

Association of *Viharaja* and *Manasika Hetus* (Behavioural and Mental Factors) with *Amlapitta* (Hyperacidity) amongst Police Professionals in Pune

Babar Smeeta Shivaji¹, Joshi Mrudula Vinayak², Joshi Vinayak Nilkanth³

¹Ayurveda Samhita and Siddhanta), M.A.(Sanskrit). Ayurveda Practitioner, Pune, Maharashtra, ² Professor and HOD, P. G. Department of Ayurveda Samhita and Siddhanta, ³Professor and HOD, Rognidan and Vikruti Vidnyan, Dr. D.Y. Patil Vidyapeeth, Dr. D.Y. Patil College of Ayurveda and Research centre, Pimpri, Pune, Maharashtra, India

Abstract

Background- Changing life style in conjunction to unhealthy dietary pattern, mental stress and strain is leading to *Ajeerna* (indigestion), and further *Amlapita* (hyperacidity). **Aim-** To evaluate the association of *Viharaja* and *Manasika Hetus* (behavioural and mental factors) with *Amlapitta* (Hyperacidity) amongst police professionals in Pune.

Settings and Design- This cross sectional study was conducted among Police professionals in Pune region.

Methods and Material: Study included 100 identified patients of *AMLAPITA*; both males and females from the age group of 25-50years. A self administered, structured, pilot tested 9 item questionnaire was used to collect data. **Statistical Analysis:** Descriptive data was analyzed using number and percentages. **Results:** Maximum patients with *Pitta-Vataja Prakruti* were n=47, *Kapha-Pittaja Prakruti* were n = 41 and *Kapha-VatajaPrakruti* were n= 12. 71 (100%) *Amlapitta* Police Professionals did daily *Ratri-jagarana* who had night shift and 29 (100%) reported day shifts out of which 21(72.41%) Police Professionals did daily *Ratri-jagarana* yet they had day shift duty. Mental stress was more in Night shift personnel n=52 (73.24%) than stress observed in Day shift participants n=17(58.62%).

Conclusion: Present study help us to estimate association of *Amlapitta* with changed life style pattern. These etiological factors like *Viharaj and Manasika hetus* namely *Ratrijagarana, Vegavidharana*, Mental stress cannot be eradicated totally due to current career progression scenario. But definitely alternative therapies like yoga, meditation and diet plans can be suggested and practiced as and when necessary.

Key Words –*Amlapitta, Etiological factors, Police Professionals, Hyperacidity, Stress, Behavioural causes, mental causes*

Introduction

Amlapitta(Hyperacidity) is a very common disease of this era.30% of the general population is suffering

Corresponding author:

Dr. Joshi Mrudula Vinayak

Professor and HOD, Department of Ayurveda Samhita and Siddhanta, Dr. D.Y. Patil Vidyapeeth, Dr. D.Y. Patil College of Ayurveda and Research centre, Pimpri, Pune.

E mail - mrudula.doctor@gmail.com

Mobile: +919022374758

from gastro-oesophageal reflux and gastritis resulting in heartburn. It is very troublesome disease and can give rise to many serious problems if not treated in time. Signs and symptoms of *Amlapitta* are very similar to gastritis¹. *Amla* means sour and *Pitta* is the functional digestive component of the body. Thus *Amlapitta* (Hyperacidity) is a disease; in which sour blenching is the major symptom. *Avipak*(Indigestion), *Klama*(Exhaustion including normal 8 hr. duty), *Utklesha* (Nausea), *Katu/ Tikta / Amla udgar* (pungent/ bitter/ sour Blenching), *Hrut / kantha daha*(Heart / Throat burning), *Aruchi* (Tastelessness), *Chchardi*(vomiting), *Shirashoola*(Head ache) are the important signs and symptoms of the

disease^{2,3}.

It has been indicated that *Amlapitta* occurs in the persons having unhealthy food habits^{1, 4}. The diet today is governed by social and professional background, has led people to consume unhealthy food and subsequently indigestion. Indigestion caused produces *Annavisha* (toxins) which get mixed up with *Pitta Dosha* and lodges in *Amashaya* (Stomach) and then it produces *Amlapitta* disease⁵.

Police officer's job is one such public service profession wherein noxious conjunction due to disturbed life pattern is seen. Policeman has to be on duty for longstanding hours either in a day or night shift, leading to disturbed body clock. *Ratrijagarana* (Night awakening)^{6,7,8,9}, *Atapa sevana* (exposure to bright Sunlight), *Vega vidharana* (suppression of natural urges like hunger, thirst stool, urine, etc.)⁷ is very common in their day to day life. *Ajeernashana* (repeated eating)^{1,10,11,12}, *Amla / katu / Vidahi/ ViruddhaAhar*^{12,13,14} *sevan* (sour, pungent, spicy food & food having opposite qualities) are mentioned as dietary causes of the disease. This disturbed life pattern also causes, addiction of Paan, tobacco chewing, Gutka, alcohol which in addition contributes to Gastro-Intestinal disorders like *Amlapitta*. Moreover, work pressure causes high stress level especially mental stress, which again contributes to vitiate the *Pitta dosha* leading to *Amlapitta* disease. Therefore it becomes necessary to avoid *Hetus* (etiological factors) to minimize diseases like *Amlapitta* in police professionals.

This study will help us to evaluate the association of *Viharaja* and *Manasika Hetus* (behavioural and mental factors) with *Amlapitta* (Hyperacidity) amongst police professionals in Pune.

This data will help to fetch remedy for different preventive and curative modified dietary and life style changes on the basis of dominant etiological factors.

Materials and Method

This cross sectional study was conducted among

100 pre- diagnosed police professionals from Pune region suffering from *Amlapitta*, who were working on various posts, of both sex and aged between 25 to 50 years, willing to participate in the study were selected. Individuals suffering from *Avipak*, *Klama*, *Utklesha*, *Katu/ Tikta / Amla udgar*, *Hrut / kantha daha*, *Aruchi*, *Chchardi*, *Shirashoola* (Head ache) as main symptoms were included; while those who suffered from Hypertension, Cardiac diseases, Diabetes mellitus, Congenital and Immunological disorders were excluded from the study. Approval was obtained from the scientific committee and Institutional Ethics committee (No: AY/PG/130/2014/15/IEC). Every participant signed an informed consent form before starting the study. A structured questionnaire with 9 major questions was administered. All the Police Professionals were asked to complete the questionnaire. Information regarding *Hetus*, *Lakshanas* of *Amlapitta*, Daily schedule and duty shifts and other occupational causes related to stress in Police profession was recorded. The collected data was entered in Microsoft Excel 2007. Descriptive analysis in the form of number and percentages were calculated.

Results

This cross sectional study was completed among 100 police professionals. Important findings regarding demographic variables like Age, *Prakruti* (Physical constitution), *Viharaja hetus* namely *Ratrijagarana*, *Vega vidharana* and Mental stress are listed. It was found that according to age, maximum number of patients were n= 39 from the group of 45 -50 years i.e. belonging to higher grade and minimum patients i.e. n= 24 from age group 35-45 years (Table 1).

Prakruti -Observations related to Physical constitution denoted maximum patients with *Pitta-Vataja Prakruti* n=47, *Kapha-Pittaja Prakruti* in n = 41 and *Kapha-VatajaPrakruti* n= 12 (Table 2).

71 (100%) *Amlapitta* Police Professionals did daily *Ratri-jagarana* who had night shift and 29 (100%) reported day shifts out of which 21(72.41%) Police Professionals did daily *Ratri-jagarana* yet they had day shift duty.

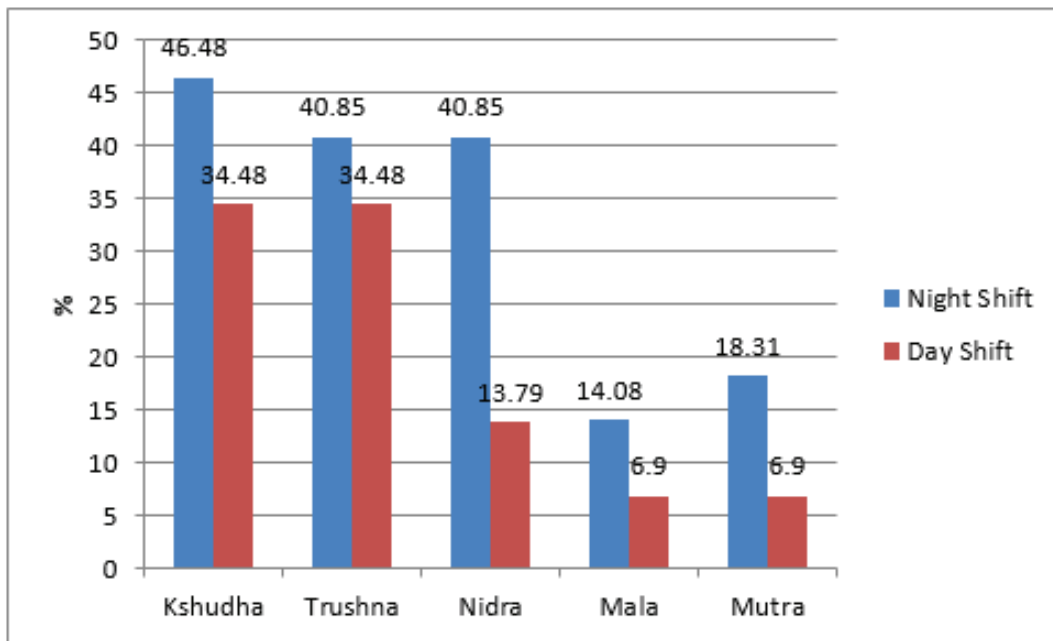


Fig1: Distribution of police professional based on the daily Vega Vidharana

Figure 1. *Vegavidharana* (suppression of natural urges) It was noted in Night shift Participants -*Kshudha* (hunger), *Trushna*(thirst), *Nidra*(sleep) and *Mala*(stool),*Mutra* (urine)*Vegavidharana* was prominently noticed in 46.48%, 40.85%, 40.85%, 14.08% and 18.31% respectively.

It is more in comparison with Day Shift duty Police Professionals where the percentage noted was 34.48%, 34.48%, 13.79%, 6.90%, and 6.90% respectively.

TABLE 1 - Distribution of 100 patients of *Amlapitta* according to Age

Age Range in years	Number
25 – 35	37
35 – 45	24
45 – 50	39
Total	100

TABLE2. Distribution of 100 *Amlapitta* Police Professionals according to *Prakruti*

PRAKRUTI	Number
PV(Pitta-Vata)	47
KP(Kapha-Pitta)	41
KV(Kapha-Vata)	12

TABLE 3–Distribution of 100 Police professionals with *ManasikaHetus* of *Amlapitta*

MENTAL STRESS	Number (%)
Night duty(n =71)	52(73.24)
Day duty(n =29)	17(58.62)

Table 3. *Manasikhetu*-Mental stress was more in Night shift personnel n=52 (73.24%) than stress observed in Day shift participants i.e. n=17(58.62%)

Discussion

Present survey study executed on 100 Police Professionals, pre-diagnosed with *Amlapitta*; acknowledges prevalence of disease *Amlapitta* in Police Professionals; along with important role of *Viharaja and Manasika Hetus* in disease creation. Age of Police professionals plays vital role in disease progression mainly due to continuous change in life style for longer duration. Working in shift duty is trigger factor for uneven sleep pattern, unpunctual and unhealthy food habits.

Present study reveals that Police Professionals with Night Shift were found to be more exposed to *Hetus* of *Amlapitta* and were suffering from classical symptoms of *Amlapitta* as compared to Day shift Police Professionals. According to this study *Hetu – Age* between 45-50 years in participants indicates the middle age group which is *Pitta* dominant phase of life. Further, the increasing load of responsibilities is also a characteristic of this age group which can be an etiological factor. *Sharirprakruti* (Physical constitution) adds on to susceptibility to disorders. *Pitta Vataj prakruti* dominates with n=47. These type of constitutions in persons make them physically weak and more sensitive to external factors.

Working in Night shift exposes them to *hetus* like *Ratrijagarana, Vegavidharana of Kshudha, Trushna, Nidra, Mala and Mutra vega*. These *hetus* are *Viharaj hetus* and cause *Annavaha and Rasavaha srotas dushti* (disturbed digestion and assimilation). This leads to *ajeerna* (indigestion), *agnimandya* (weak capacity of digestion) and finally results in *Amlapitta*.

In *Manasika hetus*¹⁵; *Krodha* (Anger) causes *Pitta prakopa* (increase in *Pitta*), *Chinta* (Stress) causes *rasa dhatu dushti*, *Bhaya* (Fear) causes *Trasa* (pain) and *Shoka* (Grief) causes *vataprakopa* (Increase in *Vata*)¹⁶. *Vata pitta anubandha* is there in *Manasika hetus* which causes indigestion¹⁵ which again leads to *Agnimandya* and creates *Vidhaha* (burning), *Shuktata* (sour blenching) and *Amlapitta* symptoms appear.

Apart from above *hetus* if person takes *Pitta prakopak* (spicy, pungent food items) *Ahara*, *Vihara*, *Adhyashana* (excessive eating), *Viruddha-ahara* (opposite property in food), *Pishtanna* (Bakery products), *katulavan Rasa sevana* (food with pungent and salty taste), it leads to *vidagdhata* (incomplete digestion) of *Ahar* (food) and then leads to *Amlapitta*.

Conclusion

Present study help us to estimate association of *Amlapitta* with changed life style pattern. These etiological factors like *Viharaj and Manasika hetus* namely *Ratrijagarana, Vegavidharana*, Mental stress cannot be eradicated totally due to current career progression scenario. But definitely alternative therapies like yoga, meditation, diet plans etc. can be suggested and practiced as and when necessary. This may help in lowering the rate of incidence, symptomatic relief and act as preventive measure in young Police professionals.

Conflict of Interest: Nil

Source of Funding: Self

Ethical Clearance: Obtained from Institutional Ethics Committee, DR D Y Patil College of Ayurveda and Hospital, Pimpri, Pune.

References-

1. Acharya Yadavji Trikamji, editor. Charaka Samhita of Agnivesha, Chikitsa Sthana, Reprint ed. Varanasi: Chaukhamba Surbharti Prakashan; 2014. P- 517.
2. Acharya Narendranath Shastri, editor, 1st ed., Madhava Nidana (Madhukosa commentary), Amlapittanidanam, New Delhi: Motilal Banarasisdas 2009, shloka -1, p-641.
3. Pandit Hemrajshermana, editor. of Kashyap Samhita, khilasthan, Amlapittachikitsa, Chaukhambha Sanskrita Sansthana, 2004, p-335-338.
4. Pandit Hemrajshermana, editor. of Kashyap Samhita, khilasthan, Amlapittachikitsa, Chaukhambha Sanskrita Sansthana, 2004, p-335-336.
5. Pandit Hemrajshermana, editor. of Kashyap Samhita, khilasthan, Amlapittachikitsa, Chaukhambha Sanskrita Sansthana, 2004, p-336-337.
6. Pandit. Hari Sadashiv Shastriparadkar editor of Ashtang Hrudayam of Vagbhata with Commentries Sarvangsundara of Arunadatta & Ayurved Rasayana of Hemadri, Sutrasthana 7/55, Chaukhambha Sanskrita Sansthana, 2009.
7. Pandit. Hari Sadashiv Shastriparadkar editor of Ashtang Hrudayam of Vagbhata with Commentries Sarvangsundara of Arunadatta & Ayurved Rasayana of Hemadri, Sutrasthana 4/1, Chaukhambha Sanskrita Sansthana, 2009.
8. Pandit. Hari Sadashiv Shastriparadkar editor of Ashtang Hrudayam of Vagbhata with Commentries

- Sarvangsundara of Arunadatta&AyurvedRasayana of Hemadri, Sutrasthana 47/54, Chaukhambha Sanskrita Sansthana, 2009.
9. Dr.Shivprasadsharma editor ofAshtang Sangrahaof VruddhaVagbhat with Shashilekha Sanskrit Commentary byIndu, Sutrasthana 9/39, Chaukhambha SanskritaSeries office, 2016.
 10. Dr.Shivprasadsharma editor of AshtangSangrahaof VruddhaVagbhat with Shashilekha Sanskrit Commentary byIndu, Sutrasthana 13/2, Chaukhambha Sanskrita Series office, 2016.
 11. Pandit. HariSadashiv Shastriparadkar editor of AshtangHrudayam of Vagbhatawith CommentriesSarvangsundara of Arunadatta& Ayurved Rasayana of Hemadri, Nidanasthana 1/22, Chaukhambha Sanskrita Sansthana, 2009.
 12. Pandit. Hari Sadashiv Shastriparadkar editor of Ashtang Hrudayam of Vagbhatawith Commentries Sarvangsundara of Arunadatta& Ayurved Rasayana of Hemadri, Sutrasthana 8/13,14, Chaukhambha Sanskrita Sansthana, 2009.
 13. Pandit. HariSadashivShastriparadkar editor of Ashtang Hrudayam of Vagbhatawith CommentriesSarvangsundara of Arunadatta& Ayurved Rasayana of Hemadri, Sutrasthana 7/45, Chaukhambha Sanskrita Sansthana, 2009.
 14. AcharyaYadavjiTrikamji, editor. CharakaSamhita of Agnivesha, Sutra Sthana,26/84 Reprint ed. Varanasi: ChaukhambaSurbhartiPrakashan; 2014. P- 150.
 15. AcharyaYadavjiTrikamji,editor.CharakaSamhita ofAgnivesha, VimanaSthana 2/9, Reprint ed. Varanasi: ChaukhambaSurbharti Prakashan; 2014. P- 238.
 16. AcharyaYadavjiTrikamji, editor. CharakaSamhita of Agnivesha, Chikitsa sthana 3/114-124, Reprint ed. Varanasi: ChaukhambaSurbhartiPrakashan; 2014. P- 407.