients has got Vatapittashamaka, Raktaprasadana, Garbhasthapaka, Jeevaniya, Balya properties.

**KEYWORDS:** Ayurveda, Garbhini, Anemia during pregnancy, Dhatryavaleha.

#### INTRODUCTION

Anemia is the commonest hematological disorder in pregnancy. According to the standard laid down by WHO, Anemia in pregnancy is present when the hemoglobin concentration in the peripheral blood is 11 gm/ 100 ml or less. During pregnancy plasma volume expands (maximum around 32 weeks) resulting in hemoglobin dilution. For this reason, hemoglobin level below 10 gm / dL at any time during pregnancy is considered anemia (WHO, 1993,

CDC, 1990). Hb level at or below 9 gm/ dL requires detailed investigations and appropriate treatment. Adopting this lower level, the incidence of anemia in pregnancy ranges widely from 40-80 percent in the tropic compared to 10-20 percent in the developed countries. Anemia is responsible for 20 percent of maternal deaths in the third world countries. Ayurveda, is one of the most ancient system of life, health and cure. Ayurveda makes learn how to live healthy. *Strotas* are unique concept of Ayurveda, related to origin, biotransformation, ailments and treatment. *Pandu Roga* is one of the disease of *Rasavaha Strotas* according to *Charaka Samhita*. The growing fetus is nourished by the *Rasa* of mother. So, mother needs a better and more nutritious diet for the baby.

#### **Drug Discussion**

द्विपलांशां तुगाक्षीरीं नागरं मधुयष्टिकाम्। प्रास्थिकीं पिप्पलीं द्राक्षां शर्करार्धतुलां शुभाम्।। धात्रीफलरसद्रोणे चूर्णितं लेहवत्। शीतं मधुप्रस्थयुतं लिह्नात् पाणितलं ततः।। हन्येष कामलां पित्तं पाण्डुं कासं हलीमकम्।। इति धात्र्यवलेहः।

च.चि. 16 / 100-101

Ingredient of Dhatryavaleha (Charak Samhita Chikitsa 16/100-101)

S. no	Ingredient	Part used	Latin name	Rasa	Guna	Virya	Vipaka
1	Dhatri	Fruit	Emblica officinali	Pancharasa (Exept Lavana) Amlapradhana	Guru, Ruksha, Shita	Shita	Madhura
2	Draksha	Fruit (Dry)	Vitisvinifera Linn.	Madhura	Guru, Sanigdha Mardu	Shita	Madhura
3	Pippali	Fruit	Piper longum Linn.	Katu	Laghu, Sanigdha Tikshna	Anunshita	Madhura
4	Yashtimadhu	Stem	Glycyrrhiza glabra Linn.	Madhura	Guru, Sanigdha	Shita	Madhura
5	Nagar	Rhizome	Zingiber officinale Rosc.	Katu	Laghu, Sanigdha	Ushna	Madhura
6	Vanshlochan		Bambusa arundinacea Willd.	Madhura, Kashaya	Ruksha, Laghu, Tikshna	Shita	Madhura

#### Dhatri (Amalaki)

A good source of vitamin C; carotene, nicotinic acid, riboflavine, D-glucose, D-fructose, myoinositol and a pectin with D-galacturonic acid, D-arabinosyl, Dxylosyl, L-rhamnosyl, D-

glucosyl, D-mannosyl and D-galactosyl residues, embicol, mucic, Indole acetic acid and four other auxins- a1, a3, a4 and a5, two growth inhibitors- R1 & R2; phyllembic acid and phyllembin (fruits). Embelica officinalis has Spasmolytic, mild CNS depressant, hypolipidaemic, antiatherosclerotic, antimutagenic, antimicrobial, antioxidant, immunomodulatory, antifungal, antitumour, hypoglycaemic, anti-inflammatory, antibacterial, antiulcer, adrenergic potentiating, HIV-1 reverse transcriptase inhibitory action. Embelica officinalis may help to enhance absorption of iron salts due to its high contents of Vitamin C.

#### Draksha

Draksha (Vitisvinifera) fruit contains 70 to 80% water and numerous organic and inorganic compounds. These are sugars, organic acids, phenolic compounds, nitrogenous compounds, aroma compounds, minerals, pectin substances. It also contains arginine and alanine. They are also good source of bioflavonoids. catechin, epicatechin, beta-sitosterol, ergosterol, jasmonic acid, glucose, fructose, galactose, it also contains tannic, malic, tartaric and racemic acid along with 0.05% of ash. Raisins contain calcium, magnesium, potassium, phosphorous and dehydro ascorbic acid i.e., oxidised form of ascorbic acid, which helps in the absorption of the available iron.

#### **Pippali**

N-hexadecane, n-heptadecane, n-octadecane, nnonadecane, n-eicosane, n-heneicosane, \_-thujene, terpinolene, zingiberene, cymene, p-methoxy acetophenone, traces of dihydrocarveol, phenylethyl alcohol and two sesquiterpenes (essential oil from the dried fruit)N- isobutyldeca- trans-2- trans-4-dienamide, piperine, piplartine and a lignan d-sesamin, two piperidine alkaloids-pipernonaline and piperundecalidine in Pippali fruits.

The immunomodulatory potential of Piper longum fruit extract have been evaluated by hoemagglutination titre(HA),macrophage migration index(MMI), and phagocytic index(PI) in mic.

#### Yashtimadhu

Glycyrrhizin (principal sweetening agent), glycyrrhizic acid, glycyrrhetinic acid, hiquirtin, isoliquiritin, neoisoliquiritin, liquiritogenin, isoliquiritogenin, glabrine, glabranine, licuraside, licochalcones A & B, hispaglabridin A & B, licoricidin, glabrene, liquiritic acid, glabrolide etc. Pharmacological activities: Smooth muscle depressant, antimicrobial, antiviral, antipyretic, antioxidant, anti-inflammatory, expectorant, anti-ulcer, spasmolytic, anti-

exudative Action and uses: The roots are sweet, refrigent, tonic, diuretic, intellect promoting. They are useful in cough, ulcerations, fever, skin diseases, ophthalmic diseases, hoarseness of voice, anemia.

#### Sunthi

Heptane, isovaloraldehyde, camphene,  $\beta$ -pinene, Casinine, myrecene, linonene,  $\beta$ -phellandrene,  $\alpha$ -curcumene, gingerol, zingerone, shogaol, ginger glycolipids A, B, C gingersols, cineol, gzingeral, gingeodiol, sesquitajene, zingiberenol, threonine, glycine, cysteine, isoleocine, leucine and arginine. Ginger (Zingiber officinale) is a non-toxic highly promising natural antioxidant compound having a wide spectrum of biological function (antimicrobial, anti-inflammatory, antioxidant, immunomodulatory, anticarcinogenic).

#### Vanshlochana

Vanshlochana contains silica, Cholin, betain, cynogenetic glycosides, albuminoids, Oxalic acid, reducing sugar, resins, waxes, benzoic acid, Arginine, cysteine, histidine, niacin, riboflavin, thiamine, Protein, gluteline, contains lysine, methionine, betain, cholin, proteolytic enzyme, nuclease, urease. Vanshlochana possess Anti-inflammatory, Antiulcer, Anti-diabetic, Anti-oxidant, anthelmintic, astringent, emmengogue activity.

#### Sharkara

Glucose also known as dextrose is a simple sugar (monosaccharide) that is used to increase the level of blood sugar (glucose) when the level falls too low (hypoglycemia). Glucose in this form increases the level of the blood sugar, so it is a glucose-elevating agent. Other glucose-elevating agents are diazoxide (Proglycem) and glucagon.

#### Madhu

Unsurprisingly, these comprise the major portion of honey - about 82%. The carbohydrates present are the monosaccharides fructose (38.2%) and glucose (31%); and disaccharides (9%) sucrose, maltose, isomaltose, maltulose, turanose and kojibiose. Honey is rich in dietary antioxidants as well as flavonoids. The natural antioxidant boost can improve well-being and also help in the development of the baby in pregnancy. Honey is a potent source of iron, copper and manganese. When these elements are combined they aid in hemoglobin synthesis. Honey is therefore a powerful weapon against anemia.

#### **CONCLUSION**

Among the ingredients of Dhatri avaleha, Amalaki is the major component and it is having predominantly sour taste, it is a vayasthapaka (anti ageing) and rasayana (rejuvinative) drug, it increases healthy status of the tissues. Other drugs Vanshalochana, Yashtimadhu, Draksha, Sharkara, Madhu are helpful in Preenana (nourishing), Brimhana (increases bulk of the body), Ksheena dhatu vardhaka (increases the body tissues). Shunti and Pippali increases digestive activity. In total Dhatri avaleha is Preenana (nourishing) and Dhatu vardhaka (increases all the tissues of the body). Thus it can revert back the pathogenesis of Pandu roga. So by the virtue of these properties Dhatri avaleha is effective in treating Pandu roga.

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