

A Survey Study of Joint Pain to Develop the Assessment Criteria of *Agnidushti* in *Amavata*

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Abstract

Introduction: Due to *Agni dusti Nidana Sevana* when *Agni* is vitiated it becomes incapable in digesting the ingested food, lead to *Ama* formation. In *Amavata* as *Ama* gets accumulated in the joints leads to restriction in moments of the joints, pain, tenderness, swelling in affected site or joints. Aims-To assess the *Agnidushti* in *Amavata*, a scale will be prepared on the basis of *Ayurvediya* concept of *Amavata*. To make universal parameters to major status of *Agnidushti* in patients of *Amavata*.

Methods: 500 subjects of joints pain were taken in the survey study to know the cause of *Agni dusti* in *Amavata*. In the study we use two methods were to assess of *Agni*. Result Method-1, effect of *Agni* was assessed using six parameters *Ayu, Varna, Bala, Svasthya, Utsaha* and *Upacaya* and Method-2 was scoring of *Jaranashakti* by using *Utsah, Laghuta, Udgarsuddhi, Kshut, Trishnapravritti Yathochitmalotsarga* parameters.

Results: In first method-1-41.4% patients were having Grading-2 & 40.8% patients were having Grading-3 of *Ayu, Varna, Bala, Utshaha, Upchaya, Swasthya* and in second method-2-38% patients were having Grading-1 and 23.1% patients were having Grading-2 of *Jaran Shakti, Abhayavaharan Shakti, Ruchi* and *Vata Mutra Purisha Retasam Mukti*.

Conclusion: Both methods result showed that majority of population were involved in *Agni dusti nidana* which indicate *Agnidushti* and further *Ama* formation.

Keywords: *Ama, Agni dusti, Amavata* & survey study

Introduction

पृष्ठभूमि अग्निदुष्टि के कारण जिस समय निदान सेवन करा जाता है तो अग्नि के विकृत होने के कारण ग्रहण करा गया भोजन भी पचने में असमर्थ हो जाता है जिससे आम की उत्पत्ति होती है आमवात में आम आम के रूप में जोड़ों में जमा हो जाता है जिससे जोड़ों में दर्द, स्पर्श असह्यता, प्रभावित संधियों में सूजन दलक्ष्य आमवात में अग्निदुष्टि का आंकलन करने के लिए आमवात के आयुर्वेद कंसेप्ट के आधार पर स्केल तैयार किया गया आमवात के रोगियों में अग्निदुष्टि की प्रमुख स्थिति के लिए सार्वभौमिक मापदंडों को बनाने के लिए विधियाँ विधि-1 अग्नि के प्रभाव का मूल्यांकन छह मापदंडों का उपयोग करके किया गया था आयु, वर्ण, बल, उत्साह, उपचय, स्वास्थ्य विधि-2 जरणशक्ति के आधार पर स्कोरिंग की गई उत्साह, लघुता, उदगारशुद्धि, क्षुत्, तृष्णाप्रवृत्ति, यथोचितमलोत्सर्गद्य परिणाम विधि-1 -41.4: मरीजों के ग्रेडिंग 2 रही 40.8: मरीजों की ग्रेडिंग 3 रही आयु, वर्ण, बल, उत्साह, उपचय, स्वास्थ्य द्य विधि-2 दृ 38: मरीजों की ग्रेडिंग 1 रहे और 23.1: मरीज ग्रेडिंग 2 के थे जरणशक्ति, अभ्यवहरणशक्ति, रुचि, वातमूत्रपुरीषरेतसाममुक्तिद्य निष्कर्ष दोनों विधियों के परिणाम से पता चला है कि अधिकांश आबादी अग्निदुष्टि निदान में शामिल थी जो अग्निदुष्टि और आगे आम गठन का संकेत देती है।

Due to hypo functioning of *Agni* [1] the first *Dhatu Rasa* [2] is not formed properly & is retained in the *Amashaya* [3] that is called as *Ama* [4]. In *Amavata* [5] as *Ama* gets accumulated in the joints leads to restriction in moments of the joints, pain, tenderness, swelling in affected site or joints. *Ama* [6] is a major factor the production of *Amavata*. Assessment of *Agnidushti* [7] by preparing the scale will be helpful to select the better regimen to disintegrate the pathogenesis of *Amavata*.

Modern Concept of *Ama*

Ama can be defined as intermediary product of metabolism of carbohydrates fats and proteins. Improper metabolisms of carbohydrates produce lactic acid. Improper metabolisms of proteins produce lactic acid which is accumulate in joints.

Free radicals *Ama*

Free radical is an atom/molecule that containing one or more unpaired electron, which requires neutralization by free radical scavengers. Free radicals causes' damage to cell membrane and thus the cell is destroyed.

Material Methods

This study is approved by Ethical committee IEC No is IEC/ACA/2018/43

Aims and Objectives

- To conduct an epidemiological survey of joint pain.
- To make universal parameters to major status of *Agnidushti* in patients of *Amavata*.
- To develop assessment criteria of *Agnidushti* in patients of *Amavata*.

Need of Study

- To assess the correlation between *Agnidushti* in *Amavata*.
- With the help of survey among the patients of joint pain, patients of *Amavata* will be selected on the basis of questionnaire. Questionnaire will be prepared according to *Ayurvedic* symptoms of *Amavata* and American College of Rheumatology. With the help of survey an attempt will be made to establish correlation between dietary habits and *Amavata*.

Inclusion Criteria

- Patients of 16 years and above
- Either sex presenting with clinical features of Joint pain.
- Patients willing to sign the consent form.

Exclusion Criteria

- Diagnosed patients of *Asthimajjagat Vata*.
- Pregnant women and lactating mother.
- Any critical disease and Psoriatic arthritis.

500 subjects of joints pain were taken in the survey study to know the cause of *Agni dusti* in *Amavata*, to develop the parameter of *Agni*. Subjects were taken from NIA hospital and various camps conducted by NIA.

500 Subjects were According to Age, Sex, Religion, Occupation, Socio Economic Status *Desha*, Appetite, Bowel Habits, Micturition, Sleep Pattern, Addiction, Menstruation Cycle, Present Illness History etc.

- **Age:** In the present study maximum patients, 28.6% (143) were from age group of 41-50 years, 27.6% (138) patients were from age group of 31-40 years, 21.6% patients were from age group 51-60 years.

Discussion: The probable cause for more number of patients in this age group might be that middle age group patients are prone to excessive exercises, irregularity in diet, *Virudha Ahara-Vihara* [8] due to their professional responsibilities, mental stress [9] and depression. Thus psychic factor along with weather changes condition will aggravate the *Amavata* disease.

- **Sex:** 51.8% (259) patients were females and 48.2% (241) patients were males.

Discussion: After survey study it reveals that females are more prone for this disease due to tendency of heaving mostly spicy, sour, irregular food time and *Virudha Ahara* [10] rather than a balanced diet.

- **Religion:** 84.8% (424) patients were from Hindu religion, 14.4% (72) patients were from Muslim religion.

Discussion: There is no relation between religion and disease.

- **Occupation:** Maximum patients were House wife. 43.2% (216), 10.4% (52) was government Job, 13% (13) was

privet job, 8.8% (44) was labor work, 7.8% (39) was agriculture work.

Discussion: As we know that this disease is more prevalent in females

- **Socio-Economic Status:** 62.4% (312) patient's socio-economic status was middle class and 37.6% (188) patient's socio-economic status was poor.

Discussion: The reason for acquiring *Amavata* in lower middle class people has not capacity to buy different types of food as per the need of the body, so they consume inappropriate food with wrong combination, habit of skipping breakfast and meal due to their busy life style. Patients from poor and lower middle class cannot afford expensive healthy diet.

- **Desha:** Maxium 79% (395) patients belonging to *Jangalpradesha*, 17% (85) patients were *Sadharana Pradesha* and 4% (20) patients were *Anooppradesha*.

Discussion: There is no significant relationship found this disease and *Desha*.

- **Appetite:** 66.2% (331) patients having normal appetite, 31.6% (158) patients having reduced appetite, 2.2% (11) patients having increased appetite.

Discussion: *Mandagani* [11] and *Virudhaahara* cause of *Ama* formation, due to *Ama* and vitiated *Vata* [12] develop this disease.

- **Bowel:** 53.6% (268) patients having regular bowel habits and 46.4% (232) patients having irregular bowel habits.

Discussion: *Mandagani* [13] leads to faulty digestion resulting in *Ama* formation.

- **Micturition Frequency:** Micturition Frequency is 6T/D, 2T/N, 46.6% (233) patient's Micturition Frequency is 4T/D, 2T/N and 31.6% (158) patient's Micturition Frequency is 2T/D, 1T/N.

- **Sleep:** 46% (230) patients sleep frequency 2H/D, 6H/N, 43.4% (217) patients sleep frequency 7H/N and 10.6% (53) patients sleep frequency 6H/N.

- **Addiction:** Maximum 28.8% (144) patients addict of tea, 24% (120) patients were addict of smoking, pan, tea, 19.8% (99) patients were addict of smoking, alcohol, tea, 16.2% (81) patients were addict of mobile, tea, 7.8% (39) patients were addict of pan, gutaka, tea and 3.4% (17) patients were addict of alcohol, smoking, coffee.

Discussion: Maximum patients generally have tea addiction. These are mainly *Kashaya Rasa* predominance which vitiates *Vata* and *Pitta Dosha*, they destroy digestive pattern and produce *Ama*. According to modern point of view, tea increase free radical in body that may be a root cause of *Amavata*.

- **Menstruation Cycle:** In the present study 241 were female, 24.8% (124) patients was having menopause condition, 20.8% (104) patients were having regular Menstruation, 2.6% (13) patients were having irregular.

- **Present Illness History:** 84.6% (423) patients suffer from multiple joints pain with inflammation, 8.4% (42) patients suffering from B/L knee and wrist joints pain, 4.6% (23) patients suffering from lower back and knee joints pain and 2.4% (12) patients suffering from lower limb and knee joints pain.

Discussion: The production of *Ama* [14] and vitiated *Vatadosha* [15], maximum patients are suffering from multiple joints pain and inflammation. These are main sign and symptoms of *Amavata*.

Assessment the Effect of *Agni* uses Two following Methods

1. **Effect of *Agni* was assessed using six parameters *Ayu, Varṇa, Bala, Svasthya, Utsaha* and *Upacaya* [16]. Maximum score given was 18 following the scoring pattern of 1, 2 and 3 respectively for each question.**

Varna:

- a) Lustrous appearance,
- b) Normal,
- c) Dull

Balaṃ

- a) Can tolerate even the strenuous exercise

- b) Able to do the normal activities
- c) Not able to do the normal activities

Utsahaṃ

- a) Readiness to even the difficult task
- b) Readiness to do the normal activities
- c) Not enthusiastic even in the normal activities

Upacaya

- a) Endency to gain weight.
- b) Does not gain weight/Constant
- c) Tendency to lose weight

Svasthyam

- a) Generally have the feeling of well-being.
- b) Usually do not have the feeling of wellbeing.
- c) Usually remain sick.

2. **Second methods for assessment *Agnibala* [17]**

- a) ***Jaranashakti:*** Scoring according to *Jeerna Aaharalakshana* present after 4-6 hrs after taking food. They are *Utsah, Laghuta, Udgarshuddhi, Kshut, Trishnapravritti Yathoc hitmalotsarga* (Table No 1)

Table 1: Scoring symptoms

Symptoms	Score
Presence of five symptoms	0
Presence of four symptoms	1
Presence of three symptoms	2
Presence of two symptoms	3
00 of one symptom	4
Absence of all the symptoms	5
<i>Abhyavaharan Shakti</i>	
Taking food in good quantity twice / thrice	0
Taking food in normal quantity twice a day	1
Taking food in moderate quantity twice a day	2
Taking food in less quantity twice a day	3
Person taking food in less quantity once in a day	4
Person not at all taking food.	5
<i>Ruchi</i>	
Equally willing towards all the <i>Bhojyapadartha</i> .	0
Willing towards some specific <i>Aahara / Rasavishesha</i>	1
Willing toward only one among <i>Katu/Amla/Madhura</i> food stuffs.	2
Willing towards only most liking foods not to the other.	3
Unwilling for food but could take the meal	4
Totally unwilling for meal.	5
<i>Vaata Mutra PurishaRetasam Mukti</i>	
Occurs easily in normal routine times	1
Difficulty in defecation but <i>Malapravritti</i> daily with discomfort in abdomen	2
Can't pass stool daily & feeling heaviness in abdomen.	3
Passes stool after 2-3 days having gaseous distension	4
Passes stool after 3-4 days with <i>Grathita, Sakasta Malapravritti</i> & having gaseous distention with <i>Udgarapravritti</i> .	5

Scoring to assessment of Agnibala

Table 2: Table showing Scoring to assessment of Agnibala

If the score is under 0-7 indicate	<i>Pravara Agnibala</i>
If the score is under 8-14 indicate	<i>Madhyama Agnibala</i>
And score is above 14 indicate	<i>Avara Agnibala</i>

Agnidushti Method (1): 17.8% patients were having
Grading: 1 of *Ayu, Varna, Bala, Utshaha, Upchaya, Swasthaya*, 41.4% patients were having.
Grading: 2 of *Ayu, Varna, Bala, Utshaha, Upchaya, Swasthaya*, 40.8% patients were having.
Grading: 3 of *Ayu, Varna, Bala, Utshaha, Upchaya, Swasthaya*.

Discussion: This indicate these patients *Agni* is diminish and improper. *Acharya Caraka* mentioned in *Grahani* chapter that *Ayu, Varna, Bala, Utshaha, Upchaya, Swasthaya* [18] are depends on *Agnibala*. *Avara* [19] *Agnibala* produces *Ama*, which is root cause of *Amavata*.

Agnidushti Method (2): 22.55% patients were having
Grading: 0 of *Jaran Shakti, Abhayavaharan Shakti, Ruchi* and *Vata Mutra Purisha Retasam Mukti*, 38% patients were having
Grading: 1 of *Jaran Shakti, Abhayavaharan Shakti, Ruchi* and *Vata Mutra Purisha Retasam Mukti*, 23.1% patients were having
Grading: 2 of *Jaran Shakti, Abhayavaharan Shakti, Ruchi* and *Vata Mutra Purisha Retasam Mukti*, 11.5% patients were having
Grading: 3 of *Jaran Shakti, Abhayavaharan Shakti, Ruchi* and *Vata Mutra Purisha Retasam Mukti*, 4.5% patients were having
Grading: 4 of *Jaran Shakti, Abhayavaharan Shakti, Ruchi* and *Vata Mutra Purisha Retasam Mukti* and 0.25% patients were having
Grading: 5 of *Jaran Shakti, Abhayavaharan Shakti, Ruchi* and *Vata Mutra Purisha Retasam Mukti*.

Discussion: *Mandagani* and impairment of *Agnibala* produce *Ama* [20] formation *Amashaya*. This is route cause of disease.

Aharajnidana Questionnaire and there Analyzed Data

Q 1: What is your Food Habit-?: 76.6% patients were vegetarian and 23.4% patients were mixed (veg. + non veg.).
Discussion-There is no relationship between diet types of disease. This only signifies the demographical dominance of *Hindu* community in the zone.

Q 2: Quantity of Food Compared to other Family Members: 34% patients were having equal quantity of food, 59.2% patients were having less quantity of food and 6.8% patients were having more quantity of food. **Discussion-**These data support that *Mandagni* increasing *Ama* [21] and vitiated *Vata* are more responsible for *Amavata* [22].

Q 3: Atimatrashana: 42% patients were having *Atimatrashana* of food Daily, 9.6% patients were taking *Atimatrashana* of food monthly, 14.8% patients were taking *Atimatrashana* of food same time and 67.2% patients were taking *Atimatrashana* of food weakly.

Discussion: *Atimatrashana* responsible for *Ajeerna* [23] and *Ama* production, leading cause of *Amavata*.

Q 4: Get Hunger for the Successive Food Time: 5.8% patients were having get hunger before successive food time, 10% patients were having no hunger successive food time, 62.6% patients were having not specific hunger successive food time and 21.6% patients were having get hunger successive food time.

Discussion: Due to *Agnimandha* [24] and *Ama* formation patients are not having hunger at successive food time. This is leading cause of *Amavata*.

Q 5: Digestion Pattern?: 31.8% patients were having longer time to digest the food, 6.2% patients were having shorter time to digest the food and 62% patients were having usually digested the food.

Discussion: *Mandagni* [25] and *Avaraagnibala* leads to pathogenesis of *Ama Pradoaja Vikara*. When *Ama* mixes with *Dohsa, dhatu, mala*, it develops certain complex adverse reactions, which is the basis of disease.

Q 6: Ajeernashana: 37.6% patients were having *Ajeernashana* daily, 12% patients were having *Ajeernashana* monthly, 2.4% patients were having *Ajeernashana* same time and 48% patients were having *Ajeernashana* weakly.

Discussion: Hypo functioning of *Agni* [26], caused due to abstinence from food, indigestion, overeating, irregular diet habits, which produced *Ama*. *Ama* mixed other *Doshas* and develops the cause of disease.

Q 8: Adhyashana [27]: 19.8% patients were intake of food before digestion of previous meal daily, 35% patients were intake of food before digestion of previous meal monthly, 9.2% patients were intake of food before digestion of previous meal same time and 36% patients were intake of food before digestion of previous meal weakly.

Discussion: After fasting intake heavy food diminishes *Agni*; this is cause of *Ama* and disease formation.

Q 9: Which Taste Usually Prefer in Diet

Mostly 53.4% patients prefers sweets taste, 13.2% patients prefer Spicy, bitter, sour taste, 11.6% patients prefer Sweet, spicy, bitter, salt taste, 11.6% patients and other taste prefer below 3% patients.

Discussion: Hypo functioning of *Agni* caused due to abstinence from food, indigestion which produced *Ama*. *Ama* mixed other *Doshas* and develops the cause of disease [28].

Q 10. Aharaja Nidana (Non-Veg): 16.8% (84) patients were taking and 83.2% (416) patients were not taking Chicken in food, 21.6% (108) patients were taking and 78.4% (392) patients were not taking Eggs in food, 8.4% (42) patients were taking and 91.2% (458) patients were not taking Fish in food, 23.4% (117) patients were taking and 76.6% (383) patients were not taking Mutton in food.

Discussion: Excessive quantity of non-vegetarian food cause of *Vidagdhaheerana*, Due to *Vidagdhaheerana* vitiated of *Pitta* cause the *Vidaha* of *Rasadhatu* impairing formation of further *Dhatu*s and by product formation of *Ama mala* which is cause of the disease

Q 11. Virudha Ahara: 2.8% (14) patients were taking and 97.2% (486) patients were not taking *Virudhaahara* in form of milk shakes, 19.4% (97) patients were taking and 80.6% (403) patients were not taking *Virudhaahara* in form of milk+sweets, 23.6% (118) patients were taking and 76.4% (382) patients were not taking *Virudhaahara* in form of *Khichadi*+milk, 76.4% (382) patients were taking and 23.6% (118) patients were not taking *Virudhaahara* in form of *Raita*+pineapple+tomato+ cucumber, 99% (495) patients were taking and 1% (5) patients were not taking *Virudhaahara* in form of green leafy vegetables, 11.4% (57) patients were taking and 88.6% (443) patients were not taking *Virudhaahara* in form of milk *Palak paneer*.

Discussion: According to *Madhav-Nidana* [29] *Virudha Ahara* is main cause of the *Amavata* disease.

Q 12. Vidahi and Vidagdha Ahara: 44.2% (221) patients were taking and 55.8% (279) patients were not taking *Vidahi* and *Vidagdha Ahara* in form of Namkeen + milk, 40.6% (203) patients were taking and 59.4% (297) patients were not taking *Vidahi* and *Vidagdha Ahara* in form of Fast food, 1.6% (8) patients were taking and 98.6% (492) patients were not taking *Vidahi* and *Vidagdha Ahara* in form of Fast food+ cold drinks, 2% (10) patients were taking and 98% (492) patients were not taking *Vidahi* and *Vidagdha Ahara* in form of Preserved food, 29.8% (149) patients were taking and 70.2% (351) patients were not taking *Vidahi* and *Vidagdha Ahara* in form of Refrigerated food, 25.2% (126) patients were taking and 74.8% (374) patients were not taking *Vidahi* and *Vidagdha Ahara* in form of Lunchbox.

Discussion: *Vidahi* and *Vidagdha Ahara* vitiated of *Pitta* cause the *Vidaha* of *Rasa dhatu* impairing formation of further *Dhatu*s and by product formation of *Ama mala* which is cause of the disease.

Q 13. Pishtanana: 58.8% (294) patients were taking and 41.2% (206) patients were not taking *Pishtanana Ahara* in form of *Dalbhati*.

Discussion: Maximum 59% patients taking *Pishtanana*, which is *Guru*, *Snigdha* and diminish the *Agni*.

Q 14. Fried items and fast food Ahara: 55.2% (276) patients were taking and 44.8% (224) patients were not taking Fried items *Ahara* in form of *Samosa*, 5.2% (26) patients were taking and 94.8% (474) patients were not taking Fried items *Ahara* in form of *Kachori*, 24.4% (122) patients were taking and 75.6% (378) patients were not taking Fried items *Ahara* in form of *Pakoda*, 2.6% (13) patients were taking and 97.4% (487) patients were not taking Fried items *Ahara* in form of *Alutikki*, 67.8% (339) patients were taking and 32.2% (161) patients were not taking Fried items *Ahara* in form of *Poori*.

Discussion: These types of *Ahara* are *Vidahi* and *Vidagdha*, which vitiated *Pitta* and cause of *Vidhagdha*jeeran. This is main cause of disease formation.

Q 15. Drava-Ahara: 88.6% (443) patients were taking and 11.4% (57) patients were not taking *Drava Ahara* in form of *Milk*, 100% (500) patients were taking *Drava Ahara* in form of *Water*, 17% (85) patients were taking and 83% (415) patients were not taking *Drava Ahara* in form of any favorite juice

Discussion: Excessive quantities of *Dravya-Ahara* dilutes *Pachak rasa* and diminishes *Jatharagni*, which produce *Ama*.

Q 16. 500 Patients According to Viharaja Nidana:

Q 16(a). Taking Cold Water Bath/Drink Immediately After Exposure to Sun/ Exhaustion/Terror?: 57.8% (289) patients were taking and 42.2% (211) patients were not taking cold water bath/drink immediately after exposure to sun/exhaustion/terror.

Discussion: There is no relation with this *Viharaj Nidana* and disease.

Q 16(b). Heavy Exercises?: 46.2% (231) patients were doing heavy exercise and 52.8% (269) patients were not doing heavy exercise.

Q 16(c). Ati Asana?: 58.2% (231) patients were doing *Ati Asana* and 53.8% (269) patients were not doing *Ati Asana*.

Discussion: According to *Madhav Nidana-Nishchalsata* [30] is major cause of disease.

Q 16(d). Heavy Work Immediately after Intake of Heavy Food?: 34.4% (172) patients were doing very often heavy work immediately after intake of heavy food, 2% (10) patients were doing rarely heavy work immediately after intake of heavy food, 63.6% (318) patients were not doing very heavy work immediately after intake of heavy food.

Discussion: According to *Madhavnidana* it is major cause of *Amavata* disease.

Q 16(e). Day Sleeps?: 43.4% (217) patients were having day sleep very often, 5% (25) patients were having day sleep rarely, and 51.6% (258) patients were not having day sleep.

Discussion: According to *Acarya Caraka*, *Diwaswapna* leads to vitiation of *vata-pitta dohsa*, while according to *Acarya Susruta* *Diwaswapana* leads to vitiation of all the three *Dohsavata*, *pitta* and *kapha*. These vitiated *Dosha* leads to *Agni dusti* results in *Ama* formation in body. This is cause of disease formation.

Q 16(f). Day Sleep Immediately After Intake Food?: 40.8% (202) patients were having day sleep very often immediately after intake food, 4.8% (24) patients were having day sleep rarely immediately after intake food, 54.8% (274) patients were not having day sleep immediately after intake food.

Discussion: This is cause of *Abhishayandi* and vitiated *Kapha-Pitta*. These vitiated *Dohsa* leads to *Agni dusti* results in *Ama* [10] formation in body. This is cause of disease formation.

Q 16(g). Day Sleep Immediately After Intake Food?: 40.8% (202) patients were having day sleep very often immediately after intake food, 4.8% (24) patients were having day sleep rarely immediately after intake food, 54.8% (274) patients were not having day sleep immediately after intake food.

Q 16(h). Depression?: 12.4% (62) patients were having depression very often, 3.6% (18) patients were having

depression rarely, 1.8% (9) patients were having depression weakly and 82.2% (411) patients were not having depression.

Discussion: When the stressful state becomes ongoing and inappropriate, the different parts of the gastro-intestinal tract start to work independently of each other. Communication breaks down between cells, organs and their various functions. The stomach may start secret too much acid and inability to digest results.

Conclusion

- *Mandagni* and *Avaraagnibala* leads to pathogenesis of *Amapradoṣajavikara*. When *Ama* mixes with *Dosha*, *dhatu*, *mala*, it develops certain complex adverse reactions, which is the basis of disease.
- As per the *Ayurvedic* principles, a new tool was developed with 17 questions and validated in a sample size of 500 individuals and the observations were matching the fundamental principles of *Agni* and it can be further studied in large sample group.
- Majority of population were involved in *Mansikanidana*, *cinta*, *ṣoka*, *bhaya*, and *krodha* ^[25] which indicate *Agniduṣṭi* and further *Ama* formation.

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