

Demographic factors, personal history and clinical features of *Amavata* patients**Dr. Muhammed Safer P I¹,**

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ABSTRACT

In the present era, hectic lifestyle, unwholesome diet as well as the regimes of human being is the prime culprit in the high prevalence of chronic non communicable diseases. This ill healthy lifestyle may lead to the sluggish functioning of agni (bio fire) and the generation of ama (accumulation of waste matter) in body. The pathogenesis of amavata starts from gastrointestinal tract as generation of ama. This ama further proceeds to deeper pathological roots with special inclination to seats of Kapha dosha especially the Sandhis (joints). The demographic factors and personal history of individual has a vital influence in the pathology of the disease. Hence in this study the demographic factors and the personal history of the group of participants were examined. An observational study was conducted among 20 participants. Detailed case record form was used to collect the data and it was statically analysed. The collected data was tabulated and expressed in terms of percentages.

Key Words: *Amavata*, demographic factors, personal history

INTRODUCTION

Ayurveda explains *agni* as the key factor on which the maintenance of health and the well being of body of every individual depend upon¹. *Agnimandya* is considered as the root cause of all ailments². In the present day to day life people often are not aware of the time of food intake and the status of their digestive capability. Digestion and absorption of the given medicine is also dependent on *Agni* in all diseased conditions³. If the *agnimandya* is not addressed timely, it further leads the genesis of *ama*. *Ama* is described as the partially digested, faulty formed *rasa*, i.e. the first end product of the digestion⁴. While analyzing the aetiological factors food, activities and emotional disturbances are the contributory factors of the genesis of *ama*⁵. In the present era people are forced to practice unwholesome food and regime in the midst of hectic schedules and stress. This *ama* will initiate the origin of various pathological conditions according to the site of its lodgement⁶. The profuse *ama* has a special inclination towards the seats of *kapha*, the joints, and leads to the crippling multiple joint disease *amavata*⁷.

The disease has a strong association between few demographic factors and the habits and behaviour of the individual. Those who lead sedentary life style, follow faulty dietary habits are more susceptible to occurrence of *amavata*. Exertion immediately after food, grief, anxiety are also aetiologically aggravating factors of the disease *amavata*⁸.

MATERIALS AND METHODS

The present study was planned as an observational study. The participants for the study were selected from the Vaidyaratnam P S Varier Ayurveda College Hospital, Kottakkal, Kerala. Duration of the study was fixed as 18 months.

Ethical Considerations: Plan of the study was explained to the participants and informed written consent in regional language was obtained in document form. Only those participants who were willing to participate and who furnished the written consent form were included. The study protocol was placed before Institutional Ethics Committee of Vaidyaratnam P.S.Varier Ayurveda College, Kottakkal and clearance was obtained.

Selection of Participants: Screening of 52 participants was done in OPD, Vaidyaratnam P.S.Varier Ayurveda College Hospital. From the screened participants, 20 participants who were

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satisfying the inclusion criteria and willing to give informed written consent were included in the study.

Inclusion criteria: Participants of either sex in the age group 18- 50 of, having multiple joint pain with any four of the following confirmatory symptoms and more than two of associated symptoms, were included after getting an informed written consent^{5,6,7,8}. Pain all over the body (*Angamarda*), impaired taste perception (*Aruchi*), excessive thirst (*Trishna*), feeling laziness to do day to day activities (*Alasyam*), heaviness of the body (*Gouravam*), feverishness (*Jwara*), improper digestive activity (*Apaka*), generalized swelling over the body (*Anganam sunata*), general fatigue (*Utsaha hani*), constipation (*Vid vibandhata*) and excessive salivation (*Praseka*) were considered as the confirmatory symptoms.

Increased urine output (*Bahu mutrata*), disturbed sleep (*Nidra viparyaya*), excruciating pain like scorpion bite (*Vrischika damsavat vedana*), poor appetite (*Agni daurbalyam*), burning sensation (*Daha*), discomfort in chest (*Hrid graham*), gaseous accumulation with resonance (*Antrakujanam*), colicky pain in abdomen (*Kukshi sula*) and tastelessness (*Vairasyam*) were considered as the associated symptoms.

Exclusion criteria: Patients with chronic illness (more than 5 years) and pregnant or lactating women were excluded. Those who had major systemic illness like uncontrolled hyperglycaemia with complications and malignant hypertension were excluded.

Assessment and Data collection: The patient data including the socio demographic details and other relevant clinical data were collected and documented in the suitably designed data collection form designed as per the need of the study.

Data analysis: The collected data was checked, analysed and presented with the help of tables, graphs. Statistical analysis was done by using Microsoft Office 2007 Excel and Graphpad InStat version 3.

RESULTS:

Observation & data analysis :

Demographic data

The participants had a mean age of 42.05. Maximum frequency was observed in 41 – 50 group. 80% participants were female and male were only 20%. 55% of the participants were belonging to Hindu religion where 45% were Muslims. There were no uneducated participants. 20% were having primary education, 30% were having secondary education, 20% with higher secondary education and the remaining 30% were graduates. 85% participants were married and living with their spouse. One participant was unmarried and two were widows. Only 5% participants belong to very poor class. 15% belongs to poor, 30% belongs to lower middle and 50% belongs to the middle class.

5% of the participants were from each group coolie, social activist and pensioner. 15% were teachers, 10% were fish sellers and the remaining 60% were home makers.

Distribution according to presenting complaints:

1.1 Confirmatory symptoms

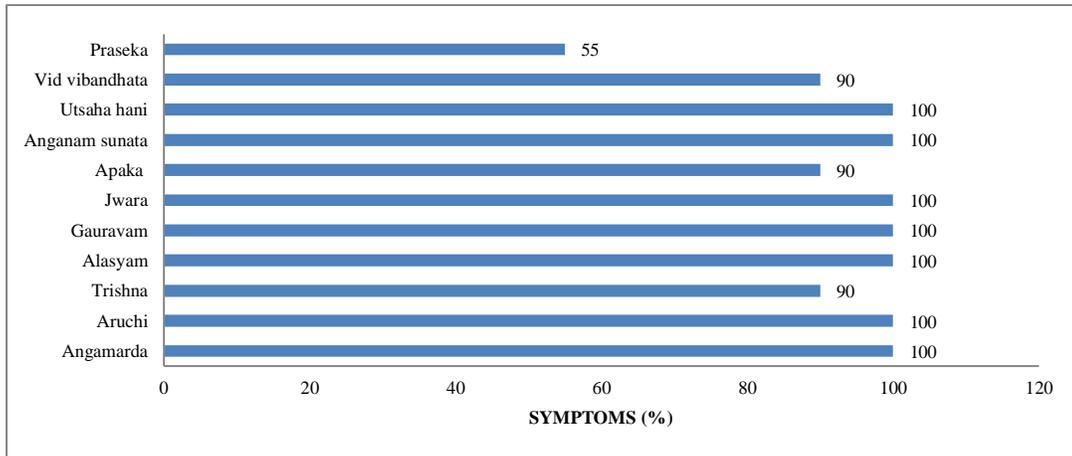
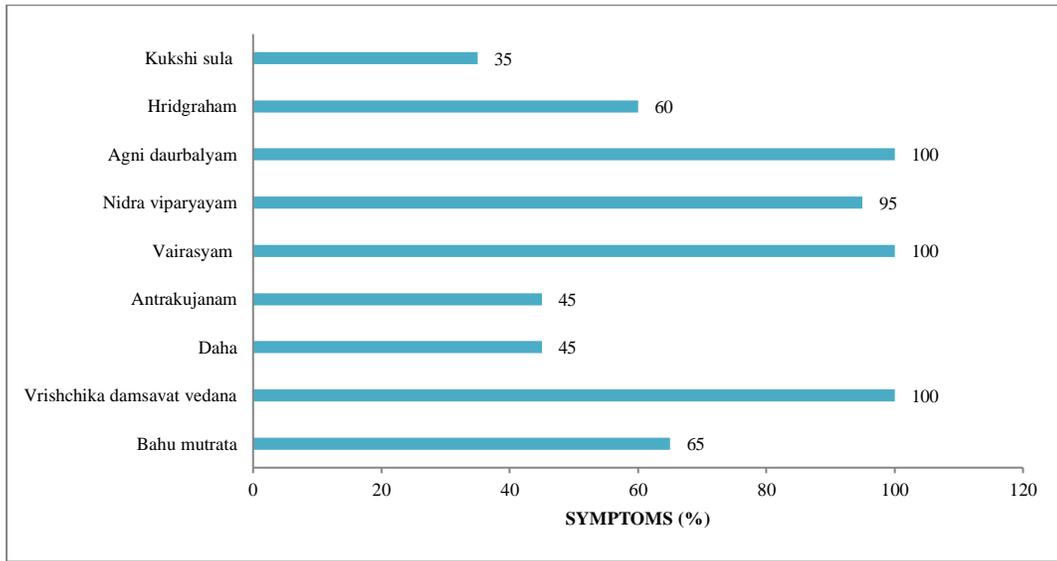


Figure 1. Distribution of participants according to confirmatory symptoms in percentage. *Angamarda, aruchi, alasyam, gauravam, jwaram, anganam sunata, utsahahani* were noted among 100% of the cases. 90% exhibited symptoms like *trshna, apaka* and *vid vibandhata*. 55% cases had *praseka*.

1.2 Associated symptoms :



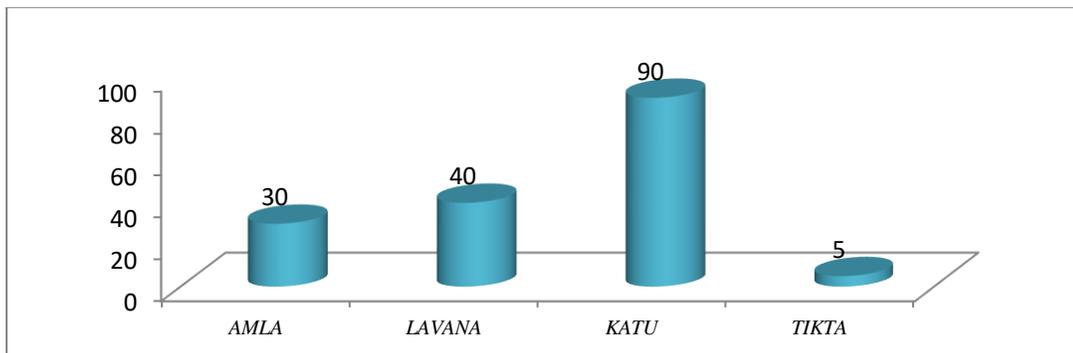
(Figure 9. Distribution of participants according to associated symptoms in percentage)

The symptoms like *Vriscika damsavat vedana*, *vairasyam* and *agni daurbalyam* were present in all the participants. *Nidraviparyayam* was reported by 95% participants. *Bahu mutrata* was observed in 65% of the participants. *Hridgraham* noted among 60% cases. *Antrakujana* and *Daha* were observed among 45% participants. 35% participants had *Kukshi sula*.

Distribution according to Diet: All the participants were following mixed dietary pattern.

Distribution according to Appetite: 95% participants had poor appetite. Only 5% claimed to have moderate appetite.

Distribution according to the desired rasa:



90% of the participants expressed *katu* as the desired taste. 40% were having *lavana* as the desired taste. *Amla* and *tikta* were opted by 30% and 5% respectively.

Distribution according to Bowel habit:

85% participants were having constipated bowel habit whereas 15% were having the normal bowel.

Distribution according to Micturition: 65% of the participants were complaining of polyuria. 30% had normal urination. 5% had oliguria.

Distribution according to Sleep Pattern: All the participants were complaining of disturbed sleep.

Distribution according to Physical Activity: Among the participants 60% were doing mild exercise whereas the remaining 40% were following moderate exercise.

Distribution according to Deha Desa: All the participants were with the disease affecting the whole body, sarvanga.

Distribution according to Kshanadi Kala: Among the whole participants 85% noted the disease aggravation during seetha and 15% noted aggravation in the *ushna kala*.

Distribution according to Anala: All the participants *agni* was in *mandavastha*.

Distribution according to Jarana Sakti: 90% of the participants were having *avara Jarana sakti* and 10% were having *madhyama Jarana sakti*.

Distribution according to Abhyavaharna Sakti: 95% of the participants were having *avara Abhyavaharna sakti* while only 5% had *madhyama Abhyavaharna sakti*.

Discussion on Demographic Data

Age: The participants had a mean age of 42.05 years. Maximum frequency, 70% belongs to 41 – 50 years groups. Previous studies support this age distribution in which 76% participants belongs to age group 30 – 60 where in the present study upper age limit was fixed as 50 years⁹. The clinical presentation of *Amavata* closely mimics with the rheumatoid arthritis (R.A.), in accordance with their similarities on clinical features, like pain, swelling, stiffness, fever, redness, general debility are almost identical. The onset of RA is frequent during 4th and 5th decade of life with 80% of participants developing the disease between 30-65 years of age¹⁰. Certain other scholars opines that onset of RA, in both women and men, is highest among those in their sixties¹¹.

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Sex: In this study 80% participants were females. Community prevalence study shows that female are more sufferers of *Amavata* than male and 3:1 is the ratio of occurrence between them¹⁰. The incidence of RA is typically two to three times higher in women than men¹¹. Moreover female population is more in North Malabar region from where the participants are coming from^{12,13}.

Distribution according to religion: 55% of the participants were belonging to Hindu religion where 45% were Muslims. The participants were from Malappuram, Kozhikode and Kannur districts which are distributed according to the census figures^{12,13}.

Distribution according to socio economic status: Only 5% participants belong to very poor class. 15% belongs to poor, 30% belongs to lower middle and 50% belongs to the middle class. This data does not mean that the disease is not affecting the rich or very rich people, but this represents the economic class who utilise the facility of Ayurveda College OPD. On the other hand few studies suggest that increased urbanisation has seen the rise of the middle classes and it is predominantly the diet and lifestyle preferences of this group that mark a change with the past¹⁴. Due to the practice of incompatible food, lack of physical activity, exertion just after food intake and stress and may lead to hypofunctioning of biofire and generation of ama.

Distribution according to presenting complaints

Presenting complaints were divided into confirmatory symptoms and associated symptoms.

Confirmatory symptoms: The cases were either fresh cases or in an acute exacerbating stage of already known cases. All the typical features of *amavastha* were evident. In RA the symptoms include malaise, fatigue, weakness, muscle soreness, low-grade fever, and weight loss¹⁵.

Associated symptoms: People with these rheumatic complaints may experience more losses in function than people without arthritis in every domain of human activity including work, leisure and social relations¹⁶. The observed symptoms in this study is consistent with previous studies¹⁷. Cardinal clinical findings of the disease such as pain, swelling, tenderness, morning stiffness, restriction of movements, muscle weakness were observed in all cases of those studies. Loss of appetite, anorexia, weakness, drowsiness, anaemia was observed in more than 50% of cases^{9,17}.

Distribution according to Diet: All the participants were following mixed dietary pattern. Injudicious intake of more than one type of food which are incompatible as usual in case of fast foods, may give rise every chance of *agni mandya*, *rasa dhatu dushti* and the further formation of *ama*¹⁸.

Distribution according to Appetite: 95% participants had poor appetite. Only 5% claimed to have moderate appetite. Since the basic reason behind the pathology of *amavata* is *agnimandya* all existing studies support these findings.

Distribution according to the desired *rasa*:

90% of the participants expressed *katu* as the desired taste. 40% were having *lavana* as the desired taste. Amla and *tikta* were opted by 30% and 5% respectively. There is a usual practice of taking pickles along with easily digestible diets like *kanji* during the most commonly seen *mandagni* stage, i.e. *jwara*. *Kaṭu* is helping in *deepana*, *pachana* and *ruchya*; causes *soshana* of *sneha*, *meda* and *kleda*. It clears the obstruction in channels and it is *kaphahara*¹⁹. There is a universal principle of the liking towards the opposite *rasa*, *guna* etc when one *dosha* is getting vitiated²⁰. Here the participants are having desire towards the *rasa* which is having the opposite property of *ama*. Tastelessness was a common feature observed in all the participants⁷. Since *amla* is *hridya* and *ruchya*, this may be the reason behind the desire towards this *rasa*. It is *agnideepana*, *pachana*, *ushna veerya*, *preenana laghu* and *mudha vatanulomana*²¹.

Distribution according to Bowel habit: 85% participants were having constipated bowel habit whereas 15% were having the normal bowel. *Vid vibaddhata* is a classical symptom of *amavata malasanga* is seen in *amavastha*²².

Distribution according to Micturition: *Bahumutrata* is one among the confirmatory symptom. *Bahu picchilata* is mentioned among the quality of *ama*²³. The basic cause is the increase of *apyamsa* which leads *kleda vriddhi*²⁴. The function of *mutra* is *kledavahana*²⁵. This may be the reason for the observed *Bahumutrata* in the participants.

Distribution according to Sleep Pattern: All the participants were complaining of disturbed sleep. Similar observation was noted in previous studies²⁶. The term *Nidraviparyaya* gives a clue about the particular sleep pattern, where the patient feels sleepy during day time and disturbed sleep at night²⁷.

Distribution according to *Kshanadi Kala*: Among the whole participants' disease aggravation is more in seetha when compared to that of *ushna kala*. *Ritu vaishamya* is a given reason for the sluggish *agni* and formation of *ama*²⁸.

Distribution according to *Anala*: All the participants *agni* was in *mandavastha*. This may lead to the impaired formation of the first *dhatu*⁴. This faulty formed *rasa dhatu* known as *ama* is the basic element in the pathology of the present disease⁷.

Distribution according to *Jarana Sakti* and *Abhyavaharna Sakti*: *Jarana sakti* may be sluggish since the *mandagni* leading to the accumulation of *kleda* which is the resultant product of undigested faulty formed unripe materials known as *ama*²⁹⁻³¹. The natural remedy to overcome this stage is *apatarpana* and body seeks this technique as a self correction method³². Since the person having *ama udgara* like after the just finished meals, he may not feel to take food³³. Heaviness, nausea etc are also hindering factors to administer food²⁴.

CONCLUSION

The observations in the present study were in accordance to the previous studies conducted.

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