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MVR AYURVEDA MEDICAL COLLEGE PARASSINIKKADAVU

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FORWARD

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E. KUNHIRAMAN

Director

MVR Group of Institutions

As the calendar year comes full circle, I am delighted to share with you the highlights of a remarkable event that has left an indelible mark on the global Ayurveda community. The 10th World Ayurveda Congress & Arogya Expo, held in Dehradun, Uttarakhand from 12-15 December 2024, was a resounding success. This prestigious gathering brought together esteemed scholars, researchers, and practitioners from around the world to share knowledge, insights, and best practices in the field of Ayurveda.The theme of the event was "Digital Health: An Ayurveda Perspective." This initiative aims to harness the potential of digital technologies to enhance the reach, efficacy, and accessibility of Ayurvedic healthcare.

I am thrilled to congratulate our college's presenters who showcased their research and expertise at this esteemed platform. Their dedication and hard work have made us proud. Special congratulations to Dr. Bineesh, who bagged the first prize for his outstanding paper presentation on "Comparative pharmaceutico-analytical study of two types of Kanta Loha Bhasmas and their clinical efficacy in the management of type 2 diabetes (Madhumeha)." This achievement is a testament to his outstanding research and commitment to advancing the field of Ayurveda. As we celebrate these achievements, we also acknowledge the tireless efforts of the organizers, participants, and supporters who made this event a grand success.

In this December issue of Ebodhi, we bring you a comprehensive report on the 10th World Ayurveda Congress & Arogya Expo, along with other insightful articles and updates from the world of Ayurveda.

Wishing you a joyous and enlightening read!

Prof. E. Kunhiraman

Director, MVR Group of Institutions

EDITORIAL

Chief Editor:
PROF. DR. A.K MURALEEDHARAN MD (AYU)
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MVR Ayurveda Medical College, Parassinikkadavu

Dear Readers,

As we step into the last month of the year, E Bodhi is delighted to present its December issue, featuring insightful articles from the Roganidana and Swasthavritta departments.

The Roganidana department sheds light on a key concept of Ayurveda, āma, emphasizing the importance of understanding the root causes of diseases.

Āmavāta and āma in Ayurveda hold significant relevance as they represent critical concepts in the understanding of pathology and disease progression. Āmavāta, a condition characterized by joint pain, stiffness, and swelling, results from the accumulation of āma (undigested toxic byproducts) and its vitiation of vāta dosha. Āma, a central pathological entity in Ayurveda, is formed due to improper digestion and metabolism, leading to systemic toxicity and obstructing the srotas (channels). Addressing āma through proper digestion, detoxification, and diet forms a cornerstone of Ayurvedic treatment, underscoring its role in both disease management and prevention.

Complementing Roganidana, the Swasthavritta department shares valuable insights on the art of living a balanced and healthy life. By embracing the principles of Swasthavritta, they present an analysis of the rainy seasons and the seasonal regimen of Kerala. Another article is a case report showcasing the efficacy of Ayurveda in managing a case of retinal astigmatism.

As we reflect on the past year, this issue invites you to reassess your relationship with health and wellness. Let the wisdom of Roganidana and Swasthavritta guide you toward a more harmonious and balanced existence.

We hope you enjoy this issue and integrate the knowledge shared within its pages into your daily life.Warm regards,Dr. Muraleedharan A.K.Principal, MVRAMCChief Editor, E Bodhi

Warm regards,
Dr. Muraleedharan A.K MD (AYU)
Principal, MVRAMC
Chief Editor, E Bodhi

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Dr. Prof. Muraleedharan A.K MD(Ayu)

PRINCIPAL
MVR AYURVEDA MEDICAL COLLEGE, PARASSINIKKADAVU

BLENDING TRADITION WITH TECHNOLOGY: 10TH WORLD AYURVEDA CONGRESS HIGHLIGHTS DIGITAL HEALTH REVOLUTION

The 10th World Ayurveda Congress (WAC 2024) and Arogya Expo, held in Dehradun from December 12 to 15, highlighted the theme "Digital Health: An Ayurveda Perspective," emphasizing the fusion of traditional wisdom with modern technology. The event drew over 10,000 participants, including 352 international attendees from 58 nations, and facilitated 3,200 business meetings, resulting in deals worth $150 million. Organized by the World Ayurveda Foundation in partnership with the Ayush Ministry and Uttarakhand government, it featured a 100,000-square-foot exhibition, sessions on Vriksha Ayurveda, and traditional healing practices. The accreditation of the first Ayurvedic institute in Europe marked a significant step in Ayurveda's global expansion.

Heartfelt congratulations to Dr. Bineesh for securing the first prize for his exemplary research paper, "Comparative pharmaceutico-analytical study of two types of Kanta Loha Bhasmas and their clinical efficacy in the management of type 2 diabetes (Madhumeha)".

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ANALYSIS OF RAINY SEASONS AND SEASONAL REGIMEN OF KERALA WITH SPECIAL REFERENCE TO SUSRUTA

INTRODUCTION

Ayurveda has given prime importance for health and its maintenance through seasonal health regimen. Ayurveda advice various food regimen as well as lifestyle regimen based on season. Whereas the identification of seasons based the characteristics declared by Ayurveda in different geographical areas of India has prime important as the following the regimens recommended for each season.

Seasons/ Rithus are classified according to the features and the characteristics shown by the atmosphere and the Dosha, Bala and Agni changes inside the human. As similar to this India has six major types of seasons.

Charaka1 divide the calendar year in to two Ayana and each Ayana consist 3 rithus. Utharayana/ Adana kaala and Dakshinayana/Visarga kaala. Aadana kaala is defined as that which reduces the watery part as well as the strength of the creatures of the earth. This is considered as the period of absorption. Visarga Kaala is considered as that which generates energy and increases the watery part of the earth, i.e, it is the period of liberation.

The direction of movement or Ayana of the sun is different in these two seasons. During Aadana Kaala, Sun moves Northward from tropic of Capricorn to tropic of Cancer and in Visarga Kaala, the sun moves southward from the tropic of Cancer to Capricorn. As a result, Aadana Kaala is also known as Uttaraayana Kaala and Visarga Kaala as Dakshinaayana Kaala. Sisira, Vasanta and Greeshma constitute Aadana Kaala (Uttaraayana Kaala); whereas Varsha Vasanta, Sarat and Hemanta constitute Visarga Kaala (Dakshinaayana Kaala)2
According to Charaka and Vagbhata seasons and the features with Ayana listed in table 1

Table 1

Ayana	Season	Features
Utharayana/ Adanakala	Sisira	Feeling extreme cold day and night
	Vasantha	Feeling hot at day and cold at night
	Greeshma	Feeling hot day and night
Dakshinayana/ Visarga kala	Varsha	Heavy raining
	Sarath	Frequent rain and hot days
	Hemantha	Feeling cold day and night

Analysis of Kerala climate with special reference to Susrutha

Considering the climates of Kerala the Rithu charya3 classification by Acharya Susrutha is apt model. In his scrutiny impending to southern parts from Ganga river there is slight variations in seasons. The episodes of extreme cold climate is dropping coming to the southern sides of India. Kerala being a state belong to the southern side of Ganga; the pravrit ritukrama will be more suitable to analyze the climatic conditions.

It is two rainy seasons experienced by Kerala, namely south west monsoon (Edavapaati) and north east monsoon (thulavarsha) which supports the pravrit ritukrama described by Acharya Susrutha.Here the controversy exists in the naming of seasons, as which of the rainy season should be named as varsha or pravrit. According to the ritu karma the south west monsoon/ (Edavapaati) begins by the end of May or early June should be considered as pravrit and north east monsoon (Thulavarsham) begins in the months of October and November should be considered as varsha.

But, by evaluating the swarupa described by Susruta for pravrit4 as the sky is full of clouds and wind blows from west producing lightning and roaring thunders are the features of north east monsoon (thulavarsha) which is found to be more similar to that of pravrit. Lightning and thunder is the common characters of Thulavarsham rain in Kerala.Thulavarsham or North east monsoon is happening when the north east monsoon wind return back from kerala. In short, if we are emphasizing on the swarupa of seasons, the south west monsoon (Edavapaati) can be considered as varsha and north east monsoon (thulavarsha) as pravrit. The seasonal divisions of Kerala5 enlisted in table 2

Table 2

Ritu	Maasa	Gregorian calendar
Vasanta	Magham	Mid January – mid February
	Phalgunam	Mid February – mid March
Greeshma	Chaitram	Mid March – mid April
	Vaisakham	Mid April – mid May
Varsha(Edavapaati)	Jyeshtam	Mid May- mid June
	Aashadam	Mid June – mid July
Sarat	Sravanam	Mid July – mid August
	Proshtapadam	Mid August – mid September
Pravrit (Tulavarsham)	Aswayujam	Mid September- mid October
	Kartikam	Mid October – mid November
Hemanta	Margaseersham	Mid November – mid December
	Pausham	Mid December – mid January

Regimens followed in Varsha Rithu / Idavapaathi

South west monsoon/ Idavapaathi is the beginning of rainy seasons in Kerala which followed with Greeshma rithu/ summer season. Vata dosha which vitiated will be in the prakopa avastha. As the days are full of rain and wind the food should be one which reduces moisture and vata in the body and it should be dry, easy to digest, unctuous, hot, sour and salty. When the atmosphere is cloudy, food and drinks should be processed and used along with honey6. Old rice, wheat and barley, processed soup of pulses, Old cereals and seasoned meat soup (mamsa yusha), meat of desert animals, vegetable soup, and old honey should be the part of diet7.

Regimens followed in Pravrit Rithu/ Thulavarsham

In kerala usually Sarath and Pravrit rithu will be representing an alternate climate habits which experiencing as short durations of rain and sunlight alternately. So the regimens should followed Vata as well as pitta Samanam. Sweet (Madhura rasa),Ghee(Ghrita pana)7 Warm milk, meat soup and the foods which stouten the body and increase moisture inside the body are beneficial in this rithu to reduce the aggravated vata as well as pitta. Foods prepared from barley, Shashtika rice(Njavara rice), Wheat and old Sali (White rice) can also consume8.

CONCLUSION

Assuming the climates in Kerala the well definable climates that can be recognized are 2 rainy seasons (Edavappathy and Thulavarsham), summer season and cold climate (December-January). There are no any extreme climates happens in Kerala. Hence the seasonal regimens should included the ahara and viharas which alleviate vata dosha in varsha rithu (edavappati rain) and the combined regimen which alleviate vata-pitta doshas sould be followed in pravrit rithu (thulavarsham).

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CONCEPTUAL STUDY OF AMAVATA

ABSTRACT

In the current era, Amavata is one of the most common disease affecting a large group of Population . Amavata term derived from words as "Ama" & "Vata". The Ama when combines with Vatadosha& occupies shleshmasthana (Asthisandhi) results in painful disease "Amavata". The clinical presentation of Amavata closely mimics with Rheumatoid Arthritis in accordance with their similarities on clinical features like pain, swelling, stiffness, fever, redness, general debility, fatigue. Amavata is mentioned in Ayurveda since the period of Madhavakara (16 th century A.D.) under the category of VataKaphaja disorders. Nidanas of Amavata are Viruddhahara, Mandagni, Exercise after heavy meal etc. Amvata is one of the challenging disease for the clinicians due to its chronicity, incurability, complications and morbidity.

This study deals with systemic review of Amvata from all the classics of Ayurveda.

Key Words: Amavata , Ama.

INTRODUCTION

An immense knowledge of Ayurveda – the life science includes explanations about Doshas- Body humors, dhatus-tissues, malas- wastes and srotas –body channels and how doshadushya sammurchana-meeting of imbalanced doshas with week tissues leads to development of diseases.The changing life style of human being by means of dietetic and behaviour pattern plays a major role in the manifestation of several disorders. Thus, this type of pattern may also lead to the development of the disease Amavata. In Amavata, Vata as a Dosha and Ama are chief pathogenic factors. They are contradictory in nature and thus possesses difficulty in planning the line of treatment. The Ama when combines with Vata Dosha and occupies in Shleshma Sthana (Asthi&Sandhi) results painful disease "Amavata" The disease is characterized by various featureslike Sandhishoola,swelling, in ability of joints movements etc.It is mostly the disease of MadhyamaRoga Marga and having ChirakariSwabhava. Sometime it can also be manifested as the acute case.

Amavata is the particular type of disease which is the mentioned in Ayurveda since the period of Madhavakara (16th century A.D.) under the category of Vata-Kaphajadisorders.The clinical presentation of Amavata closely mimics with the special variety of rheumetological disorders called rheumatoid arthritis (R.A.), in accordance with their similaritis on clinical features, like pain , swelling .stiffness, fever, redness, general debility are almost identical. The disease R.A. is chronic in nature and affects mostly the middle aged group. It is one of the common debilitating disease by the virtue of its chronicity and implications.

The onset of disease is frequent during 4th and 5th decade of life with 80% of patients developing the disease between 30-65 years of age. Community prevalence study shows that female are more sufferers than male and the ratio of occurrence between them is 3:1. A disease in future makes man to depend on others by afflicting the joints, altering the appearance, affecting the other systems makes the life miserable.Due to their similar mode of presentation, the disease rheumatoid arthritis can be broadly grouped under the heading Amavata.

HISTORICAL REVIEW

Amavata as a separate disease entity was described for the first time in detail by Madhavakara (900 AD) who devoted a full chapter (25th) of Amavata in his famous treatise Madhava Nidanamdealing with the etiopathogenesis of the disease in a systematic manner besides the signs, symptoms, complications and prognosis.

ETYMOLOGY

Vatadosha along with Ama is termed as Amavata. It indicates the propulsion of Ama by vitiated Vata in the entire body and getslodged in Sandhisthana producingAmavata. The word Ama and Vata unite to form the term Amavata. This signifies the role of pathogenesis of Ama and Vata in the disease. The improperly formed Annarasa is Ama and it causes vitiation of vata, which is known as Amavata. Áma is produced due to indigestion and along with Vata it is a well-known disease entity.

DEFINITION OF AMAVATA:

Amavata is a medical condition where Stabdhata of the body occurs due to lodging of vitiated Ama and Vata in the Sandhi .

CLASSIFICATION OF AMAVATA:

Madhavakara has classified Amavata according to predominance of doshas whichare as follows:

1. EkDoshaja:
2. DwiDoshaja :
3. TriDoshaja :

These varieties of Amavata can be differentiated on the basis of characteristic symptoms of Dosha involved .

Acharya Harita has classified Amavata into following four types on the basis of clinical manifestation.

1. Vishtambhi
2. Gulmi
3. Snehi
4. Sarvangi

Again it can be classified according to:

(A) Severity:

1. Samanya Amavata
2. Pravriddha Amavata

In Samanya Amavata, the symptoms are more or less general, less severe and not associated with Upadrava in comparison to Pravriddha Amavata.

(B) Chronicity:

1. Navina Amavata
2. Jeerna Amavata

Up to one year of onset it is said to be Navina and more than one year it is Called Jeerna Amavata.

NIDANA OF AMAVATA:

Madhavakara has described –

1. Viruddhahara(Unwholesome Diet)
2. Viruddhacheshta(Erroneous Habits)
3. Mandagni(Diminished Agni)
4. Nishchalata (Sedentary Life)
5. Exertion immediately after taking Snigdha Ahara is the causative factors for disease Amavata

1. ViruddhaAhara :-

Factors, which provoke doshas but do not eliminate them out of the body, are called Viruddha. There are certain codes for healthy eating,non-observance of the codes is called Mithya Ahara (Vijayarakshita). Mithya Ahara deranges the digestive power (Jatharagni) and also causes Dushti in Grahani. Thus the food doesn't get digested properly leading to production of Ama. As the Grahani is also Dushta, Anna undergoes further degradation and turn to AmaVisha.

A few example of virudha ahara and Mithya Ahara in our daily life are cited below as-

Canned food,Preservative in food, Beverages Fast food, packed food,street food

Sweets, chewing gum, panmasala & so on.

2. Viruddha Cheshta

The habits, which exert unfavorable effect on body humors, are considered as Viruddha Cheshta. In our classics Viruddhaahara has been described extensively but Viruddha Cheshta is not mentioned clearly. In Viruddha Cheshtafollowing factors can be considered, which are responsible of Dosha Utklesha.

1. Vega vidharana
2. Vega udirana
3. Diwaswapa
4. Ratrijagarana
5. Ativyayama
6. Vishamshayyaasana
7. Ativyavaya

Acharya Charaka has very clearly mentioned that suppression of natural urge of vomiting causes diseases. Due to this the dislodged Doshas can not be expelled out. If the Doshas termed as Ama & they are able to start the etiopathogenesis for the diseases. Day sleep after having Meals, Cereals, Abhishyandi & Gurubhojana in lunch causes Dushti of Mamsavaha &Medovaha Srotasa, which later hamper the Agni& as a consequency Ama is produced in the body. Asthis (bones) &Sandhis (joints) are the most affected parts in Amavata. Root source of these are Majjavaha srotasa & it is directly afflicted with Viruddha Sevana.So we can say that Viruddha Cheshta both contribute as Nidanas in pathogenesis of Amavata.

3.Mandagni

As it is said that Mandagni is the root cause of all diseases. It includeshypofunctioning of various forms of dehagni (i.e. Jatharagni, Bhutagni & Dhatvagni). The ingested food is digestedby all these types of Agni to form Poshaka & Poshyadhatus in the body. Mandagni leads to formation of Ama, which causes Srotorodha& results in reduced Dhatuposhana in turn causing Dhatukshaya. This Dhatukshaya leads to vataprakopa.Acharajanya (Adrishtahetu) is a very important factor has been mentioned by all the Acharyas. Behavioral misconducts, antisocial activities sinful activities & other activities punishable by court are considered under this heading.This Acharajanya factors

bring about psychogenic stress, which hampers the Agni & creates Ama.

4. Nishchalatwa

Nishchalatwa causes kaphavriddhi ultimately leading to Agnimandya. In today's life, People taking guru-snigdhaahara & indulging in sedentary life style by which low circulation of blood & low secretion of digestive enzymes Agni is hampered by which Ama formation occurs after that Amavata like disease occurs.
Sedentary life & day sleep after having meals cereals Abhishyandi & Gurubhojanain lunch causes Dushti of Mamsavaha & Medovahasrotasa. A person who is lazy & less active by his nature, in such person continuous consumption of nutritious or even normal diet produces accumulation of Kapha dominant Dhatus. Also due to sedentary habits, Agni gets vitiated which in turn leads to vitiation of doshas & production of Ama, it along with Ama causes pathogenesis of Amavata.

5. Snigdham Bhuktavato Hiannam

Vyayamam :-
After consumption of food, normally most of blood circulation is supplied to the digestive system. If a person indulge in exertion immediately after taking food especially rich in Snigdha guna, digestion & absorption will be hampered which leads to Ama formation. Also exercise after taking food causes vataprakopa which affects the metabolism & assimilation of Ahara.So from the above description it clearly seems that Ama Dosha generally by unwholesome food habits like Viruddhasana Adhyasana, Ajirnasana is known as Amavisha. It is very difficult to treat due to its Ashukriya (prompt action) & opposite natures of treatment of Ama & Visha.

ViprakrishtaNidana- Distant causes:-
1. Pragnyaparadha- Intellectual blasphemy
2. Agantuja- External factors
3. Kulaja- Hereditorial factors

PURVA RUPA- PRODROMAL SYMPTOMS OF AMAVATA

Disease Amavata, in the early stage produces mild symptoms like Apaka, Aruchi ,Shiroruja &Gatraruja which can be considered as Purvarupa of Amavata. Hence, the following Lakshana could be considered as Purvarupa of Amavata.

1. Agnimandya:- It is hampered function of Agni due to consumption of Nidana.
2. Apaka :- It is due to Agnimandya because proper digestion & metabolism does not take place.
3. Daurbalya:- It is a result of improper digestion of Dhatu & deprived nourishment.
4. Angamarda :- All type of nourishment of Dhatu leads to formation of Ama, so body feeling ache , that is called Angamarda.
5. Aruchi:- When the function of Rasanendriya is impaired by vitiated RasaDhatu & Bodhaka Kapha, they produced Aruchi.
6. Gaurava:- It is result of vitiated Kapha & Ama which produce heaviness in the body.
7. Gatrastabdhata:- Guna of Ama like Picchila, Guru, &Sheeta circulate in the body with the help of Vyanavayu, it gives rise to Gatrastabhdhta.

RUPA –SYMPTOMS AND SIGNS OF AMAVATA

They can be classified under following headings.

Pratyatma Lakshana:-(Cardinal sign & symptoms)

A) Sandhishoola- Pain in joints
B) Sandhishotha- Swelling in joints
C) Stabdhata- Stiffness
D)Sparshasahyata- Intolerance to touch

Samanya Lakshana:- (General /Associated Features)

A) Angamarda- Bodyache
B) Aruchi- Tastelessness
C) Trishna- Thirst
D)Alasya- Lassitude
E) Gaurava- Heaviness
F) Jwara- Fever
G)Apaka- Indigestion
H) Angashoonata- Swelling in organs

Doshanubandha Lakshana- Symptoms according to dosha dominance:-

A) Vatanubandha – Ruk-pain
B) Pittanubandha – Daha-Burning sensation, Raga-Redness
C) Kaphanubandha – Staimitya-lack of mobility, Guruta-heaviness, Kandu-Itching
D)Vatapittanubandha – Ruk, Daha, Raga
E) Vatakaphanubandha – Ruk, Staimitya, Guruta, Kandu
F) Kaphapittanubandha – Staimitya, Guruta,Kandu, Daha, Raga
G) Sannipataja – Symptoms of all doshas

PRAVRIDDHA LAKSHANA- Symptoms produced on aggravation of disease:-

A) Agnidaurbalya- Reduced digestive fire
B) Praseka- Excess salivation
C) Aruchi- Tastelessness
D)Gaurava- Heaviness
E) Vairasya- Tastelessness
F) Ruja&shotha in Hasta, Pada, Shiro, Guipha, Trika, Janu, UruSandhi- Pain and swelling of hands, legs, head, ankle, hip, knee and thighs
G)Vrishchikadanshavatavedana- pain like scorpion sting
H)Kukshikathinyav- hardness of abdomen
I) Kukshishoola- Pain in abdomen
J) Vibandha- Constipation
K) Antrakujana- Intestinal gurgling
L) Anaha- Distension of abdomen
M)Chhardi- Vomitting
N) Hritgraha- Compression of cardiac region

O) Jadya- Stupor
P) Bhrama- Giddiness
Q)Murchaha- Fainting
R) Nidra-viparyaya- Alteration in sleep
S) Daha- Burning sensation
T) Bahumutrata- Excess urination

UPASHAYA – ANUPASHAYA OF AMAVATA:

Use of medicaments, dietary regimens and viharas which bring lasting relief are known as Upashaya. On the contrary, anupashaya aggravates the disease.

Upashaya -

Katu, Tikta, Ruksha drugs ,Amla Rasa, Deepan, Pachan drugs ,Santarpana, Langhan, RukshaSweda, Abhyanga,SnehyuktaSweda, Ushna Kaala etc. Anupashaya of Amavata- SheetaKaala, Meghodaya Kaala, PratahaKaala

SAMPRAPTI –ETIOPATHOGENESIS OF AMAVATA:-

Conventionally the Samprapti can be categorized in two types.

1) Samanya(General) Samprapti: this is a common pathogenesis among various types of a single disease.
2) Vishishta(specific) samprapti; this is a specific pathogenesis for a particular sub type of disease.

The samprapti of Amavata described in MadhavaNidana and by some other commentators can be summarized as-

Sanchaya: When a person exposed to etiological factors Viruddha Ahara, does Vyayama after intake of Snigdha Ahara,Chinta, Shoka ,Bhaya etc. they cause Dushti of Agni, Dosha prakopa and Dushya Daurbalya.

Prakopa:

Due to Dushti of Agni, Mandagnioccurs. Mandangni cause Ama formation. Then due to fermentation of Ama gets suktatva (Vidagdhatva) and it converts in Amavisha. With the help of vitiated Vayuit goes to Prasaravastha. Now it is Samavata.

Prasaravastha:

Samavata goes to Dhamani (RasavahaSrotasa). Then Dushti of Amavisha occurs due to Tridosha. So it becomes Nanavarna (various colours) and Atipichchhila (viscid unctuous and heavy) Ama. Now it is Atidaruna Ama.

SthanaSanshraya:-

Yugpat Kupita of Vata and Ama (kapha) with the help of DushyaDaurbalya gets SthanaSanshraya in Rasavaha Srotasa, Sleshma Sthana andTrika Sandhi.

Vyakti:

As it reaches Vyakti stage, most of the symptoms of Amavata are manifested like Daurbalya ,Hridgaurava, Gatrastabdhata, Sandhishula,Sandhishotha, Sandhigraha,Sparshasahyata etc.

Bheda:

It is the chronic stage of the disease.

SAMPRAPTIGHATAKA:-
Dosha- Tridosha mainly Vata and Kapha
Dushya- Rasa, Mamsa,Asthi,Majja,Snayu and kandara
Srotas- Rasavaha,Mamsavaha,Asthivaha,Majjavaha
Srotodushti- Sanga and Vimarg-gamana
Agni - Jatharagnimandya&Dhatvagnimandya
Udbhavasthana- AmaPakvashayottha
RogaMarga- Madhyama
Vyaktisthana- Whole body mainly sandhisthana
Vyadhiswabhava- Chirakari

UPADRAVA – COMPLICATIONS OF AMAVATA
Various updravas of Amavata as mentioned by Acharyas are tabulated as follows:

1. Madhavakara- Mentioned it with Pravridhamana lakshana as Anyaniupdravani
2. Vijay Rakshita – Sankocha- contractures &Khanja- lameness
3. Vachaspati- Various Vatika disorders
4. Harita – Angavaikalya – deformities

SADHYASADHYATVA (PROGNOSIS) OF AMAVATA
Sadhya: Dominancy of single dosha in Amavata indicates disease is sadhya (curable).
Yapya: Dominancy of two doshas in Amavata indicates disease is yapya (manageable condition).
Krichchhrasadhya: Dominancy of all three doshas associated with sarvanga shotha (generalized oedema) indicates disease is Krichchhrasadhya (difficult to cure).

SAPEKSHA NIDANA (DIFFERENTIAL DIAGNOSIS) OF AMAVATA
Sapeksha Nidana or differential diagnosis of the disease Amavata can be done from
1. Vata Rakta (Gout),
2. Sandhigata Vata (Osteoarthritis),
3. Kostruka Sirsha (Infective arthritis),
4. Sandhigata Sannipatika Jwara (Rheumati fever).

CONCLUSION
Amavata is a disease which presents with stabdhata of the body . due to indulgence in virudhahara, viudhacheshta, mandagni , snigdham bhuktavata ahara etc the Vitiated vata and ama get lodged in trika sandhi and produce this disease.

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AN AYURVEDIC PROTOCOL TO MANAGE TRACTIONAL RETINAL DETACHMENT IN A PATIENT WITH MYOPIC ASTIGMATISM – A CASE REPORT

Abstract

Introduction-Retinal detachment (RD) is a condition in which the neuro sensory retina is separated from the retinal pigment epithelium. RD is higher when the refractive error is more. In Ayurveda it can be compared with tritheeya patalagatha timira (kacha) where the objects are visualized as covered by cloth and vision reduces as there is aggravation of gradual pigmentation of drushti. Case -The case of A 24-year-old female presented to the OPD of Sreedhareeyam Ayurvedic eye hospital with a complaint of diminished vision in right eye and was diagnosed previously as tractional retinal detachment is presented here. Intervention- The patient was managed with oral medications and external therapies like netrakriya kalpas and local applications to head during IP management. Results – had shown stability in visual acuity ,improvement in fundus photography and Optical coherence tomography (OCT) at the end of three course of treatment. Concluions- This study had shown further lowering of detached neuro sensory retina to its position and reduced tractional changes there by stability in visual acuity, which shows effectiveness of Ayurveda in a patient having tractional retinal detachment. This study emphasizes the importance of an integrative approach to manage tractional retinal detachment.

Key words-Alternative medicine, Kacha, Kriyakalpa

Introduction

Retinal detachments constitute a serious ocular condition and can lead to permanent vision loss. Retinal detachment is when the neurosensory retina loses adherence to the underlying retinal pigment epithelium (RPE), loses its oxygen and nutrient supply leading to the death of the tissue. There are three categories of retinal detachment: rhegmatogenous, tractional, and exudative. Rhegmatogenous retinal detachments are the most common and are caused by fluid passing from the vitreous cavity via a retinal tear or break into the potential space between the sensory retina and the RPE. Tractional detachments occur when proliferative membranes contract and elevate the retina. Exudative detachments result from fluid accumulation beneath the sensory retina caused by retinal or choroidal diseases. Risk factors for retinal detachment includes, extreme nearsightedness, previous intraocular surgery, trauma, family history, previous viral retinitis retinal lesions etc1 RD is higher when the refractive error is more. In, Ayurveda, the clinical features related to visual disturbances can be correlated under the broad heading of the Timira (early stage of blurriness of vision)-Kacha (second stage where more blurriness of vision)-Linganasha (end stage where complete loss of vision) group. In RD and myopic astigmatism where the vision is further more deteriorated can be correlated with kacha as per Vagbhatacharya, where the objects are visualized as covered by cloth and vision reduces as there is aggravation of gradual pigmentation of drushti and the patient have upper vision but not lower. In the Ayurvedic classics, we find the concept of Chakshushya and many drugs, and therapeutic procedures explained which enhance visual acuity as well as improve the health of the eye. The chikithsa sutra includes Sneha pana (drinking of fats), Asra-visravana (bloodletting), virechana (purgation), Nasya (nasal medication), Anjana (collyrium), Murdha-Basti (retention of oil over the head), Basti (enema), Tarpana (retention of fat over the eye), Lepa (application of paste), and Seka (pouring of liquids over the eye).

Case Presentation

A 24-year-old female patient presented to the OPD with a complaint of more diminished vision in right eye since 10 months. She had been seen previously by an ophthalmologist who diagnosed tractional retinal detachment. The patient was diagnosed with progressive myopic astigmatism at 9 years of age and using power glass since then. 10 months before she found more dimness of vision in right eye. She came to Sreedhareeyam Ayurvedic eye hospital for alternative options.

Her immediate family members did not suffer from similar complaints. There was no history of other systemic illness and her personal history readings (bowel, appetite, micturition and sleep) were within normal limit. A detailed ocular examination was performed. Distant visual acuity (DVA) at admission was 2 ½ /60 OD (Oculus Dexter) and 4/60 OS (Oculus Sinister). Best corrected visual acuity in OD was 5/60 B and OS was 6/12 (P). Her near vision was N6 (CF) OD and

N6 (CF) OS. Refractive manual for OD:-6.00(SPH), -1.25(CYL), Axis-180; and for OS:-5.50(SPH). Eyelids, conjunctiva, sclera, cornea and anterior chamber were normal in both eyes. Pupils were of normal size and of normal reaction. Both lens were clear. Intra Ocular Pressure [IOP] by Schiotz Tonometry was 13 mmHg in right eye and 12 mmHg in left eye. A detailed fundus examination of right (OD) eye revealed neuro sensory retinal detachment, tractional changes and blurred disc (Figure 1 a). Optical coherence tomography (OCT) scanning OD showed a dome-shaped elevation under the retina , suggestive of neuro sensory retinal detachment .

Diagnostic assessment

Hematological findings were within normal limit. Fundus examination and Optical coherence tomography (OCT) scanning confirmed the diagnosis of neuro sensory retinal detachment.

Therapeutic intervention

The patient underwent 3 courses of treatment one was from September 14 th 2019 to September 22 nd , second course was from June 9 th 2020 to June 28 th and the last course was from April 7 th 2021 to April 29 th. She was given with both internal medications (Table 1) and external therapies (Table 2). All medicines used during the treatment were manufactured at Sreedhareeyam farm herbs India, Pvt Ltd, the hospital's GMP certified drug manufacturing unit. During the course of treatment asked the patient to follow Pathyapathyas ie,avoid excess intake of spicy, hot heavy food, avoid excess straining of eyes, include more of green leafy vegetables in food.

Outcome Measures

Discharge medicines were given after the completion of each courses and instructed to continue the medicines until the next visit along with Pathya-apathya. Internally Sukumaram kashayam, Vainatheya ghritam, Dhanwantharam tablet, Chandra prabha vati Dasamoola hareetaki lehyam and Livomyn tablets were given. For external use Anjana ghritam, Sunetra Regular Nayana drops ,and ksheera bala 21 avarthi were given.

Vision was monitored during each courses and at the discharge time of first course , distant visual acuity (DVA) for both eyes(OU) were 3 /60 OD and 5/60 B OS. Best corrected visual acuity was 5/60 OD and 6/6(P)OS . DVA at the discharge of second course remains the same as that of discharge of first course. DVA at the discharge of third course was 3 /60 OD, 5 /60 (B) OS. Best corrected visual acuity was 6/60 OD and 6/6(P) OS. 0n comparing with the previous ocular examination done during first course, near vision at discharge time of third course was N10 (CF)OD and N6 OS (Table 3). After the first course of treatment, OCT scanning and fundus examination was done during the admission time of second course which shows slight reattachment of detached retina and reduced tractional changes. After the third course of treatment, fundus examination and OCT scanning OD showed further lowering of detached

neuro sensory retina to its position and reduced tractional changes. The optic disc ,margin becomes defined little more, retinal thickness reduced further (Figure 2 a and b). A timeline of events for this case is provided in Table 4.

Discussion

Retinal detachment (RD) is a condition in which the neuro sensory retina is separated from the retinal pigment epithelium. Most retinal detachments progress to total retinal detachments and complete loss of vision. If the retina is not re attached promptly then visual recovery is progressively affected. Also long standing retinal detachment starts to develop scarring that can prevent reattachment.2 The presenting symptoms of the patient can be included under the drushtigatha roga- kacha explained by Acharya in classics where the third patala (layers) of the eyes are being affected. Since the dosha reaches the third patala, gradually pigmentation aggravates and vision reduces further3. Which are categorized under yapya roga by Acharya. The goals of the Ayurvedic treatment in this case are the reattachment of the detached retina , stop further deterioration of the eye and restoration of the damages to the extent possible. Here in this case important consideration was given to Vataanulomana, because proper functioning of Vata Dosha is necessary in every aspects of retinal detachment. Here Dhanwantharam gutika acts as an Effective Vatashamaka drug. Also it improves digestion and circulation. In Bharangyadi Kashaya, majority of drugs are katu rasa and ushna veerya in nature. It has Vatakaphashamaka, Deepana,Amapachana and Rasayana properties.4

Amruthotharam kashayam is indicated in all varieties of fever, and hence, helps in restoring proper digestion. Also it has vata anulomana and srothosodhaka property. Since the retinal detachment is mainly due to the dushitha vata and kapha, so in this case it normalizes vata dosha by expelling out the wastes and by regulating the movement of Doshas out of the body and eye. Dushita kapha dosha is eliminated out by the sroto sodhaka property of the drug5.

Triphala ghrita is chakshushya in nature. Triphala and Ghrita are Chakshushya Dravya i.e. both gives strength to Chakshurendriya 6. Triphala is believed to have balancing and rejuvenating effect on thridosha. Ghrita has its lubricating action by Snigdha Guna and also as it is Samskaranuvarti 7 it carries the properties of Triphala and act as a good mediator. Amalaki helps in purifying toxins from the body, by enhancing food absorption. Thus flushes out the toxins out of the body. It is chakshushya- ie it's a rasayana for strengthening the eye. Because of its high content of vitamin C amalaki is a powerful anti-oxidant. Science research shows that amalaki is an extremely potent anti-oxidant , excellent in removing excess free radicals , which are the basis of much degenerative diseases and ageing8. All these qualities make amalaki as a powerful immunity enhancer . Hareetaki and Ghrita in the drug aid better tissue absorption and improve blood parameters.

Chandraprabha vati is a tridoshahara, rasayana and mutrala drug. Chandraprabha vati is a combination of 37 drugs 9, where Shilajatu and Guggulu are the main constituents. Guggulu is considered as one of the best drugs for reducing aggravated vata along with diuretic nature. Shilajatu is a rasayana which helps in maintaining the normal functioning. Hence the same was selected here with a notion to alleviate symptoms of vitiated vata like retinal detachment, traction etc and to improve the appetite and strength of the patient.

Sukumara Kashayam is a potential antioxidant medicine.10 Vidaryadi churna is used in the treatment of general debility. It helps to increase immunity and vitality. Also it is aphrodisiac and improves nourishment. Nethra raksha kashayam is chakshushya in nature.

Pratimarsha nasya with anutaila is specially recommended by Acharya Charaka as preventive measures for urdhwajathru gatha vikara. Majority of ingredients of Anutaila shows tikta-
katu rasa(bitter-pungent taste) and laghu guna(light). These properties are very much in favor of clearing the srotas. Katu vipaka, ushna virya(hot potency) and tikshana(sharp) properties produce draveekarna(liquification) of vitiated kapha dosha. Madhura rasa(sweet taste) and snigdha(unctuous) properties help to nourish dhatus(tissues). Anutaila has tridosha nashana, balya, brimhana and rasayana properties which may help to increase local immunity.11

As Siroveshtanam is applied directly over the head it is absorbed rapidly through the skin and hair follicles and cross the blood-brain barrier and the blood-ocular barriers. Shirodhara produces a constant pressure and vibration which is amplified by hollow sinus present in the frontal bone. The penetration is through the follicular pores to the follicles and then to the dermis via sebaceous glands. It normalizes the function of thalamus and forebrain which brings the amount of serotonin and catecolamines. It stimulates pineal gland which produces the hormone melatonin which regulates the wake and sleep cycle12.

In Tarpana the tissue contact time and bioavailability is more. Ghrita possess the quality to penetrate to deeper channels in the body. The lipophilic nature of ghrita helps to reach to the target organ and finally reaches the cell because of presence of lipids in cell membrane. Ananta Ghrta, consists of Amalaki, Jivanti, Yashtimadhu, and Haritaki, as constituent is used for Tarpana in all eye diseases. Jataveda ghrita is chakshushya in nature. So it is also used in tarpana kriya . Netra dhara causes vasodilatation hence fast absorption of medicines. As Ascyotana is applied at a particular height and temperature, it enables the absorption of the medicines to reach the target tissues rapidly. Sunetra regular is prepared from Daruharidra, Haridra, and rose water, and is indicated in eye disorders .Dasamoola hareetaki leham is a good immune modulator, rejuvenative and is a best laxative which flushes off unwanted kleda in the cells which causes internal swelling.

In Ksheerabala Taila - Bala, Ksheera and Tila Taila possess Madhura Rasa and Vipaka. Madhura Rasa mitigates both Vata and Pitta Dosha. It is Dhatunaamprabalam (strength to the tissue) and is good for sense organs and pleasing to mind (Shadindriyaprasadaka). It nourishes the body (Tarpayati) and plays a major role in promoting life (Jeevayati). So here in this case , vitiated vata dosha can be cured and tissue integrity of the ocular muscles can be improved.

Conclusion

Therapeutic procedures along with internal medicines (chakshushya and many other drugs) had shown further lowering of detached neuro sensory retina to its position , reduced tractional changes and there by stabilizing visual acuity. The optic disc and margin became defined little more, retinal thickness reduced further. This case study indicates effectiveness of Ayurveda in a myopic astigmatism patient having tractional retinal detachment. This study emphasizes the importance of an integrative approach in healthcare. Study on a large number of samples to draw more concrete conclusions are needed. Awareness should be created for the role of Ayurveda in such type of diseases especially concerned with Ayurveda where modern medicine has limited role.

Table 1 –Oral medicines

Medicine	Dosage	Anupana (post-prandial beverage)	Time	Duration
Bharngyadi kashayam	40mL	Lukewarm water	6am	15/09/19-22/09/19
Nethraraksha kashayam (Santalum album+Glycyrrhiza glabra)*	40mL	Lukewarm water	6am and 6pm	10/06/20-28/06/20
Sukumaram kashayam	40mL	Lukewarm water	6am and 6pm	15/09/19-22/09/19 10/06/20-28/06/20 8/04/21-29/04/21
Vidaryadi churnam	1 teaspoon	*Sukumaram kashayam*	6am and 6pm	8/04/21-29/04/21
Chandraprabha gutika	1 tablet	Lukewarm water	Twice a day after food	10/06/20-28/06/20
Triphala ghritam	1 teaspoon	Lukewarm water	Twice a day after food	8/04/21-22/04/21
Amruthotharam kashayam	40 ml	Lukewarm water	6am and 6pm	17/06/20-28 /06/20

Table-2 External therapies

Treatment	Medicine	Method of administration	Duration
Pratimarsha nasyam	*Anutailam*	4 drops of medicine is instilled into each nasal cavity	11 /06/20-14/06/20 8/04/21-14/04/21
Netra kshalanam	*Kashyapam kashayam* (main ingredient triphala+yashtimadhu)*	The *kashaya* is poured in a thin stream over the opened eye	14/09/19-15/09/19 10/06/20-14/06/20 8/04/21-16/04/21
Seka	*Mridweekadi kashaya*	The *kashaya* is poured in a thin stream over the closed eye	9/04/21-16/04/21
Tarpana	*Jataveda ghritam *+ Ananda ghritam ** (*Yashtimadhu, Amalaki, Jivanti,* and *Haritaki,*)	Medicated ghee is poured and retained over the eyelids in an enclosure built around the eye out of wheat flour for 45 minutes	**16/09/19-22/09/19** 15/06/20-21/06/20 17/04/21-25/04/21
Aschothana	*Nayana drops**	One drop of the medicine is instilled into the inner canthus from a height of 2 *Angulas* (fingers).	14/09/19-15/09/19
	*Netra sudha **		10/06/20-14/06/20

Anjana	*Padmakadi anjanam* *	One drop of the medicine is instilled into the inner canthus from a height of 2 *Angulas* (fingers). The patient was asked to move the eyeball in a circular manner	8/04/21-16/04/21
Shiro veshtana	*Kachooradi churnam* *Vara churna m* *Shirasthoda vatakam* *Nimbaamritaadi eranda tailam*	30g of powder is made into a paste by mixing with the *tailam* . A Cora cloth was immersed in 100mL of the *tailam* and the paste was smeared over the cloth. The cloth was applied over the forehead from one ear to the other and tied over the head.	10/06/20-14/06/20
Sirodhara	*Sasanka tailam* *Ksheera ala tailam*	The oil is poured in a thin stream over the head from a coconut shell with a hole in the center.	11/06 /20-14/06 /20
	Sasanka tailam		9/04/21-16/04/21

Table 3.Visual acuity

	Before three course of IP management		After three course of IP management	
	OD	OS	OD	OS
Vision	2 ½ /60	4 /60	3 /60	5 /60 B
Vision with PG	5 /60 B	6 /12 P	6 /60	6 /6
Near vision	N 6 CF	N6 CF	N10 CF	N6 CF

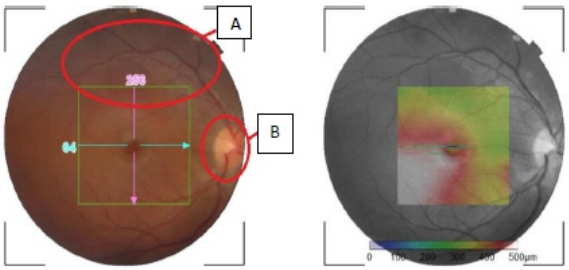
Table 4. Timeline events

Date	Events
03/2016	This myopic astigmatism patient experiences dimness of vision in RE. Gets diagnosis of tractional RD in RE
08/2019	The patient experienced more dimness of vision in RE and Consults Sreedhareeyam Eye Hospital and is advised inpatient management

09/2019	OCT Scanning OD: a dome-shaped elevation under the retina, thickened retinal layer Fundus examination OD : angioid streaks, exudates around 12 '0 clock position , Neuro sensory retinal detachment ,sub retinal fluid with blurred disc margins and retinal traction
14/09/2019	Admitted for a course of inpatient management DVA : 2 ½ /60 OD, 4 /60 OS Near vision :N6(CF) OU • Treatment started
9/06/2020	Admitted for second course of inpatient management DVA : 2 ½ /60 OD, 4 /60 OS Near vision :N6(CF) OU
10/06/20	• Treatment started
28/06/20	DVA : 3/60 OD, 5 /60B OS

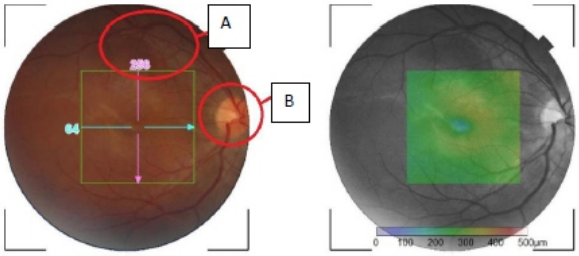
7/04/21	Consultation at Sreedhareeyam for the follow up treatment DVA : 3 /60 OD, 5 /60 BOS Vision with PG : 6/60 OD, 6/6 P OS Near vision : N10 (CF) OD, N6 (CF) OS
8/04/21	• Treatment started
29/04/21	DVA : 3 /60 OD, 5 /60 B OS Vision with PG : 6/60 OD, 6/6 P OS Vision with pin hole : 6/60 OD, 6/6 OS Near vision : N10 (CF) OD, N6 (CF) OS OCT Scanning OD: Showed further lowering of detached neuro sensory retina to its position and reduced tractional changes. The optic disc ,margin becomes defined more, retinal thickness reduced further

Figure 1a –fundus photograph at admission (before 3 course of treatment)



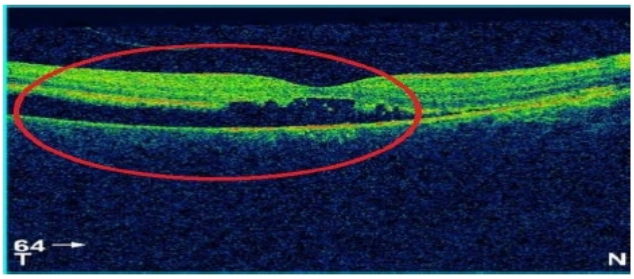
Marked portion " A" shows- tractional changes "B" Shows - blurred disc and margin

Figure 2a –fundus photograph at discharge (after 3 course of treatment)



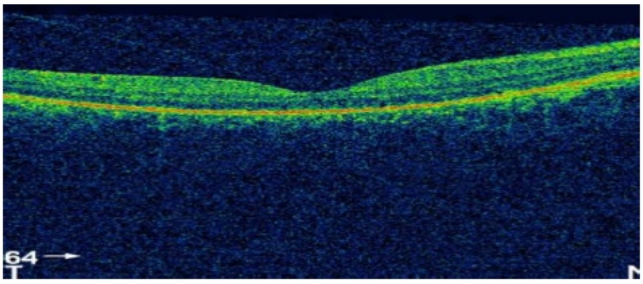
Marked portion " A" shows- reduced tractional changes. "B" Shows - The optic disc ,margin becomes defined little more.

Figure 1 b – OCT Scan at admission (Before 3 course of treatment)



Marked portion showing a dome-shaped elevation under the retina , suggestive of neuro sensory retinal detachment .

Figure 2b –OCT Scan at discharge (After 3 course of treatment)



Graph shows further lowering of detached neuro sensory retina to its position.

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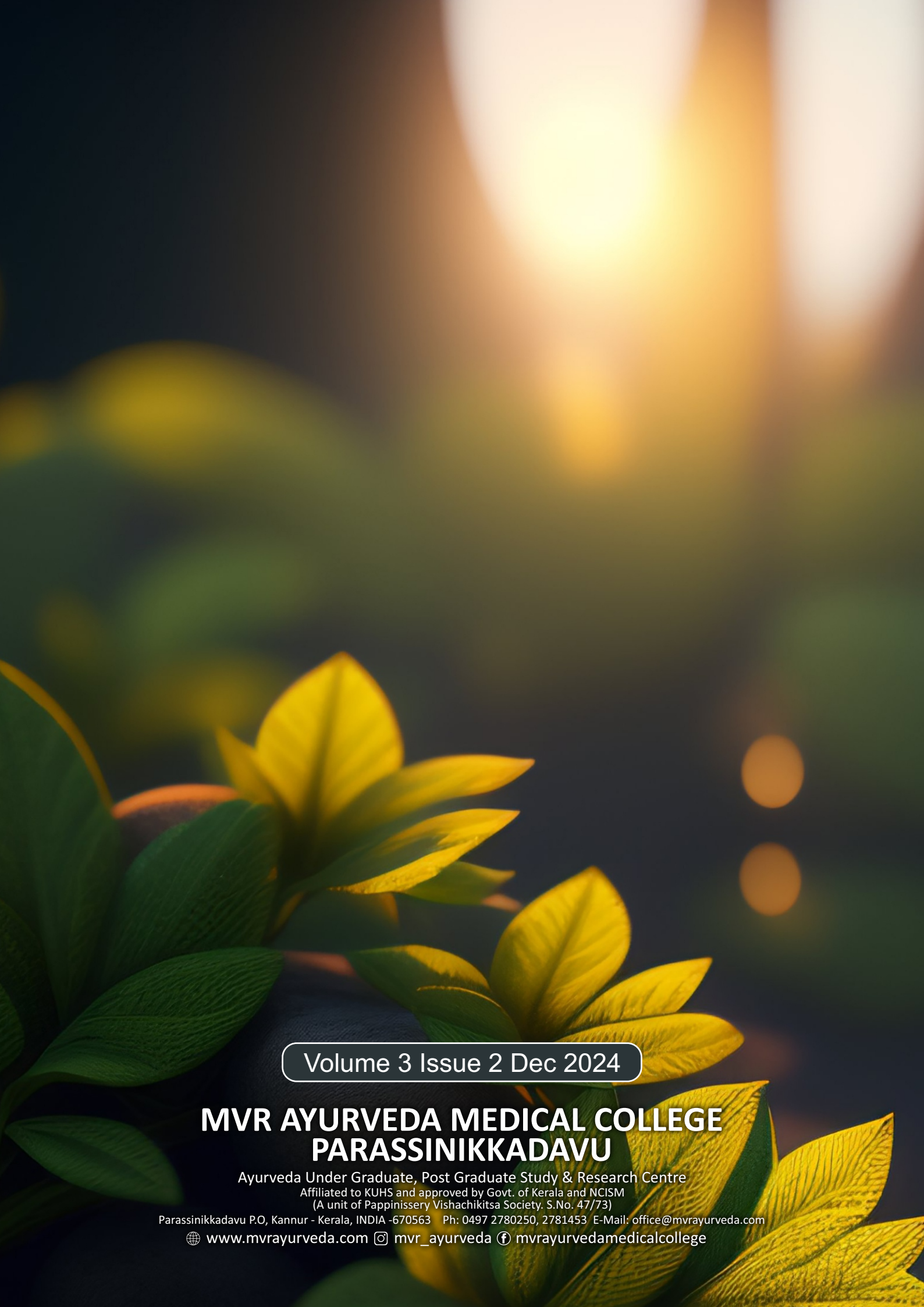

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