CLINICAL AND DEMOGRAPHIC PROFILE OF
AMLAPITTA AND PARINAMASULA

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ABSTRACT: AmlaPitta and ParinamaSula are two major diseases encountered by present day physicians. This article describes the clinical and demographic aspects of AmlaPitta and ParinamaSula.

INTRODUCTION

A study was conducted in Sir Sunder Lal Hospital (Kaya Chikitsa Ward), B.H.U on 110 patients, Out of which there were 49 cases of AmlaPitta and 61 cases of ParinamaSula. The patients of ParinamaSula group were divided into two sub groups viz ParinamaSula (Group A) and ParinamaSula (Group B). The patients having classical signs of ParinamaSula such as pain in abdomen during digestion, relief of pain after taking food etc. without radiological and or endoscopical evidence of ulcer were kept in ParinamaSula Group B. The number of patients in ParinamaSula group A was 44 and in ParinamaSula Group A was 44 and in ParinamaSula Group B 17.

Age Incidence:

There was no patient of AmlaPitta and ParinamaSula below the age of 10 years. The age incidence in AmlaPitta (49 cases) and ParinamaSula (61 cases) (Group A 44, Group B 17) is given in Table.

Table 1.: Age Incidence in AMLAPITTA and PARINAMASULA

| Age Group in Yrs | AMLAPITTA | PARINAMASULA | PARINAMASULA (Gr.A) | PARINAMASULA (Gr.B) |
|------------------|-----------|--------------|---------------------|---------------------|
|                  | n         | %            | n                   | %                   | n            | %            | n            | %            |
| 11to 20          | 03        | 6.13         | 07                  | 11.47               | 04           | 9.09         | 03           | 17.64        |
| 21to 30          | 16        | 32.65        | 15                  | 24.59               | 12           | 27.27        | 03           | 17.64        |

N=Number of patients
The above table reveals that *AmlaPitta* occurs more frequently in third and fourth decades, while *ParinamaSula* occurs more often in third, fourth and fifth decades, the possible reason of this may be that Pitta is predominant in middle age of life which may increase the severity and frequency of *AmlaPitta*. In the production of *ParinamaSula* Vayu plays the key role, so, the cases of *ParinamaSula* are encountered up to fifth decade.

**Sex Incidence:**

Male to female ratio in *AmlaPitta* was found to be 2.7:1 and Parinama Sula 3:1. It may be due to different social roles and different emotions in both sexes. Sex hormones especially oestrogen is supposed to play the protective role in duodenal ulcer. More percentage in males may also be due to increased frequency of smoking and alcohol consumption.

**Habitat and religion:**

Both *AmlaPitta* and *ParinamaSula* more prevalent in rural area. More than 90% patients were Hindus, probably due to Hindu dominant locality. Rural Population of our country is much higher than urban.

**Occupation:**

Maximum percentage of patients *ParinamaSula* belongs to labour class while professionals, students and office workers suffer more from *AmlaPitta* according to this study. The following table shows the occupation incidence in 49 cases of *AmlaPitta* and 61 cases of *ParinamaSula*.

### Table 2.: Occupation Incidence in *Amlapitta* and *ParinamaSula*

| Age Group in Yrs | *Amlapitta* | *ParinamaSula* (Gr. A) | *ParinamaSula* (Gr. B) |
|------------------|-------------|------------------------|------------------------|
|                  | n  | %   | n  | %   | n  | %   | n  | %   |
| 11 to 20         | 03 | 6.13| 07 | 11.47| 04 | 9.09| 03 | 17.64|
| 21 to 30         | 16 | 32.65| 15 | 24.59| 12 | 27.27| 03 | 17.64|
| 31 to 40         | 20 | 40.82| 16 | 26.23| 11 | 25.00| 05 | 29.41|
| 41 to 50         | 04 | 8.16| 13 | 21.31| 08 | 18.18| 05 | 29.41|
| 51 to 60         | 04 | 8.16| 05 | 8.09| 04 | 9.09| 01 | 5.88|
| Above 60         | 02 | 4.08| 05 | 8.19| 05 | 11.37| 0 | 0.00|
| Total            | 49 | 61  | 44 | 17  |     |     |     |     |

Nature of work  | *Amlapitta* | *ParinamaSula* (Gr. A) | *ParinamaSula* (Gr. B) |
|----------------|-------------|------------------------|------------------------|

Labour class takes food which is less nutritious. They also take more condiments to make the food palatable, condiments cause irritation of gastric mucosa which is already less healthy due to undernutrition or malnutrition. This group (due to poverty) does not visit physicians in the early phase of the disease, which is the stage of *AmlaPitta*. Professionals being more aware of their health, consult physicians in the early phase of disease which hampers the aggravation of the disease or conversion of *AmlaPitta* into *ParinamaSula*. 
Dietary Habits:

60% Patients of AmlaPitta registered themselves as vegetarians and 40% as nonvegetarians. In ParinamaSula series the percentage of non-vegetarians was more (54%). According to Malhotra (1964, 65), Roughage deficient diet causes constipation and other diseases like peptic ulcer this type of diet is called sloppy diet which is gulped without mastication.

Incidence of Alcohol consumption and smoking:

15% patients of AmlaPitta and 24% of ParinamaSula were chronic alcoholics. It suggests that alcohol takes an active part in the production of AmlaPitta and ParinamaSula. Madya has been described as one of the causative factors of AmlaPitta in ayurvedic tests. Modern medicine also counts alcohol in the aetiological factors of peptic ulcer and dyspepsia. Addiction of smoking has been noted in 32.65% patients of AmlaPitta and 45.90% patients of ParinamaSula. In ParinamaSula (Gr.A) which is x-ray positive peptic ulcer, 25% patients used to smoke upto 3 cigarettes daily and 22.73% more than 5 cigarettes daily. So, the role of smoking in ParinamasSula is crystal clear.

Smoking increases gastric motility and reduces bicarbonate secretion. According to Mc Guigan (1973) smoking is associated with increased duodenal ulcer frequency and increased mortality from ulcer. A tendency to smoke and a tendency to develop ulcer may be related through stress as much as through any physiological mechanism.

Incidence of Anxiety:

Anxiety was divided in two grades. Grade (+)-When Patient complains of being anxious occasionally. Anxiety produces no interruption in working capacity. Grade (++)
– when patient complains of being anxious and by observation he looks so. Patient complains of palpitation and sweating dryness of mouth, gets anxious on trivial cause and the working capacity is reduced. Following table shows the incidence of anxiety in AmlaPitta (49 cases) and Parinama sula 61 cases (Gr. A 44 cases, Gr. B 17 cases).

Table 3. Incidence of ANXIETY in AMLA PITTA and PARINAMA SULA

| ParinamaSula (Group B) | Patient s having radiological or endoscopical evidence of ulcer were kept in | ParinamaSula (Group A) and Patient s |
|------------------------|--------------------------------------------------------------------------------|-------------------------------------|

In is evident from the above table that 63.27% patients of AmlaPitta and 88.52% patients of ParinamaSula were having anxiety. As may as 70% patients of ParinamaSula were having grade (++)

anxiety. So, frustration and suppression of feelings and emotional activity appear to do much in the genesis or at least in the chronic course of the disease.
**Incidence of Depression:**

Element of depression was observed in both AmlaPitta and ParinamaSula. It was more in ParinamaSula as compared to AmlaPitta which appears due to pain and chronic course of ParinamaSula. In AmlaPitta, 14 (28.57%) cases were of grade (+) depression and 6 (12.24%) of grade (++) depression. In ParinamaSula, 26 (42.62%) cases were of grade (+) Depression-complaint of sad mood occasionally. Patient wants to remain alone. Working capacity is not decreased. Grade (++) Depression—marked loss of interest in work. Patient looks depressed, remains aloof, does not attend any ceremony life seem to be worthless. Working capacity is reduced.

**Duration of Disease:**

In this study, 22, (40.90%) patients were suffering from AmlaPitta for less than 2 years, 18 (36.73%) for 2 to 5 years and 9 (18.37%) for more than 5 years. Out of 61 cases of ParinamaSula, 20 (32.79%) cases were of less than 2 years duration. 22 (36.06%) between 2 to 5 years and 19 (31.05%) cases were of more than 5 years duration. In ParinamaSula (Gr. A), 29.54% patients were of less than 2 years 34.04% between 2 to 5 years and 36.36% were of more than 5 years duration. In ParinamaSula (Gr. B), 41.18% were of less than 2 years again 41.18% between 2 to 5 years and 36.36% were of more than 5 years duration. It shows that both the diseases are chronic, but chronicity of ParinamaSula is more than AmlaPitta.

**CONSTITUTIONAL PROFILE:**

**A. Body Surface Area and Ponderal Index:**

Body surface area of most of the patients of AmlaPitta, ParinamaSula, Parinama Sula (Gr. A) and ParinamaSula (Gr. B) (55.10%, 59.02%, 63.64% and 47.06% respectively) was in the range of 1.41 to 1.60 square meters.

Maximum number of (73.46%) Patents of Amla Pitta has ponderal index more than 42 while maximum number of patients (70.49%) of ParinamaSula had ponderal index less than 44. So, the ponderal index is slightly higher in Amla Pitta than ParinamSula, Ponderal index indicates the linearity of a person.

**B. Dosa Prakriti:**

Dosa Prakriti in AmlaPitta (46 cases) and PrinamaSula 61 cases (Gr. A 44, Gr. B 17) is given in table 4.

**Table 3.: Incidence of DOSA PRAKRITI in AMLA PITTA and PARINAMA SULA**

| Age Group in Yrs | AMLAPITTA | PARINAMASULA | PARINAMASULA (Gr.A) | PARINAMASULA (Gr.B) |
|------------------|-----------|--------------|---------------------|---------------------|
| ParinamaSula     | Group B   | The patients having radiological or endoscopical evidence of ulcer were kept in | | |
It is evident from the above study that in both the disease entities the number of patients of Vata Pitta Prakriti was more as compared to Kapha Vata and Pitta Kapha.

Manasa Prakriti:

Maximum number of patients belonged to Rajasika Prakriti. In AmlaPitta 30 (61.22%) cases were of Rajasika Prakriti and 19(38.78%) of Tamsika Prakriti. 47(77.04%) cases of Rajasika and 14 (22.96%) cases of Tamsika Prakriti were observed in ParinamaSula. In ParinamaSula (Gr. A) the percentage of Rajasika and Tamsika Prakriti was 79.54% and 20.46% while in ParinamaSula (Gr.B) the percentage of Rajasika and Tamsika Prakriti was 70.59% and 29.41% respectively.

Incidence of ABO Blood Group:

Blood Group of 16 patients of AmlaPitta and 32 patients of ParinamaSula was examined. In AmlaPitta group the percentage of blood group A,B AB and O was 12.5%, 37.5% 12.5% and 37.5% respectively. Thus the percentage of ‘B’ and ‘O’ groups was equal. In ParinamaSula, the incidence of blood group ‘A’, ‘B’, ‘AB’ and ‘O’ was 18.75%, 31.25%, 25% and 25% respectively. Thus the percentage of blood group ‘B’ was highest in ParinamaSula. According to Lam and sircus (1975), patients of blood group ‘B’ tend to have increased acid secretion and a stronger family history while persons of blood group ‘O’ having duodenal ulcer show more tendency to bleed from an ulcer.

History of Post Treatment:

Treatment history of all the patients was taken. In this study almost all the patients had taken treatment previously. Only 6.12% (3 cases) of AmlaPitta and 3.28% (2 cases) of ParinamaSula had taken no treatment, 24.49% (12 cases) of AmlaPitta and 29.51% (18 cases) of ParinamaSula had no record of treatment. Number of patients who had taken Antacids and Anticholinergics was 21(42.86%) 09(14.75%), 04 (9.09%) and 05 (29.42%) in AmlaPitta, ParinamaSula, ParinamaSula (Gr.A) and ParinamaSula (Gr.B) respectively. The number and percentage of patients who has taken H2 blockers and antacids was 13 (26.53%) 32 (52.46%) 28(63.64%) and 04 (23.53%) in AmlaPitta, ParinamaSula, ParinamaSula (Gr.A) and ParinamaSula (Gr.B) respectively. It shows that patients of AmlaPitta had taken antacids and anticholinergics in more number and that of ParinamaSula H2 blockers. Very few patients had tried ayurvedic medicine.

Pattern of Gastric Acidity:

Gastric acidity of 22 cases of AmlaPitta and 32 cases of ParinamaSula was examined by fractional test meal method. 7% alcohol was used as a stimulant. Following table shows that pattern of acidity.
Table 5: Pattern of ACIDITY IN AMLAPITTA and PARINAMASULA

*ParinamaSula* (Group B). The patients having radiological or endoscopical evidence of ulcer were kept in *ParinamaSula* (Group A) and patients in *ParinamaSula* (Group B).

| Age Group in Yrs | AMLAPITTA | PARINAMASULA | PARINAMASULA (Gr.A) | PARINAMASULA (Gr.B) |
|------------------|-----------|--------------|---------------------|---------------------|
|                  | n | %   | n | %   | n | %   | n | %   |
| 11 to 20         | 03 | 6.13 | 07 | 11.47 | 04 | 9.09 | 03 | 17.64 |
| 21 to 30         | 16 | 32.65 | 15 | 24.59 | 12 | 27.27 | 03 | 17.64 |
| 31 to 40         | 20 | 40.82 | 16 | 26.23 | 11 | 25.00 | 05 | 29.41 |

It is evident from the above table that gastric acidity may be normal or above normal in AmlaPitta, some cases of hypochlorhydria may be found. While in ParinamaSula, the maximum number of patients were of hyperchlorhydria. The same trend was found in ParinamaSula (Gr.A) and ParinamaSula (Gr.B).

**PEPSIN:**

Pepsin in the gastric juice was measured in 12 cases of AmlaPitta and 10 cases of ParinamaSula. In AmlaPitta the pepsin was more I fasting and first sample as compared to ParinamaSula, while in other samples ie second, their and fourth the mean value of pepsin was much higher in ParinamaSula as compared to AmlaPitta. It shows that after stimulation by alcohol the pepsin was secreted more in ParinamaSula cases as compared to that of AmlaPitta. Higher amount of acid pepsin is supposed to be one of the causes of peptic ulcer, following table

Table 6: Mean of Pepsin (units pepsinogen/ml) in AMLAPITTA and PARINAMASULA

*ParinamaSula* (Group B). The patients having radiological or endoscopical evidence of ulcer were kept in *ParinamaSula* (Group A) and patients in *ParinamaSula* (Group B).

| Age Group in Yrs | AMLAPITTA | PARINAMASULA | PARINAMASULA (Gr.A) | PARINAMASULA (Gr.B) |
|------------------|-----------|--------------|---------------------|---------------------|
|                  | n | %   | n | %   | n | %   | n | %   |
| 11 to 20         | 03 | 6.13 | 07 | 11.47 | 04 | 9.09 | 03 | 17.64 |
| 21 to 30         | 16 | 32.65 | 15 | 24.59 | 12 | 27.27 | 03 | 17.64 |
| 31 to 40         | 20 | 40.82 | 16 | 26.23 | 11 | 25.00 | 05 | 29.41 |

**MUCIN (Hexosamine):** In contrast to the acid pepsin, the hexosamine level has decreased in ParinamaSula group after stimulation. In ParinamaSula (Gr.A) ie. X-ray positive peptic ulcer, the level of hexosamine has markedly decreased. But in AmlaPitta group, the level of hexosamine has increased after stimulation following table shows the mean of Hexosamine (µgm/ml) in AmlaPitta (12 cases) and ParinamaSula 10 cases (Gr A 6 cases, Gr. B4 cases).
Table 7 : Mean of Pepsin (units pepsinogen/ml) in AMLAPITTA and PARINAMASULA

ParinamaSula (Group B). The patients having radiological or endoscopical evidence of ulcer were kept in ParinamaSula (Group A) and patients

| Age Group in Yrs | AMLAPITTA | PARINAMASULA | PARINAMASULA (Gr.A) | PARINAMASULA (Gr.B) |
|------------------|-----------|--------------|---------------------|---------------------|
|                  | n   | %     | n   | %     | n   | %     | n   | %     |
| 11 to 20         | 03  | 6.13  | 07  | 11.47 | 04  | 9.09  | 03  | 17.64 |
| 21 to 30         | 16  | 32.65 | 15  | 24.59 | 12  | 27.27 | 05  | 17.64 |
| 31 to 40         | 20  | 40.82 | 16  | 26.23 | 11  | 25.00 | 05  | 29.41 |
| 41 to 50         | 04  | 8.12  | 12  | 19.21 | 06  | 10.16 | 05  | 17.64 |

SYMPTOMS:

Various symptoms were observed in the patients of AmlaPitta and ParinamaSula. Pain is the cardinal symptom of ParinamaSula. It has relation with meal. Most of the patient feel pain the midnight which disturb the sleep. All the cases of ParinamaSula reported pain in abdomen. Pain is not a major symptom of AmlaPitta. Only 48% patients reported mild pain or dull ache.

Avipaka (Indigestion) was observed in 92% cases of AmlaPitta and 65% cases of ParinamaSula

Aruci (Anorexia) was also more in AmlaPitta patients (65%) as compared to ParinamaSula (54.09%)

Adhamana (Flatulence) was present in almost equal amounts in AmlaPitta (79.59%) and ParinamaSula (78.69%).

Udgara (Belching) was also present in almost the same percentage of patients of AmlaPitta (73.47%) and ParinamaSula (70.49%)

Acid Eructation, Utklesa (Nausea) and Vamana (vomiting) were seen in 10% more cases of ParinamaSula than in AmlaPitta patients.

Hrit Kanth Daha (Heartburn) was reported by almost equal percentage of patients

Malena and Heametemesis were not reported by AmlaPitta patients. Following table shows the percentage and number of cases of having different symptoms.
Table 8: Incidence of symptoms

ParinamaSula (Group B). The patients having radiological or endoscopic evidence of ulcer were kept in ParinamaSula (Group A) and patients

| Age Group in Yrs | AMLAPITTA | PARINAMASULA (Gr.A) | PARINAMASULA (Gr.B) |
|------------------|-----------|---------------------|---------------------|
|                  | n    | %     | n    | %     | n    | %     |
| 11 to 20         | 03  | 6.13  | 07  | 11.47 | 04  | 9.09  | 03  | 17.64 |
| 21 to 30         | 16  | 32.65 | 15  | 24.59 | 12  | 27.27 | 03  | 17.64 |
| 31 to 40         | 20  | 40.82 | 16  | 26.23 | 11  | 25.00 | 05  | 29.41 |
| 41 to 50         | 04  | 8.16  | 13  | 21.31 | 08  | 18.18 | 05  | 29.41 |
| 51 to 60         | 04  | 8.16  | 05  | 8.09  | 04  | 9.09  | 01  | 5.88  |
| Above 60         | 02  | 4.08  | 05  | 8.19  | 05  | 11.37 | 0   | 0.00  |
| Total            | 49  |       | 61  |       | 44  |       | 17  |       |

Nature of work

|                  | AMLAPITTA | PARINAMASULA (Gr.A) | PARINAMASULA (Gr.B) |
|------------------|-----------|---------------------|---------------------|
|                  | n    | %     | n    | %     | n    | %     |
| 1. Housewives    | 13  | 26.53 | 15  | 24.59 | 08  | 18.18 | 07  | 41.18 |
| 2. Agriculture work and Hard Manual labour | 14 | 28.57 | 24 | 39.34 | 21 | 47.73 | 03 | 17.65 |
| 3. Professional work (Teacher, Student, | 20 | 40.82 | 18 | 29.51 | 13 | 29.54 | 05 | 29.41 |
| 4. Businessmen   | 02  | 04.08 | 04  | 06.56 | 02  | 04.55 | 02  | 11.79 |

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