An assessment on the relation between Prakruti and Amavata disease

Sri Nagesh K. A.,1 Abhijit H. Joshi.2
1PhD Scholar, 2Head, Department of Ayurveda, Vidyapeeth Bhavan, Tilak Maharashtra Vidyapeeth, Gultekdi, Pune, Maharashtra, India.

ABSTRACT

Prakruti is said to be the basic component of a human being. It has been explained in classics that Prakruti provides susceptibility for certain diseases based on Dosha. It is the time of the hour to explore and prove the concept clinically. A total of 362 diagnosed cases of Amavata were taken for the study and were assessed for the Prakruti dominant among them. Sampling was cross sectional simple random method. The observation made during were recorded and analyzed. It was also observed about predominant Rasas consumed as well as the dominant Guna they consumed. Analyzing Rasa and Guna added more value to the study. The observations were applied with descriptive as well as inferential statistics. Dominance of Vata-Pitta Prakruti was found with 42% of cases and Pitta Prakruti alone stood last with only 5% cases developing Amavata.

Key words: Prakruti, Amavata, Rheumatism, Rheumatoid arthritis.

INTRODUCTION

Since the day when research works took its toll over Ayurveda, the most appealing was the word, Prakruti. There were many research works undertaken over Prakruti and its relation over disease manifestation. The various types of Prakruti and their characteristics have been critically analyzed; the different modern protocols have been implemented to understand the nature of man. It was linked with the genomics and different observational studies also have been undertaken.

The disease Amavata which is a common phenomenon during clinical practice characterized by body ache, tastelessness, excessive thirst, lethargy, heaviness all over the body, raise in body temperature, indigestion and edema over body parts. There are explanations in classical texts of Ayurveda regarding the relationship between Prakruti and any disease. It has been said that, persons with certain Prakruti are liable/prone for certain diseases. The probability of disease manifestation in relation with a specific Prakruti needed to be practically observed and understood.

Statement of the problem

The concepts explained in classics needed to be practically applied and understood. The purpose of practical implementation is not to question the authenticity of the explanation, is just to understand with a clear mandate over practicality. Unless it is clinically applied and understood, one cannot achieve a command over the subject. In order to understand the relation between Prakruti and any disease, a common illness named Amavata has been chosen.

Literary review

Prakruti is said to be the basic component of a living being. Ayurveda explains three Doshas being the reason for Prakruti. There are Shareerika (physical) as
well as *Manasika* (mental) Prakruti. They influence on each other.

**Tridoshas** named as *Vata*, *Pitta* and *Kapha* decides the *Shareerika Prakruti*. There can be a participation of one or two or all the three *Doshas* in the formation of Prakruti.[3]

*Doshas* whichever is dominant on the *Shukra* and *Shonita* and when they combine, together lead to the formation of Prakruti.

Person with those respective Prakruti have their own characteristics with respect to their bodily content and their susceptibility to certain disease is prominent.

*Vata Prakruti* person have the higher susceptibility to develop *Vata* related diseases compared to the persons with other type of Prakruti and so on.

When persons with *Vata Pradhana* (Prakruti) consume reasons for *Vata* aggravation, *Vata* aggravates faster in him compared to any other *Dosha*. This principle is applicable in case of other types of Prakruti as well.[4]

This phenomenon is directly proportional to the *Dosha* dominant in their Prakruti as well as the *Dosha* dominance in the disease.

Development of any disease has a specific causative factor as well as a specific series of events for its formation.

*Vata* which is propelled/provoked by *Vata Dosha* rushes towards *Shleshma Sthana*, getting too much of *Vidagdha* in *Shleshma Sthana*, gets propelled towards *Dhamani*’s, well influenced and affected by the *Vata*, *Pitta* and *Kapha*, the *Anna Rasa* attains *Picchila Gunas* and creates the obstruction in the *Srotas*. Produces *Daurbalya* (weakness), *Gurutva* (heavyness) in *Hridaya* rapidly. Such *Ama* is a shelter/pre-condition for multiple diseases. By getting aggravated all together (*Ama, Dosha*) enters in to *Trika Sandhi* and produces the *Stabda* (stiffness) all over the body. This condition is called as *Amavata*.[4]

**Symptoms of Amavata**

*Angamarda* (bodyache), *Aruchi* (loss of taste), *Trishna* (thirst), *Aalasya* (lazyness), *Gaurava* (heavyness), *Jwara* (raise in temperature), *Apaaka* (indigestion), *Shoonata of Anga* (swelling of the body parts) are the symptoms seen in *Amavata*.[5]

**OBJECTIVE OF THE STUDY**

To study the relation between *Prakruti* and *Amavata* disease.

**MATERIALS AND METHODS**

**Materials**

**Literary:** literary sources for the present study have been taken from the Ayurveda classics, its reputed commentaries, published journals and reputed Sanskrit-English dictionaries.

**Observational:** A total of 362 cases which are fulfilling the inclusion and exclusion criteria from IPD and OPD of Sri Sri College of Ayurvedic Science and Research Hospital, Bengaluru, are taken for the study.

**Methodology**

**Type of Study**

- Literary study
- Observational study

**Literary study**

Literary study was conducted by collection of various data from classical texts of Ayurveda, darshanas, grammar and translations.
Observational study
Observational study was conducted by collection of various diagnosed cases of Amavata from different OPD’s and IPD’s of SSCASR Hospital, Bangalore. Data thus collected was analyzed for Prakruti.

Research design
The present study was a retrospective cross sectional study. Diagnosed cases of Amavata of either sex were collected for the study between the age group of 20 to 50 years by a non randomized method. The causative factors in each case were collected and compared with the symptom produced.

Source of data
The patients form OPD and IPD of Sri Sri College of Ayurvedic Science and Research, Bangalore were collected for the study.

Method of collection of data
The diagnosed cases of Amavata were taken by cross sectional random method of either sex between the age group 20-50 years.

The data were collected in a detailed Case Record Form (CRF) prepared for the study.

Inclusion Criteria
1. Patients with classical signs and symptoms of Amavata.
2. Both sexes.
3. Age group: 20- 50 yrs.

Exclusion Criteria
1. Cases involving other systemic disorders.
2. Age - less than 20 years and above 50 years.

Sample size - A total of 362 patients.
Sampling method - Cross sectional simple random method.

Observations
The observations made were classified according to the frequency of the Prakruti involved, development of the pathogenesis according to the classical texts and the symptoms developed.

Statistical analysis
Following descriptive and inferential statistics were employed in the present study.

Descriptive statistics
The Descriptive procedure displays univariate summary statistics for several variables in a single table and calculates standardized values (z scores). Variables can be ordered by the size of their means (in ascending or descending order), alphabetically, or by the order in which the researcher specifies.

Inferential statistics
Cramer’s V Test (Cross tabulations)
The Crosstabs procedure forms two-way and multiway tables and provides a variety of tests and measures of association for two-way tables. The structure of the table and whether categories are ordered determine what test or measure to use. Cramer’s V test was employed in the present study.

Cramer’s V is a measure of association between two nominal variables, giving a value between 0 and +1 (inclusive). It is based on Pearson's chi-squared statistic. In the present study Cramer’s V test was applied to find out the association between grades and duration for various parameters selected.

Chi-square test
The Chi-Square Test procedure tabulates a variable into categories and computes a chi-square statistic. This goodness-of-fit test compares the observed and expected frequencies in each category to test either that all categories contain the same proportion of values or that each category contains a user-specified proportion of values.

All the statistical methods were carried out through the SPSS for Windows (version 23.0).

Observation and Results
A total of 362 cases diagnosed with classical signs and symptoms of Amavata have been taken into study and observed for various Prakruti found among them. There are general information collected along with Nidana and Lakshana based on Case Record Proforma
(CRF) specially prepared for the purpose. The selection of sample was cross sectional and study was retrospective. The selected sample was distributed based on various factors and analyzed as below.

The samples were observed for the dominant *Rasa* they consumed, the food with dominant quality as well as the *Prakruti* they had.

**Table 1:** Frequency distribution table of the selected sample by *Rasa* and test statistics.

<table>
<thead>
<tr>
<th>Combination of Rasa</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>88</td>
<td>24.3</td>
</tr>
<tr>
<td>A</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>MA</td>
<td>8</td>
<td>2.2</td>
</tr>
<tr>
<td>ML</td>
<td>4</td>
<td>1.1</td>
</tr>
<tr>
<td>MK</td>
<td>8</td>
<td>2.2</td>
</tr>
<tr>
<td>MKs</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>AL</td>
<td>6</td>
<td>1.7</td>
</tr>
<tr>
<td>AK</td>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td>LK</td>
<td>16</td>
<td>4.4</td>
</tr>
<tr>
<td>TKs</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>MAL</td>
<td>47</td>
<td>13.0</td>
</tr>
<tr>
<td>MAK</td>
<td>9</td>
<td>2.5</td>
</tr>
<tr>
<td>MLK</td>
<td>29</td>
<td>8.0</td>
</tr>
<tr>
<td>MKT</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>ALK</td>
<td>48</td>
<td>13.3</td>
</tr>
<tr>
<td>AKT</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>LKKs</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>LKT</td>
<td>6</td>
<td>1.7</td>
</tr>
<tr>
<td>KTKs</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>MALK</td>
<td>37</td>
<td>10.2</td>
</tr>
<tr>
<td>MAKT</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>MLKT</td>
<td>2</td>
<td>0.6</td>
</tr>
<tr>
<td>MKTKs</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>ALKT</td>
<td>26</td>
<td>7.2</td>
</tr>
<tr>
<td>ALKKs</td>
<td>1</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Test statistics: $X^2 = 947.061$; $p = .001$

Graph 1: Frequency distribution of the selected sample by *Rasa*.

Among 362 cases taken, the dominance of *Rasa* consumed by them was assessed. Major share of 88 cases was taken up by *Madhura* Rasa with 24.3% followed by *Amla*, *Lavana* and *Katu* Rasa consumers with 48 cases compounding up to 13.3% then by consumers of *Madhura*, *Amla* and *Lavana* with 47 cases compounding up to 13%. This is followed by the consumers of *Madhura*, *Amla*, *Lavana* and *Katu* Rasa with 37 cases leading to 10.2%, then by the consumers of *Madhura*, *Lavana* and *Katu* Rasa with 29 cases contributing 8% of total cases taken. This is followed by the consumers of *Amla*, *Lavana*, *Katu* and *Tikta* Rasa with 26 cases sharing 7.2% of total cases then by the consumers of *Lavana* and *Katu* Rasa with...
16 cases sharing 4.4% of total cases. Remaining consumers have varied consumptions of Rasa. Chi-Square test (947.061) revealed that there is a highly significant (.001) difference between Madhura Rasa and Amavata compared to other types of Rasa. It can also be observed that there are only one case each with that of Amla Rasa, and other combination of Rasas which are also highly significant for not leading to Amavata compared with that of other Rasas and their combinations.

Table 2: Frequency distribution table of the selected sample by Guna and test statistics.

<table>
<thead>
<tr>
<th>Guna</th>
<th>Frequency</th>
<th>Percent</th>
<th>Test statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guru</td>
<td>308</td>
<td>85.1</td>
<td>X² =178.221</td>
</tr>
<tr>
<td>Laghu</td>
<td>54</td>
<td>14.9</td>
<td>p=.001</td>
</tr>
</tbody>
</table>

Graph 2: Frequency distribution of the selected sample by Guna.

Total of 308 cases were found to be having Guru Guna in their Ahara with 85.1% and the ones who were the consumers of food with Laghu Guna were 54 with 14.9%. Chi-Square test (178.221) revealed a highly significant difference (.001) between Guru Guna and Amavata with that of Laghu Guna.

Table 3: Frequency distribution table of the selected sample by Prakruti and test statistics.

<table>
<thead>
<tr>
<th>Prakruti</th>
<th>Frequency</th>
<th>Percent</th>
<th>Test statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vata</td>
<td>66</td>
<td>18.2</td>
<td>X² =469.602</td>
</tr>
<tr>
<td>Pitta</td>
<td>18</td>
<td>5.0</td>
<td>p =.001</td>
</tr>
<tr>
<td>Vata-Pitta</td>
<td>160</td>
<td>44.2</td>
<td></td>
</tr>
<tr>
<td>Pitta-Kapha</td>
<td>103</td>
<td>28.5</td>
<td></td>
</tr>
<tr>
<td>Kapha-Vata</td>
<td>15</td>
<td>4.1</td>
<td></td>
</tr>
</tbody>
</table>

The selected 362 cases were distributed based on the Prakruti and analyzed. It was found that 160 cases had Vata-Pitta Prakruti contributing 44.2% followed by 103 cases with Pitta-Kapha Prakruti contributing 28.5%, 66 cases of Vata Prakruti contributing 18.2%, 18 cases with Pitta Prakruti contributing 5% and 15 cases of Kapha-Vata Prakruti contributing 4.1%. Chi-square test (469.602) revealed that there is a highly significant difference (p=.001) between Vata-Pitta Prakruti and Amavata compared to that of other types of Prakruti.

Graph 3: Frequency distribution of the selected sample by Prakruti.

Discussion

Tendency of the aggravated Doshas to lodge and affect specific organ or area depends on the natural location of the Doshas as well as the areas and organ where they are compelled to locate.
Amavata and Laghu Guna when taken in excess would result in Gurutva only in developing Amavata. Prakruti Pareeksha showed that 42% of cases were found to be having Vata-Pitta Prakruti, Pitta-Kapha Prakruti stands next with 27.1% and last being Vata-Kapha Prakruti with 0.8%.

CONCLUSION

Specific type of Prakruti makes a person susceptible for specific Dosha dominant disease. Vata-Pitta Prakruti persons are found to be more susceptible (42%) for Amavata. Pitta Prakruti persons were found to be less susceptible for Amavata disease with only 5% of incidence. Along with Prakruti, consumption of food with Madhura Rasa and Guru Guna also contributed for the onset of Amavata.

REFERENCES

4. Acharya J.T., Madhava nidana by madhavakara, Madhukosha commentary, chaukhambha orientalia, Varanasi, ed. 6th, 2001;p.186.
5. Acharya J.T., Madhava nidana by madhavakara, Madhukosha commentary, chaukhambha orientalia, Varanasi, ed. 6th, 2001;p.187.

http://dx.doi.org/10.21760/jaims.v2i2.7704

Source of Support: Nil, Conflict of Interest: None declared.