

**Study of Sodium Contain In Blood of Patient Suffering From Amlapitta**<sup>1</sup>Dr Narendra Yadnik, <sup>2</sup>Dr. K.D. Sathe, <sup>3</sup>Dr S.V. Sarganacharya, <sup>4</sup>Dr Madhavi Hebali<sup>1</sup>Lecturer, Dept. of Sharir Kriya, Parul institute of Ayurved, Parul University, Limbda, Vadodara.<sup>2</sup>Professor, Dept of Kriya Sharir, SSAM Hadapasar, Pune.<sup>3</sup>Professor, Dept. of Swasthavritta, Parul Institute of Ayurved, Parul University, Limbda, Vadodara.<sup>4</sup>Professor, Dept. of Rognidan, Parul Institute of Ayurved, Parul University, Limbda, Vadodara.**Corresponding Author:** Dr Narendra Yadnik, Lecturer, Dept. of Sharir Kriya, Parul institute of Ayurved, Parul University, Limbda, Vadodara, India**E-mail Id:** [narendrayadnik@gmail.com](mailto:narendrayadnik@gmail.com)**Conflicts of Interest:** Nil**Abstract**

In this new modern era of Industrialization and Globalisation, everyone is Busy with his/her related career and lifestyle. Career compels every human to get mould as per the profession requirements. So many times, health becomes a secondary need unknowingly of that person. If the process and recipe of Indian food is observed, excessive quantity of chille powder, spices and sauces are mixed to give delicious taste to the food. People consume it greedily and suffer from the most common of Acidity or Hyperacidity. Spices like “Kali mirch, cumin seeds, Lashuna, Garlic, Asafoetida, Lavanga, Bay leaf increase the palatability of food. But their excessive use in daily cooking recipe aggravates the Pitta Dosha after eating them. Recurrent aggravation of Pitta leads to disease “Amlapitta”. In this study Diagnosed Amlapitta patients were taken. Clinical examination was done and their serum Sodium test from recognised lab was performed. Analysis was done after complete study.

**Keywords:** Lavana, Serum sodium, Amlapitta, Spices.**Introduction**

Considering all types of professions and standard of living, fast food is becoming the popular trend between the people, whatever be the profession i.e. Engineers, Doctors, IT professionals, workers etc. They all are consuming the Diet containing high sodium, fats, protein which is not significantly needed to the human body. People not only add the spices but also dietary salt is added in snacks and lead excessively. According to charakacharya, Lavana is Ushna, Tikshna, Abhishyandi by the properties. So it is need to study the quantity of sodium in blood of patient diagnosed as Amlapitta. Charakacharya described in Ch. Su. 26 that the excessive consumption of Lavana Rasa is a cause of Amlapitta vyadhi. Amlapitta vyadhi is briefly explained by Acharya Kashyapa. So study is to assess the serum sodium level in diagnosed patient of Amlapitta, As Dietary salt is nothing but Lavana Rasa.

**Types of Amlapitta**

Urdhwag Amlapitta	Adhoga Amlapitta
- Vamana	- Trushna.

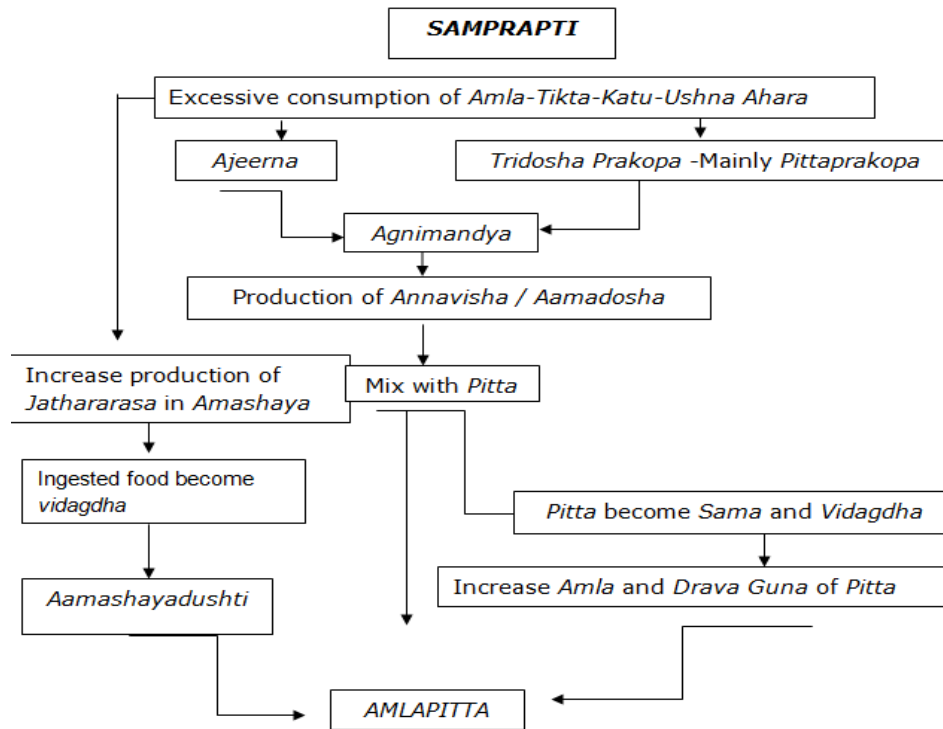
- Harita, Pitta, Neela, Krushna, Rakta, Raktabha, Mansodakabha Varna	- Daha.
- Ati Amla	- Murchha.
- Ati Pichhila	- Bhrama.
- Achha	- Moha.
- Shleshmanujata	- Hrillasa.
- Vividha Rasa	- Kotha.

**Etiological factor of Amlapitta are related with**

1. Aharaja.
2. Viharaja.
3. Agantuja.
4. Manasika and others.

**Lakshana of Amlapitta**

Vataj Amlapitta	Pittaja Amlapitta	Kaphaja Amlapitta
- Shoola.	- Bhrama	- Gaurava.
- Angasada.	- Vidaha	- Chhardi.
- Jrumbha.	- Sitaupasaya.	- Ruksha Upasaya.
- Snigdha Upasaya	- Svadupasaya	- Usma Upasaya.



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### Hyperacidity

Hyperacidity simply means an increased level of acid in the stomach. The stomach secretes hydrochloric acid, a digestive juice that breaks down food particles into their smallest form to aid digestion. When there is an excessive amount of hydrochloric acid in the stomach, the condition is known as hyperacidity.

### Serum Sodium Test

A sodium blood test is a routine test that allows your doctor to see how much sodium is in your blood. It's also called a serum sodium test. Sodium is an essential mineral to your body. It's also referred to as Na<sup>+</sup>. Blood sodium can also be part of an electrolyte panel. Electrolytes are substances that carry an electrical charge. Potassium and chloride are other electrolytes.

- **Material And Methods**

Study was conducted in two phases

- 1) Conceptual study - Ayurvedic literature was collected from ayurvedic Samhitas and their commentaries like Charaka Samhita, Sushruta Samhita, Ashtanga Hrudaya, Kashyapa Samhita, Madhav Nidana.
- 2) Observational study - Modern literature was collected from various Modern text books, previous work done, educational internet sites like PubMed etc.

- **Material Used**

- 1) Amlapitta diagnosed patient
- 2) Diet chart for daily diet
- 3) Serum Sodium Test (Recognised Lab)
- 4) Questionnaire for screening of patient consuming excessive dietary spices and spicy food.
- 5) Stethoscope
- 6) Sphygmomanometer

No	Raw & processed Food product with additive salt	Time	Quantity	≈ gms of salt

- **Observational study**

- a) Study type - Observational → Analytical
- b) Sample Size – 6 volunteers
- c) Sampling method – random sampling
- d) Desha – Sadharana

• **Inclusion Criteria**

- 1) Amlapitta Diagnosed patient of Sadharana Desha
- 2) Age group – 18 – 60 year
- 3) Gender – Either
- 4) Irrespective of Prakruti and Diet
- 5) Irrespective of alcohol and smoking

• **Exclusion criteria**

- 1) Known case of chronic illness such as CRF, CKD, DM.
- 2) Known case of Hormonal Disease

• **Study design**

1. Selection of Diagnosed Amlapitta Patient
2. History of dietary habits by Diet chart, questionnaire and CRF
3. Written and informed consent of all the patients was taken
4. Diet chart was felt for approximate consumption of spices and salt
5. Serum Sodium Test
6. Statistical Analysis
7. Inference was made finally

**Observation and Result**

All six patients were showing symptoms of Amlapitta. Serum sodium test showed normal values. Among them, 3 patients showed the values near border line i.e. near of 150 mEq/L.

The values are as below:

1) P1

Age 40 Female

Serum sodium – 135.7 mEq/L

2) P2

Age 50 yr Male

Serum Sodium - 137.5 mEq/L

3) P3

Age 28 yr Female

Serum Sodium - 139.5 mEq/L

4) P4

Age 32 yr male

Serum sodium – 142.3 mEq/L

5) P5

Age 45 yr Male

Serum sodium - 148.3 mEq/L

6) P6

Age 40 Male

Serum sodium - 144.4 mEq

### **Discussion**

Atisevana Acharya charaka have described in Ch. Su. 26 that, Lavana rasa is a cause of Amlapitta vyadhi. So in this study, patient were examined to assess that whether blood sample of Amlapitta patient shows increased traces of Sodium as Lavana Rasa is a cause of Amlapitta. Lavana dravya that is Dietary salt is nothing but a Lavana rasa. So here, Lavana (Dietary salt) was considered for study. Hypothesis is that, if amlapitta in patient is caused due to excessive consumption of dietary salt and spices, then there should be increase in sodium level in blood.

In observation, it is seen that no any of the Amlapitta patient is suffering from high serum sodium. All samples are within normal limit. So the result is insignificant to the hypothesis. But in 3 patients, Serum sodium level is near border line of normal range. So if these patients further take high sodium and high spicy diet, they may show increased sodium level in blood. Also, people in this sadharana desha do not consume excess salt or spices. So it's needed to increase sample size for this analytical study. 50% of given sample size, is on the way to risk of increase in blood sodium level in future if they persistently consume high spicy and salty diet.

### **Conclusion**

- 1) From the above Observation and Discussion, It is concluded that serum sodium level does not significantly present above the normal value in Amlapitta
- 2) Excessive consumption of dietary salt does not increase sodium level in Amlapitta Patient.
- 3) From above observation, if Amlapitta patient persistently consumes excessive salt and spices, he may suffer from high serum sodium level.

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