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**Review Article** 

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# FORMATION OF SAAMA DOSHAS AND THEIR ROLE IN HYPOTENSION

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#### **ABSTRACT**

Low blood pressure or hypotension is not considered to be a major problem in general, but cases can be seen very often at O.P.D. level. Usually dietary deficiency is considered to be the most common cause of low blood pressure. Other causes may include sepsis, dehydration, blood loss, high/ low body temperature, heart disease etc. Apart from this many hypotensive patients being physically fit present with mild symptoms as dizziness, light headedness, diminished appetite, indigestion, scanty urination etc. All these symptoms keep resemblance with that of 'Sama doshas' such as — Srotorodha (Chocking up of bodily passages), Balabhramsha (general debility), Guruta (heaviness

in body), Alasya (letharginess), Apakti (indigestion), Aruchi (anorexia), Malasanga (constipation) etc. Previously formed 'Aama' is totally responsible for the formation of these 'Sama doshas'. According to Ayurveda everything that we consume must be digested. This process of digestion completely depends on strength of 'Agni'. Its resulting toxic counterpart, when not functioning properly is known as 'Aama' and this Aama combines with bodily Doshas to form 'Sama Doshas'. These 'Sama doshas' can be considered as responsible agents for maintaining low blood pressure.

**KEYWORDS:** Aama, Sama doshas, Agni, Hypotension.

#### **INTRODUCTION**

As per Ayurveda, it is nothing else but 'Oja' which provides strength to body. Oja is considered to be responsible for the formation of compact and proportionate musculature;

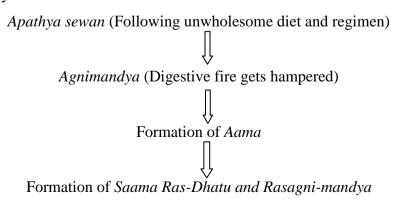
healthy sense organs and for proper functioning of body. *Ayurveda* explains 'Oja' as the essence of preformed bodily 'prashasta dhatus' and this state of 'prashasta dhatu sampat' can only be achieved by the proper status of 'Agni' (digestive fire). The strength of 'Agni' highly depends upon the type of food we take and the physiological status of individual.

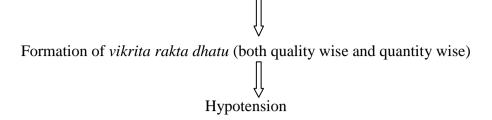
When 'hitkara aahara' is taken with peaceful mental status, the 'Agni' will remain in equilibrium state. It will result in formation of proper dhatus and ultimately the essence of dhatus (i.e., oja) can be obtained. It will strengthen the body to boost individual's immunity (Vyadhikshamattva), which is not only the resistance power to disease but also helps in speedy recovery after the exposure to disease. Thus according to Ayurveda, everything that we consume must be digested. But when the food is not properly digested, the resulting toxic counterpart formed is known as 'Aama' and this Aama combines with bodily Doshas to form 'Sama Doshas'. The classical symptoms of aama doshas explained in Ashtanga Hridaya include – Srotorodha (Chocking up of bodily passages), Balabhramsha (general debility), Guruta (heaviness in body), Alasya (letharginess), Apakti (indigestion), Aruchi (anorexia), Malasanga (constipation) etc.

#### SAMA DOSHAS AND RAKTA DHATU

As *Ras-Dhatu* is the very first *dhatu* formed by *aahara rasa*, it can get affected easily and very early in state of *samata*. In such situation the above mentioned symptoms like *Guruta*, *Alasya*, *Apakti*, *Aruchi* and *Malasanga* can be noticed. Also '*Rasagni*' gets hampered due to the involvement of *aama* and thus formation of *Rakta-dhatu* will not take place properly. All these events collectively may create the condition of hypotension.

Such state of hypotention can take some time to occur till the formation of *vikrita Rakta-dhatu*. Various *Acharyas* has explained different time durations for the formation of *Rakta dhatu*. Some has advocated about the one day duration while some others has said that it takes about 3 days for the formation of *Rakta dhatu*.





#### PRESENTATION OF HYPOTENTION WITH SAMAVASTHA

- Headache or heaviness in head.
- Vertigo
- Anorexia
- Nausea
- Drowsiness
- Letharginess
- Heaviness in body
- Constipation
- Abdominal distension

#### ANOTHER CAUSES OF LOW BLOOD PRESSURE

When the systolic blood pressure becomes less than 90 mmHg or diastolic blood pressure becomes less than 60 mmHg, termed to be as low blood pressure. But generally blood pressure less than the ideal condition i.e., 120/80 mmHg can be categorized under low blood pressure.

Medical conditions that can cause low blood pressure include.

- **Pregnancy:** Because the circulatory system expands rapidly during pregnancy, blood pressure is likely to drop. This blood pressure usually returns to the pre-pregnancy level after given birth.
- **Heart problems:** Some heart conditions that can lead to low blood pressure includes bradycardia, any valve related problems, heart attack and heart failure.
- **Endocrine problems:** Addison's disease, Parathyroid disease, hypoglycemia can trigger low blood pressure.
- **Dehydration:** When the body loses more water, it can cause dizziness, fatigue and weakness. Vomiting, fever, severe diarrhea, overuse of diuretics and strenuous exercise can lead to dehydration.

- **Blood loss:** A major injury or internal bleeding can lead to a severe drop in blood pressure.
- **Severe infection (septicemia):** Infection of bloodstream can lead to a life-threatening drop in blood pressure called septic shock.
- **Severe allergic reaction (anaphylaxis):** Anaphylaxis can cause breathing problems, a swollen throat, hives, itching and a dangerous drop in blood pressure.
- Lack of nutrients in your diet. A lack of the vitamins B-12 and folate can keep the body from producing enough red blood cells (anemia), causing low blood pressure.

#### Some medications can also be considered as the cause of low blood pressure, including.

- Alpha blockers, such as prazosin (Minipress).
- Diuretics such as furosemide (Lasix) and hydrochlorothiazide (Maxzide, Microzide, others).
- Drugs for Parkinson's disease, such as pramipexole (Mirapex) or those containing levodopa.
- Beta blockers, such as atenolol (Tenormin) and propranolol (Inderal, Innopran XL, others).
- Certain types of antidepressants (tricyclic antidepressants), including doxepin (Silenor) and imipramine (Tofranil).
- Drugs for erectile dysfunction, including sildenafil (Revatio, Viagra) or tadalafil (Adcirca, Cialis), particularly when taken with the heart medication nitroglycerin.

#### DIFFERENT SAMPRAPTI DUE TO AAMA RESULTING IN HYPERTENSION

Whenever the state of *vataprkopa* is seen with previously formed *aama*, it may cause hypertension in spite of hypotension. Vitiated *vata* may result in vitiation of both *kapha* and *pitta doshas*, which later may get mix with accumulated *aama* resulting in *srotorodha* (resistance in channels). Once resistance to channels occurs, *vata* gets bounded to the particular area causing various diseases. This bounded *vata* when get mix with *rakta* (i.e., *Raktagata Vata*) may result in the onset of *hypertension*. Thus by different *samprapti*, *sama doshas* can also be considered to be responsible for causing hypertension.

#### TREATMENT OF HYPOTENSION OCCURING DUE TO SAMAVASTHA

All the *Acharyas* has contraindicated the application of *shodhana* therapy in case of *shareeranugata saamavastha*. So the line of treatment one must follow in case of hypotension due to *sama-doshas* is –

- 1. Langhana
- 2. Pachana

**Langhana**: The types of langhana one can follow are: *pipasa* (bearing thirst), *maruta-sewana* (exposure to heavy air flow), *aatapa-sewana* (exposure to sun), *upawasa* (fasting), *vyayama* (exercise). Any one of these methods should not be chosen in condition of hypotension due to malnutrition/ dehydration/ blood loss etc. Such type of *langhana* should be performed only in case of *saamaj avastha*.

The term 'Langhana' should not be misunderstood with the only meaning 'upawasa'. State of Langhana can also be achieved by the intake of 'laghu ahara sewan' (easily digestible food). The basic principle behind the langhana therapy is that – aaharam pachati vahnir doshanaharvarjitah, dhatoon ksheeneshu dosheshu. When the food is ingested, our bodily fire gets busy in digesting it; but when the oral intake of food is stopped or easily digested food is ingested, the digestive fire gets time to pacify the vitiated doshas and then at the next level it starts digesting aama indulged in various dhatus. So in case of shareeragata samavastha, langhana must be followed by taking easily digestible food which will help in providing time to digestive fire for the digestion of preformed bodily aama.

**Pachana**: In *Ayurveda*, the use of *pachana* is indicated post *langhana* therapy in case of excess accumulation of *aama*. *Pachana* can be performed by using hot drinking water only or by the administration of oral drugs with *tikta*, *katu rasata* and *ushna-teekshna-shoshaka* properties. Such medicines which can be used to achieve the state of *niramata* are-*Panchakola churna*, *Shunthi churna*, *Ajmodadi churna*, *Chitrakadi vati* etc.

**Pathya**: *Takra* (buttermilk); *Dhaan ki laja* (puffed rice); *Shastik* and *shali dhanya*; *Masoor* (red lentils) and *Moong* (Petite yellow lentils) for preparing *yoosha*; *Manda* (rice water); *Peya*. All these food items should be given only when patient feel hungry. Hot water for drinking should be given in case when he/she feels thirsty. Once the state of *niramata* is achieved, patient must be kept on *laghu aahara* (*khichadi, moong daal, chapatti*).

*Takra* is considered to be the ideal beverage in case of *samata* due to its *ushna*, *vikasi* and *rooksha* property. *Vikasi* property helps it to enter the minute channels wherever *aama* is indulged and then its *ushna*, *rooksha* properties helps in aama *pachana*. Thus patient can also be kept only on *takra* diet.

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