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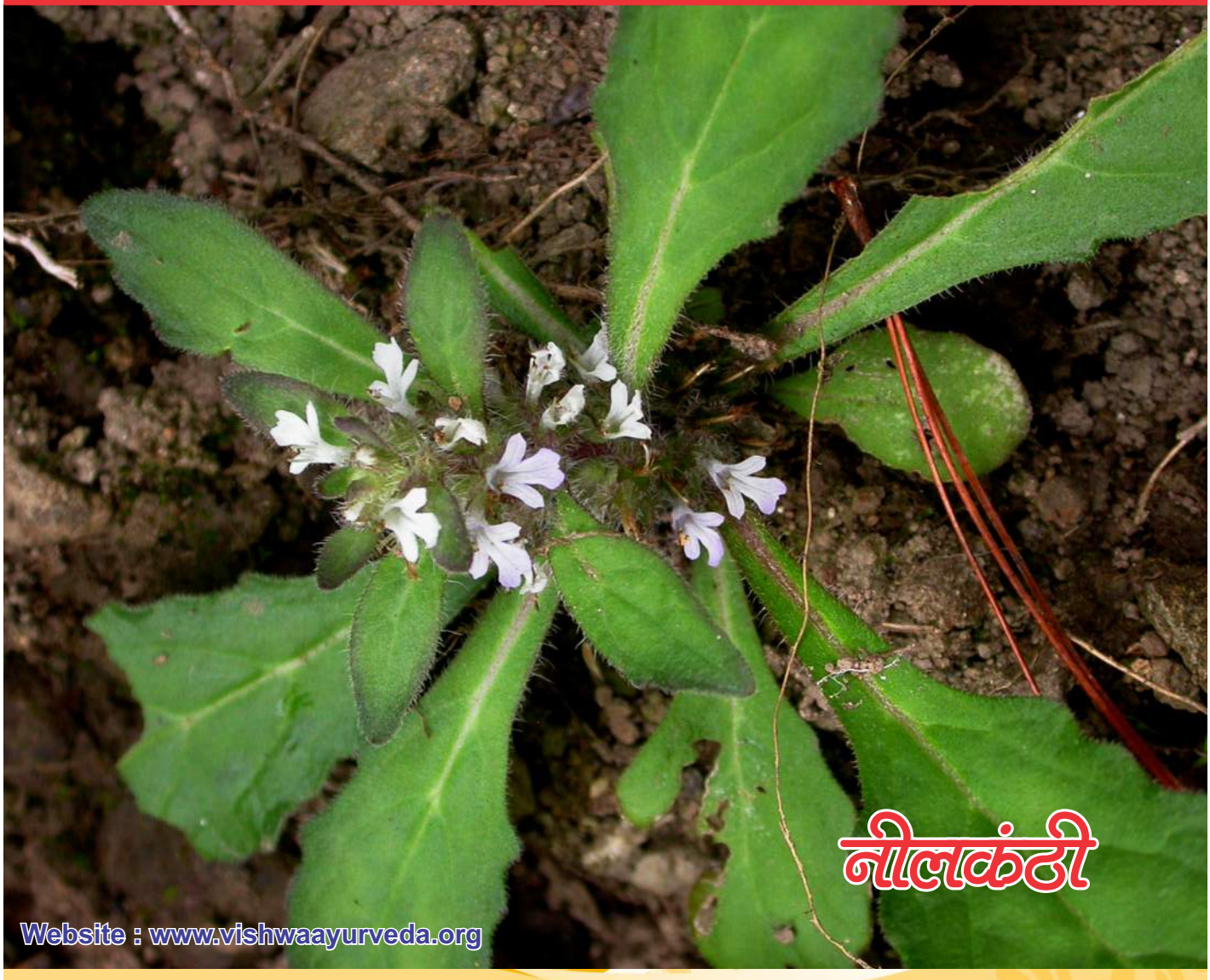
विश्व आयुर्वेद परिषद्

पत्रिका

वर्ष - 13, अंक - 1 सम्वत् 2072 पौष-माघ जनवरी, 2016



नीलकंठी

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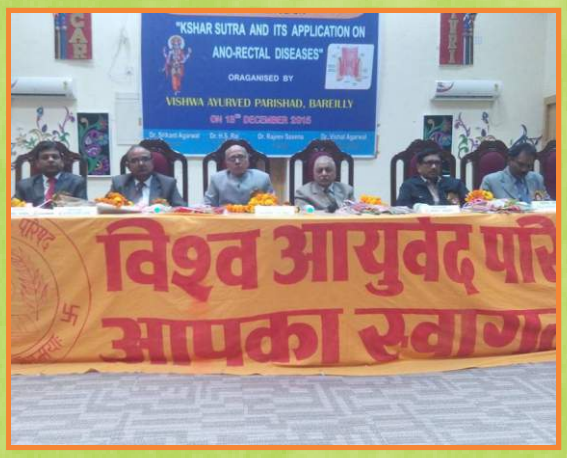
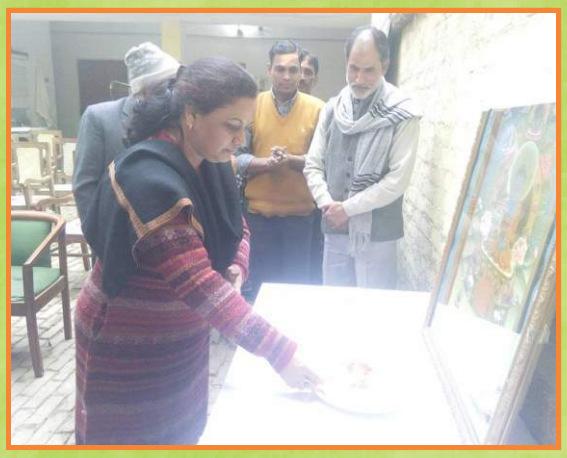
A Reviewed

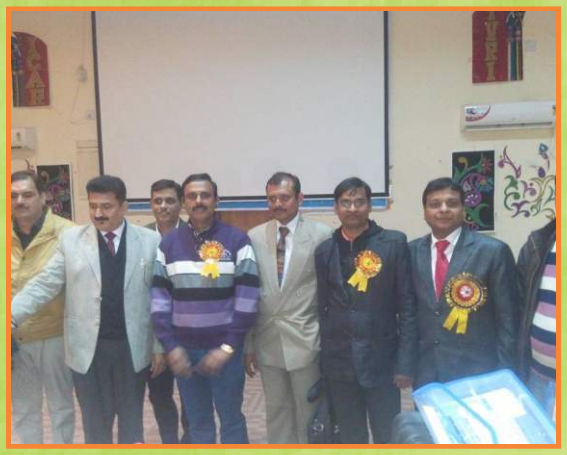
Journal of Vishwa Ayurved Parishad

₹50/–

देश के विभिन्न प्रान्तों में विश्व आयुर्वेद परिषद् की गतिविधियाँ







VAPNC-2016

(28 February, 2016)

National Seminar & Poster Presentation

Format for abstract:

Length of the abstract 250 words which includes figures, tables and references

Title of the abstract : Concise title in initial capitals should be written in times Roman, 12 point bold font with centre alignment.

Name of the authors should be written in initial capitals in 10 point times roman font two spaces below the title (aligned centrally), followed by the details (designation, institute etc.) of all the authors.

E-mail address of the author presenting the papers should be written "one space" below the "names and affiliations of the authors" (times roman 10 point font)

The main text of the abstract should be written in times roman 10 point font two spaces below the "authors' affiliation". Please arrange figures and tables as close to the relevant portion of the text" as possible. Single spacing should be maintained for the names, affiliations and email addresses while the line spacing for the text of the abstracts should be 1.5.

Arrange the text in such a way so that the "abstract" can be printed on A4 size paper with 2.5 cm margin on all sides.

Key words should be mentioned at the end of the abstract.

FULL PAPER

The abstract with a full text paper should be submitted before 20th February, 2016.

Soft copy (e-copy) may be mailed at vapnc2016@gmail.com

Hard copy may be sent to Dr. Madhurima, Reader deptt. of ras shastra and B.K, DAV Pharmacy, mahatma hans raj marg, jalandhar city.punjab -144008. Before 26th January,2016

POSTER PRESENTATION

Space Will be Available for poster exhibition . the criteria of selection will be same as for papers. The format of poster abstract is same as for the papers. The format for poster abstract is same as for the paper astract . the abstract of the poster should be sent in the same way at the address mentioned above before 26th feb, 2016. author should carry the fill poster and report at reception/registration counter on 28th feb,2016 well in advance to book space for its exhibition.

FORMAT FOR FULL POSTER

Poster size: 3x2 feet with four holes on each corner with rebet. Poster should be preferably of flex material.

Title of the poster followed by name of author and co-authors on top.

Details of author and co-author (designation, institute etc.) at the bottom.

Aim and objective, introduction ,material and methods, conclusion, diagram etc. should be included in poster as required.

IMPORTANT DATES:

Submission of paper abstract	25th Jan, 2016
Submission of poster abstract	25th Jan, 2016
Submission of power point presentation	10th Feb, 2016.
Submission of poster	28th Feb, 2016
The seminar	28th Feb, 2016

WHOM TO CONTACT:

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विश्व आयुर्वेद परिषद्

राष्ट्रीय अधिवेशन

VAPNC 2016

27 & 28 February 2016

(Dayanand Ayurvedic College, Jalandhar-8 {Pb})

NATIONAL SEMINAR & POSTER PRESENTATION

on

Recent Advances & Skill Development in Ayurveda

VISHWA AYURVED PARISHAD

Registered Under Society's Registration Act 21 of 1860

आयुर्वेद के प्राचीन गौरव को पुनस्थापित करने हुते
एक स्वप्रेरित समर्पित संगठन

A Non Government Voluntary Organisation Dedicated for Re-establishment of Ayurveda to it's Past Glory

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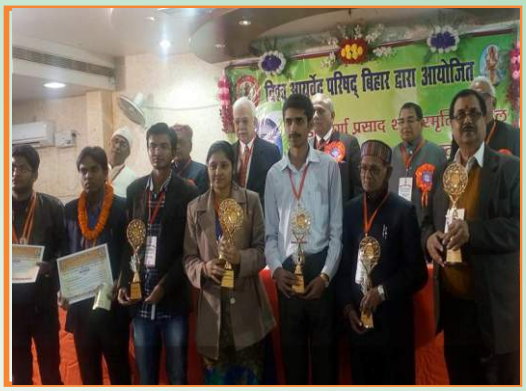
पटना, बिहार में दो दिवसीय राष्ट्रीय सम्भाषा, अखिल भारतीय स्नातक छात्र निबन्ध प्रतियोगिता पुरस्कार वितरण समारोह की झलकियाँ



विश्व आयुर्वेद परिषद् के लिए प्रोफेसर सत्येन्द्र प्रसाद मिश्र, कार्यकारी अध्यक्ष द्वारा नूतन ऑफसेट मुद्रण केन्द्र, संस्कृति भवन, राजेन्द्र नगर, लखनऊ से मुद्रित कराकर, 1/231 विराम खण्ड, गोमती नगर, लखनऊ-226010 से प्रकाशित

प्रधान सम्पादक - प्रोफेसर सत्येन्द्र प्रसाद मिश्र

विश्व आयुर्वेद परिषद पत्रिका
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Contents

अतिथि सम्पादकीय

प्रिय पाठक वृंद,

आजादी के उपरांत भारतीय आयुर्वेद योग संग्रह (AFI) तथा भारतीय आयुर्वेदिक भेषज संहिता (API) के संकलन पर कार्य आरंभ हुआ। उस समय तक आयुर्वेदिक योगों तथा द्रव्यों पर जानकारी एक स्थान पर उपलब्ध नहीं थी तथा हिमालय क्षेत्रों में पाए जाने वाले द्रव्यों की जानकारी अन्य क्षेत्रों के वैद्यों को नहीं थी। 1946 में ले. कर्नल आर. एन. चोपड़ा की अध्यक्षता में एक समिति का गठन किया गया, जिसने आयुर्वेदिक पौधों की उचित पहचान, उनके संग्रह पर नियंत्रण तथा कच्ची औषधियों के वितरण पर विचार किया गया। इस समिति ने आयुर्वेदिक भेषज संहिता (API) के संकलन पर सकारात्मक अनुशंसा की। 1962 में भारत सरकार ने कर्नल राम नाथ चोपड़ा की अध्यक्षता में पहली आयुर्वेदिक भेषज संहिता समिति का गठन किया। इस समिति का 1972 में पुनः गठन किया गया तथा समिति ने (API) से पुनः भारतीय आयुर्वेदिक योग संग्रह के कार्य को महत्व दिया। इस बीच भारत सरकार ने 1960 में भारतीय चिकित्सा पद्धतियों में अनुसंधान को बढ़ावा देने हेतु परिषद् (CCRIMH) का गठन किया। कालांतर में यह परिषद् आयुर्वेद एवं सिद्ध, यूनानी, होम्योपैथी, योग एवं प्राकृतिक परिषदों में विभक्त हो गई।

1940 में तत्कालीन भारत सरकार द्वारा औषधि एंवं प्रसाधन अधिनियम (Drugs & Cosmetic Act 1940) लागू किया। इसके अनुसार एलोपैथ औषधियों के निर्माण, विक्रय भंडारण आदि इस कानून के दायरे में आ गये। 1964 में इस अधिनियम में बदलाव कर इसके परिपेक्ष्य में आयुर्वेदिक, यूनानी तथा सिद्ध औषधियों को भी लाया गया। यह एक बड़ा कदम था। जिससे इन भारतीय चिकित्सा पद्धतियों को कानूनी रूप में भी मान्यता प्राप्त हुई। 1970 में आयुर्वेदिक औषधियों के विश्लेषण तथा (API) व (AFI) बनाने के कदम के रूप में भारतीय चिकित्सा भेषज संहिता प्रयोगशाला (PLIM) की गाजियाबाद में स्थापना हुई। आयुर्वेदिक भेषज संहिता समिति का मानना था कि भारतीय आयुर्वेदिक भेषज संहिता से पूर्व आयुर्वेदिक योग संग्रह (AFI) तैयार किया जाना चाहिए तथा इनमें वर्णित द्रव्यों को भेषज संहिता में सम्मिलित किया जाए। औषधि एवं प्रसाधन अधिनियम में प्रथम अनुसूची के शास्त्रीय पुस्तकों में वर्णित प्रलित योगों की सूची बनाई गई मथा भारत वर्ष के वैद्ययों तथा औषधि निर्माताओं से चर्चा कर अति प्रचलित शास्त्रीय यागों को सूचीबद्ध किया गया था। 1978 में भारतीय आयुर्वेदिक योग संग्रह (AFI) भाग प्रथम का प्रकाशन हुआ, जिसमें 444 योगों को सम्मिलित किया गया था। इसके उपरांत पी.एल.आई.एम. तथा केन्द्रिय आयुर्वेद एवं सिद्ध अनुसंधान परिषद् के औषधि मानकीकरण एककों की सहायता से एकल द्रव्यों के मानकीकरण का कार्य आरंभ हुआ तथा वर्ष 1986 में प्रथम भारतीय आयुर्वेदिक भेषज संहिता का प्रकाशन हुआ। जिसमें 80 द्रव्यों के भेषज संहतीय मानक सम्मिलित किए गये थे। इसके उपरांत यह कार्य निर्बाध रूप से जारी है और अबतक भारतीय आयुर्वेदिक भेषज संहिता भाग-1 (ए.पी.आई. भाग-1) के आठ खण्ड प्रकाशित हो चुके हैं। ए.पी.आई. के खण्डों में एकल औषधियों, खण्ड-6 में एकल औषधियों excepients के साथ-साथ धातु, खनिज एवं extracts सम्मिलित है। संक्षेप में खण्ड-1-6 एकल औषधियों, खण्ड-6 में एकल औषधियों, तथा excepients यथा मधु, यवानी, सत्व, गोघृत, गुड़, जल, शर्करा, पिपर मिंट सत्व, तिल तैल, सर्षप तेल, तैलपूर्ण तैल आदि सम्मिलित है। खण्ड-7 में धातु एंवं खनिज का वर्णन है, जैसे- अभ्रक, अकीक, गंधक, गादंती, रजत, मंडूर, टंकण, स्वर्ण इत्यादि। खण्ड-8 में का वर्णन है। घन सत्व तथा हाइड्रो एल्कोहॉलिक extracts जैसे- आमलकी, अश्वगंधा, विभीतक, भृंगराज, अर्जुन, हरीतकी, कालमेघ इत्यादि है। इसी क्रम में औषधि एंवं प्रसाधन अधिनियम के अनुसार आई.पी. तथा पी.एफ.आई. में प्रयुक्त excepients को आयुर्वेदिक औषधियों के निमार्ण में भी प्रयुक्त किया जा सकता है।

भारत सरकार आयुर्वेदिक औषधियों के गुणवत्ता के सुधार पर प्रतिबद्ध है। अब तक 6000 एकल द्रव्यों तथा 152 यौगिकों के भेषज संहिता मानक संहतीय मानक प्रकाशित किए जा चुके है। भारत सरकार द्वारा GMP औषधि निर्माताओं द्वारा प्रमाण पत्र को निवार्य कर दिया गया है। GMP के अंतर्गत अनुसूची-टी को लागू किया गया। इसके भाग-1 में factory premises तथा hygienic conditions की आवश्यकताओं को इंगित किया गया। इसके अनुसार साफ-सफाई, गुणवत्ता नियंत्रण, मशीनों, कार्मिकों, रिकार्ड, कार्यप्रणाली आदि के लिए नियमों का प्रावधान है। भाग-2 में मशीन तथा प्रत्येक dosage form के विनिर्माण के लिए न्यूनतक जगह का प्रावधान है। जैसे- चूर्ण/क्वाथ चूर्ण-200 sq.ft., वटी, गुटिका-100 sq.ft., कैप्सून-100 sq.ft., आसव/आरिष्ट-200 sq.ft., सूची-स में गुणवत्ता नियंत्रण प्रयोगशाला में प्रयोग हेतु उपकरणों की सूची दी गई है। उच्च गुणवत्ता हेतु औषधि निर्माता WHO-GMP का प्रमाण पत्र भी ले सकते है, जो कि औषधि के निर्यात में लाभप्रद है।

- प्रो0 वैद्य के0 एस0 धीमान
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AN OVERVEIW ON MADHUMEHA VIS-A-VIS DIABETES MELLITUS

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ABSTRACT :

Diabetes mellitus is certain to be one of the most challenging health problems in the 21st century. It is one of the important multifactoral, commonest metabolic disorder in men and women, all over the world. Recent epidemiological studies reveals that approximately 246 million of people suffer from diabetes mellitus. By 2025 this figures could be expected to be 380 millions. Its incidence has been estimated to be around 15% of Indian population. WHO has projected India as the leading country in the world, as per diabetic concerned. In the year 2025 the diabetic population in India will reach up to 70 million. It is epidemic in many developing and newly industrialized nations. It is a major global health problem with diverse causative factors often associated with multiple devastating innervating complications, increasing disability and reduced life expectancy. The information available in the classics of Ayurveda, shows that diabetes mellitus as a disease was very well known to the propounders of Ayurveda. It is amazing to note that the entire knowledge of disease diathesis, prognosis and treatment of diabetes mellitus vis a vis Prameha/Madhumeha was equally advanced since antiquity in the classics of Ayurveda. Hence the scientific community of all over the world including practitioners and researchers are now inclined to the other system of medicine including

Ayurveda in the search of new treatment modalities for better management of diabetes mellitus and its complications.

KEY WORDS: Ayurveda, Diabetes, Prameha/ Madhumeha, Ojas, Agni.

INTRODUCTION:

Diabetes mellitus is described as Prameha/ Madhumeha in ancient Indian Sanskrit literature including Ayurveda which is duly acknowledged in the modern medical texts. But it should be made clear that the term Diabetes mellitus is not clearly mentioned in the classical texts of Ayurveda. Rigveda (1500BC) contains hymns which include description of various medical conditions including Prameha/ diabetes. It is one of the oldest diseases recognized since antiquity. Pointed out by medical historians that diabetes mellitus was first known to Indians since prehistoric periods. But its actual cause is still unknown. The characteristic features of Madhumeha are very similar to those of Diabetes mellitus which is described in Ayurvedic lexicons.

Therefore, Madhumeha is being considered here as Diabetes mellitus. It is mentioned under Vatika Prameha in Charaka Samhita, while Sushruta has contributed separate chapter to this chronic health hazard. However, detailed descriptions of the disease process and therapeutics prescribed in these classics could not get proper recognition, because of the fact that conventional medical science in the understanding of patho-physiology, complications and therapeutic interventions, it provides a better platform to interpret and understand the centuries old knowledge of health care systems, Furthermore, scientific analysis of Ayurvedic drugs, reveal that Ayurvedic drugs have enormous therapeutic capabilities for the management of Diabetes mellitus and its associated complications, which modern medicine is searching for the same.

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In classical texts of Ayurveda diabetes mellitus is mentioned as sub types of Prameha, Mootratipravrittaja Vikara and as a complication of Prameha. Charaka has described disease which is very difficult to cure. Now it is possible to classify the diabete into primary and secondary types as well as Insulin dependent and Non Insulin dependent types. It is amazing that 7 century B.C. Ayurvedic texts like Charaka and Susruta Samhita have been described high caloric diet and sedentary habit as an important causative factors of Apathyanittaja Prameha and genetic/hereditary factors described as Sahaja Prameha. Beside these causative factors, diabetics are again divided in two groups in terms of the constitution and body weight viz- 1. Krisha Pramehi- thin diabets and 2. Sthula Pramehi- obese diabetics. These two types of diabets have been described to be treated on two different lines of management.

Important facts of Diabetes mellitus

- Worldwide more than 246 million of people suffer from diabetes mellitus. By 2025 this figures could be expected to be 380 millions. Although the prevalence of both type 1 and type 2 DM is increasing worldwide, but the prevalence of type 2 DM is raising with alarming rate.
- In 2007, the five countries with the largest numbers of people with diabetes are India (40-9 million), China (39.8 million), the United States (19.2 million), Russia (9.6 ,illion) & Germany (7.4 million).
- By 2025, the largest increases in diabetes prevalence will take place in developing countries.
- Each year a further 7 million people develop diabetes.
- Each year 3.8 million deaths are attributable to diabetes.
- Every 10 seconds one person dies from diabetic complications.
- Every 10 seconds two people develop Type II diabetes.
- Diabetes is the further leading cause of global death.
- At least 50 to 80% of diabetics are unaware of their condition.
- Type II DM is most frequent cause of kidney failure in Western world.
- 10% to 20% of people with diabetes die of renal failure.
- 2.5 million People worldwide are affected with diabetic retinopathy.
- Chance of heart attack or stroke are twice in Type-II diabetics. (Diabetes Care. 2004; 27(5): 1047-1053, Indian J Med Res 125, March 2007, pp 217-230).

NIDANA-ETIOLOGY:

The exact cause of such a fast increase in incidence of diabetes is exactly not known in conventional system of medicine. But it is largely belived that the role of genetic factors, environmental factors and altered stressful lifestyle play major role in the genesis of this chronic health hazard. Similar opinion is given by ancient scholars of Ayurveda.

Asyasukham svapnasukham dadhini gramyaodakanooparasah pay ansi I.

Navannapanam gudavaikritam ca prameh hetuh kaphakechcha sarvam II. (C.S.Ci-6/4)

Daopramehobhavatah Sahajaoapathyanimitt ashcha I. (S.S.Ci.-11/3)

Aharaja Karana

1. Excess and frequent use of new grains.
2. Excessive use of curd, sugar cane juice, milk and its products.
3. Meat soup of animal residing in water or near water.
4. All Kapha vitiating diets and deeds.
5. 18 types of Viruddha Ahara - Incompatible foods.

The incompatible food when ingested produces toxic metabolites (Gara-visha and Ama) and gradually hampers the process of metabolism of sugar, protein and fat that may lead to variety of metabolic disorders including diabetes mellitus.

Viharaja Karana

1. Stress producing factors like - over anxiety, anger, worry, grief and work.
2. Baktasya adou jalam peetam - sthulatvam, kaphakaram.
3. Ingestion of food with inadequate intervals.
4. Faulty dietary habbits.
5. Indulging sex / sleep with full belly etc.
6. Excessive consumption of alcoholic beverages. (Basavaraja - 14th century A.D.).

All these factors, also directly disturb metabolism of ingested food and thereby in due course, it produces Madhumeha.

Sahaja Karana

Charaka, Sushruta and Bhela have mentioned about the hereditary cause of Madhumeha in terms of Beeja, Beejabhaga and Beejabhagavayava. Again Charaka proclaimed that excessive indulgence in Madhura Rasa, dietetics/lifestyle and abnormal psychological status by their parents are responsible for genetic abnormality that may lead to Jataprameha/Madhumeha.

All the Pramehas when not treated or improerly treated may lead to Madhumeha.

PURVARUPA (PRODROMAL FEATURE)

Ayurveda once again exhibits here its observational supremacy by furnishing prodromal features of Madhumeha, which covers the prediabetic stage or diabetes mellitus. Some of the important features are:-

- Excessive accumulation of waste product in external body part.
- Feeling a sort of heaviness in the body
- Inclination towards conforts and cold things.
- Excessive thirst.
- Dryness of the mouth.
- Sweet taste in mouth.
- Burning sensation of hands and feet.
- Conspicuous change in the bodily odor - pleasant odor
- Matting of hair

RUPA (CLINICAL FEATURE)

Ayurveda has described 20 subtypes of Prameha as different clinic-pathological conditions, which is outcome of interaction of specific Doshas and Dushyas at different level that may lead to gross urinary characteristic and clinical manifestations. Vagbhata seems to have paid much attention in diagnosing the disease in its early stage explaining the following in his treatise Rasaratna samucchaya.

1) Asvasthyam sarva gatreshu - persisting & vague uneasiness in the body.
2) Shoshah - Asyasosha - feeling of dryness in the body and dryness in the mouth.
3) Taapo angah- burning sensation in the body.
4) Bahumootrata- increased frequency of micturition.
5) Karshyam- emaciation.

The above conditions alarm us to understand their observational supremacy.

In advanced stage urinary changes become more prominent such as -

a) Prabhootamutrata- excessive urination.
b) Avilamootrata - turbidity in urine.
c) Madhviva mehati - passes urine similar to Madhu.
d) Madhuryacha tanoratah - patient's body starts yielding sweet smell and taste.
e) Mootreabhidhavanti Pipeelikashcha - ants, flys etc. are attracted towards urine & body parts.

CLASSIFICATION OF DIABTES MELLITUS IN AYURVEDA:

1. Etiological - 2

("Dao pramehau bhavatai - Sahajoapathyani mittashcha" Su. Ci. 11/3)

a) Sahaja prameha : (patients of Type I) Matripitribeejadoshakrita, i.e. defects in-

1. Bija-sperm/ovum
2. Bijabhaga-Chromosome
3. Bijabhagavayava- genes

b) Apathyanimittaja prameha: (patients of Type II) It is caused by-

- faulty dietary habit
- sedentary life style
- lack of physical exercise
- psychological factors: worry, grief, anger, anxiety etc.

2. Constitutional-2

- Sthula pramehi: patients of NIDDM with or without insulin resistance.
- Krisha pramehi: malnutrition related diabetes mellitus or Type-I.

3. Doshika- 3: Urinary Abnormalities.

- Kaphaja - 10 types - early features of diabetes mellitus.
- Pittaja - 6 types - acute features of diabetes mellitus.
- Vataja - 4 types - chronic features of diabetes mellitus.
- Prognostic - 3:
  1. Sadhya: curable
  2. Yapya: palliative
  3. Asadhya: untreatable

(Diagnostic Criteria for Diabetes Mellitus)

On the guidelines of Sushruta i.e., "Sva shastre kushalaha- annyeshu shast raartheshu, Abahishkrutah", the latest techniques that modern science has come up, which may be utilized as an aid for diagnosis and assessment of prognosis wherever needed, until a better and simple method is evaluated in Ayurveda. Diabetes is diagnosed (ADA-2000) by measuring blood glucose levels. It is diagnosed by three ways and each must be confirmed on subsequent day. They are-

- Classical symptoms of diabetes + casual glucose concentration > 200 mg/dl.
- Fasting plasma glucose (FPG) > 126 mg/dl.
- 2 hour plasma glucose (PPG) > 200 mg/dl.
- Glycosylated Hb (HbAlc - < 6.5% in normal individual) Blood urea, Serum creatinine, Lipid profile, Serum cholesterol, CRP, NCV etc are needed to assess the complications.

Basic of Diabetic Management

In Ayurveda, Nidanaparivarjana is the foremost principles and important tools for the management of disorders of body and mind. Beside this, Charaka has broadly divided diabetics into two groups one is Sthula Pramehi (obese diabetic) and another is Krisha Pramehi (lean and thin diabetic). This infers the two important principles (such as biopurificatory (Samshodhana) and promotive measures-Sambrinhana therapy) for diabetic management. It appears quite similar to the management of Type I and Type II diabetes of conventional system of medicine. The ultimate goal is not only to achieve the laboratory norms, but also to minimize diabetic complications and improve the quality of life. The approaches of diabetic management are summarized as given below.

1) Nidana parivarjana - avoidance of etiological factors
2) Ahara - specific dietary regimen and the following diets are beneficial to diabetics. Yava, Palandu, Purana dhanyam, Takram, Laja, Godhuma, Chanaka, Tikta saka, Purana kulutha, Bhojana madhye salilam. Abhrimhana aharam (not medokara)
3) Vihara- exercise and meditative Asanas & life style management.
   - Vyayama (regular exercise)
   - "Padatra rahito munivartanah".
   - "Yojananam shatam yayat".
   - "Khaneth va salilasayaha".
   - "Gramaika ratram bhaikshwasi".

"All the above indicates the equal importance to diet & exercise besides mediation"

4) Shodhana: Clinically the disease Madhumeha is presented in two distinct groups Krisha and Sthula. The Madhumeha as such due to its grave nature, demands Sodhana and Shamana chikitsa. However these distinct clinical presentations of the disease sometimes compel the physican to Shamana chikitsa initially. As far as Shodana is concerned Virechana has got more importance than others.

5) Shamana Aushadhi:

- Herbal drugs: viz- Vijayasara, Nisha, Amalaki, Mamajjaka, Jambubeeja, Bilvapatra, Pippalmula, Gudamara, Karavellaka, Methika, Jarula, Tejapatra, Nimba, Karvellaka etc.
- Mineral drugs: viz- Shilajatu, Shivagutika, Chandraprabhavati, Vasantakusamakara rasa, Trivanga etc.
- Herbo-mineral preparation: including classical and neo-formulations.

6) Yoga therapy: under care of trained yoga therapist.

7) Promotion of Ojas: Drugs having Rasayana and Jivaniya properties like- Shilajatu, Amalaki and Haridra.

8) Promotion of Agni: Drugs which acts at the level of Agni like- Pippali, Bhallataka etc.

CONCLUSION

No doubt modern medicine may have found a way to bring the cases of diabetes mellitus under control up to some extent, yet the effort cannot be considered as final. Even though majority of the patients remain well for certain period with the current therapeutic measures, the underside, however must not the lost sight. It is because of danger of complications such as- resistance, hypersensitivity and antagonist formation with insulin, drug intolerance, fear of hypo and hyperglycemic episode with sulphonylureas. This seeks great attention from the present day practitioner and researchers to evaluate the present status of this chronic health hazard and to evolve newer strategies in its management. In this regard above mentioned Ayurvedic drugs and lifestyle interventions not only have anti diabetic potential but also minimize short and long term diabetic complications. Beside this, Ayurvedic drugs have rasayana, ojovardhaka, jivaniya and balya properties. By virtue of these properties Ayurvedic drugs alone or in combination with modern medicine, have capacity to reduce the insulin as well as oral hypoglycemic drug requirement, prevent or delay the long term complications, and maintain overall health in diabetics.

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सन्तर्पणजन्य प्रमेह सम्प्राप्ति विचार–विश्लेषणात्मक विवेचन

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सारांश

वर्तमान समय में परिवर्तित जीवनशैली, आहारविहार तथा निर्दिष्ट मानसिक धारणीय वेगों के यथोचित धारण न करने से उत्पन्न अत्यधिक मनोद्रेक के परिणामस्वरूप वसुन्धरा पर अनेक अनुषंगी तथा कृच्छ विकारों का सूत्रपात हुआ है। ये व्याधि निरन्तर हेतुसेवन की अखण्डित परम्परा के परिणामस्वरूप पुष्पित, पल्लवित एवं फलित होते दृष्टिगोचर हो रहे हैं। ये उत्पन्न व्याधि साम्प्रतकाल में वैद्यवर्ग के लिए शिरः शूल के प्रधान विषय के रूप में अवतरित हुये हैं। प्रमेह ऐसे ही विकारों में से एक प्रधान चिकित्स्य विषय है। समाजजीवन में अत्यधिक विषाद उत्पन्न करने वाले इस प्रमेह व्याधि का हेतुसेवन के अनन्तर शरीर में लक्षणोत्पत्ति पर्यन्त जिस श्रृंखला के माध्यम से विस्तार होता है, वह श्रृंखला (परम्परा) सम्प्राप्ति इस पारिभाषिक शब्द से ज्ञात है। यदि सम्प्राप्ति विचार में दृष्टिगोचर श्रृंखलाओं का विवेचन एवं सम्यक् ज्ञान अध्येता, अनुसन्धाता एवं वैद्यवर्ग सम्यक् रूपसे प्राप्त करने में समर्थ होता है तभी वह सम्प्राप्तिभंग करने में पूर्णरूप से समर्थ होगा। सम्प्राप्तिविघटन ही चिकित्सा है, अतः पूर्ण सम्प्राप्तिविचार ही सम्प्राप्तिविघटनार्थ आधार कारण है। अतः सन्तर्पणजन्य प्रमेह की सम्प्राप्ति का विश्लेषण प्राचीन आर्ष सिद्धान्तों के आधार पर कर सन्तर्पणजन्य प्रमेह की चिकित्सा को सुलभ करना इस विवेचन का प्रधान एवं मूल प्रयोजन है।

संक्षिप्त शब्द– प्रमेह, सम्प्राप्ति, श्लेष्मा, मेद, श्रृंखला

प्रस्तावना

प्रमेह व्याधि में व्यक्ति वारंवार एवं अधिक मात्रा में मूत्रत्याग करता है अतः उसे प्रमेह की संज्ञा से जाना जाता है। प्रमेह के मुख्यरूप से सम्प्राप्ति तथा चिकित्सा भिन्नता के आधार पर सन्तर्पणजन्य एवं अपतर्पणजन्य ये दो भेद होते हैं। प्रमेह व्याधि अनुषंगी विकारों में प्रधान है, अर्थात् पुनः पुनः होनेवाला। तात्पर्य यह है कि प्रमेह का आक्रमण किसी देह में होने के पश्चात् वह देहधारी जीवनभर प्रमेही के रूप में ही रहता है, अतः अनुषंगी विकारों में प्रधान ऐसे प्रमेह के परिप्रेक्ष्य में चिकित्साकर्मार्थ सम्प्राप्तिविचार करना अति आवश्यक है।

सन्तर्पणजन्य व्याधियों की सम्प्राप्ति का सूत्रपात– प्रारम्भ में श्लेष्मावर्धक आहारीय एवं विहारीय हेतुओं के सेवन के पश्चात् उस देहधारी की देह में अन्नरस (आहाररस) निर्मिति में अन्तराय उत्पन्न होता है तथा आहाररस सम्यक् परिणत अवस्था में निर्माण न होकर आम तथा अपरिणतावस्था में उत्पन्न होना आरम्भ होता है। वह आम एवं अपरिणत आहारस पूर्व हेतुसेवन से माधुर्यता प्राप्त शरीर में स्वयं अतिस्निग्ध होने के कारण जो अतिस्निग्ध है ऐसी मेदधातु का द्रव्य तथा गुण एवं कर्म सामान्य से अपाचित स्वरूप में अत्यधिक उपचय करता है। 'धातुपरिमणमन की परम्परा खण्डित होने के कारण अन्य धातुओं का पोषण न होकर केवल मेदधातु का ही पोषण होता है, अर्थात् अन्य धातुओं का गुणतः एवं परिमाणतः क्षय तथा मेदधातु की अत्यधिक वृद्धि होती है। तात्पर्य यह है कि प्रायः सभी सन्तर्पणजन्य व्याधियों की सूक्ष्म बीजोत्पत्ति अन्नवह स्रोतस् में ही होती है अतः वह महास्रोतस् की संज्ञा से व्यवहृत है। धातुपरिणमन की परम्परा मे आहाररस महत्वपूर्ण भूमिका प्रदान करता है अतः सन्तर्पणजन्य एवं अपतर्पणजन्य उभय प्रकार के व्याधियों में सम्प्राप्तिनिर्माण का आरम्भ करने हेतु रस ही निमित्त है। प्रस्तुत परिप्रेक्ष्य में सन्तर्पणजन्य प्रमेह के प्रसंग में भी सम्प्राप्ति आरम्भ आहाररस से ही होता है।

सम्प्राप्ति घटक– जिस प्रकार किसी नाट्य के परिपूर्ण होने हेतु उस नाट्य में प्रधान भूमिका प्रदान करनेवाले रंगकर्मियों का महत्वपूर्ण योगदान होता है ठीक उसी प्रकार शरीररूपी रंगमंच पर किसी व्याधि के सम्प्राप्तिरूपी नाट्य को परिणामपर्यन्त ले जाने वाले कुछ महत्वपूर्ण रंगकर्मी होते हैं उन्हें सम्प्राप्ति घटक कहा जाता है। वे निम्न प्रकार से उपदिष्ट करना संयुक्तिक है।

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अ) दोष– यद्यपि प्रमेह सम्प्राप्ति में वात, पित्त एवं कफ तीनों दोषों का सहभाग होता है तथापि प्रमेह व्याधि की विकारप्रकृति कफदोष ही है। जिस प्रकार किसी भी देहधारी की दोष प्रकृति शुक्र–शोणित संयोग के समय उत्कट दोष के अनुसार उत्पन्न होती है एवं मृत्युपर्यन्त अपरिवर्तनीय होती है उसी प्रकार प्रत्येक व्याधि की एक विशिष्ट एवं अपरिवर्तनीय प्रकृति होती है उसे विकारप्रकृति कहते हैं। यद्यपि उस व्याधि में समय के परिणमन के अनुसार अन्य दोषों का अनुबन्ध अवश्य होता है तथापि प्रकृति में कोई परिवर्तन नहीं होता है। आचार्य चरक ने सूत्रस्थान में विकारप्रकृति ऐसी परिभाषा का प्रयोग किया है। अतः प्रमेह व्याधि में प्रधान दोष कफदोष ही है।

आ) दूष्य– दूष्यों मे अस्थिधातु के अतिरिक्त अन्य सभी धातुयें सम्प्राप्तिनिर्माण में समाविष्ट हैं तथा अम्बु, वसा, ओज ये कफदोष के समानधर्मी अर्थात् जलमहाभूत प्रधान घटक भी सम्प्राप्ति में दूषित होते हैं। वर्णित दूष्य समुदाय में मांस एवं मेद की प्रधान दुष्टी होती है। अस्थि धातु का संघटन प्राधान्यतः पृथिवी महाभूत से होता है, तथा प्रमेह यह जल महाभूत वर्ग का विकार है अतः पूर्ण पार्थिव घटकों की दुष्टि सापेक्षतः अल्प होने के कारण अस्थि का समावेश दूष्यो में नहीं होता है।

इ) मल– जल महाभूत विकृति के परिणामस्वरूप शरीर में विद्यमान जलीय घटक प्रथमतः दुष्ट हो जाते हैं जैसे मल वर्ग में मूत्र तथा स्वेद क्योंकि पुरीष प्रधानतः पृथ्वी महाभूत प्रधान है,11 अतः मूत्र एवं स्वेद की प्रधान दुष्टि होती है तथा व्याधि की चिरकारिता के पश्चात् पुरीषवह भी दुष्ट हो जाता है इसी कारणवश प्रमेही व्यक्ति में विबन्ध दृष्टिगोचर होता है तथा वे दुर्विरेच्य होते हैं।

ई) स्रोतस्– सम्प्राप्ति का सूत्रपात अन्नवह अर्थात् महास्रोतस् में ही होता है अतः अन्नवह स्रोतस् प्रधान स्रोतस् है। रसवह स्रोतस्, मेदोवह स्रोतस्, मूत्रवह स्रोतस्, उदकवह स्रोतस् तथा पुरीषवह स्रोतस् इन स्रोतसों की प्रधान दुष्टि दृष्टिगोचर होती है।

उ) रोगमार्ग– प्रारम्भावस्था में यह अभ्यन्तर रोगमार्ग को व्याप्त करता है किन्तु व्याधि कालपरिणाम के अनुसार जीर्णावस्था में यह मध्यम रोगमार्ग में भी व्याप्त हो जाता है। इसी कारण वह चिकित्सा हेतु याप्य हो जाता है जैसे कि मध्यम रोगमार्ग के व्याधि प्रायः कृच्छसाध्य एवं याप्य ही होते हैं। सम्प्राप्तिविश्लेषण– व्याधि का जन्म शरीर में जिस श्रृंखला के माध्यम से होता है उस संपुर्ण श्रृंखला को सम्प्राप्ति अथवा जाति अथवा आगति कहते हैं। सम्प्राप्ति के विषय में अनभिज्ञ अध्येता तथा वैद्यवर्ग के लिये आचार्य चरकद्वारा वर्णित निदानस्थानोक्त प्रमेह

सम्प्राप्ति एक आदर्श सम्प्राप्ति है, अतः उसी सम्प्राप्ति को आधारशिला के रूपमें रखकर उस विवेचन का प्रस्तुतिकरण किया गया है।

सम्प्राप्तिपूर्व घटनायें– मुख्य सम्प्राप्ति की श्रृंखला शरीर में आरम्भ होने से पूर्व कुछ मुख्य घटनायें शरीर में घटित होती है। वे निम्न प्रकार से हैं–

1. श्लेष्मा का संचय शरीर में चिरकाल से होता है तथा उसका संचय द्रव गुण से होता है।
2. धातुपरिणमन की परम्परा खण्डित होने के कारण अपरिणत आहाररस से उत्तरोत्तर ओजपर्यन्त परिणाम आपद्यमान धातु भी अपरिणत् अर्थात् आम अवस्था में उत्पन्न होना आरम्भ होता है।
3. अपरिणत अवस्था में उत्पत्ति के कारण मांस एवं मेद धातु में शैथिल्य होता है।
4. बहुद्रव श्लेष्मा के कारण सर्व द्रव गुण प्रधान शरीरभावों की दुष्टि स्वभावतः होना प्रारम्भ होता है। (आश्रयाश्रयी भाव संबंध के कारण)
5. धातुपरिणमन परम्परा खण्डित होने के परिणामस्वरूप विकृत जलमहाभूत की वृद्धि होना प्रारम्भ होता है।
6. पंचमहाभूतों के दृष्टिकोण से विचार करने पर ज्ञात होता है कि प्रमेह यह प्रधानतः जल महाभूत एवं अनुबन्ध रूप मे पृथ्वी महाभूत विकृति का परिणाम है।
7. जलमहाभूत का प्रधान धर्म उसका द्रवत्व है, अतः गुणतः द्रव गुण का अत्यधिक महत्व है। आचार्य चरक द्वारा वर्णित प्रमेह सम्प्राप्ति (निदानस्थानोक्त) का वैशिष्ट्य यह है कि उन्होंने सम्प्राप्ति का क्रम से पृथक्–पृथक् श्रृंखलाओं में विभाजन कर वर्णन किया है तथा इन पृथक्–पृथक् श्रृंखला निर्माण में विशिष्ट हेतु को भी प्रकाशित किया है। इसका संप्राप्तिविघटन के समय अत्यधिक महत्व है क्योंकि यदि किसी समस्या का कारण हमें ज्ञात हो जाता है तो हम उसका समाधान सुलभता से कर सकते हैं तथा उस कारण का परिवर्तन भी कर सकते हैं, यही निदान परिवर्जन चिकित्सा है।

श्रृंखला 1– निदान, दोष एवं दूष्य ये तीन विकारविघातभाव–अभावविशेष हैं। सम्प्राप्ति आरम्भ उपर्युक्त

तीनों के सन्निपात के पश्चात् ही सम्भव है। कफकारक हेतु, कफदोष तथा सम्प्राप्तिघटकों में वर्णित सर्व श्लेष्मा के समानधर्मी दूष्य इनका सन्निपात होनेपर शरीर में त्वरमाणेन श्लेष्मा का प्रकोप हो जाता है। श्लेष्मा मन्दगुणवान् होता है तथापि प्रमेह सम्प्राप्ति में उसका प्रकोप क्षिप्र होने का कारण यह है कि सम्प्राप्ति के प्रारम्भ से पूर्व में ही उसका शरीर में गुणतः एवं प्रमाणतः अधिक्य होता है, अतः शीघ्रप्रकोप हो जाता है।

श्रृंखला 2– अनन्तर वह प्रकुपित श्लेष्मा शरीरशैथिल्य के कारण शीघ्रता से सम्पूर्ण शरीर में प्रसारित हो जाता

है। धातुपरिमणमन की परम्परा में खण्ड होने के कारण अपरिणत अवस्था में धातुनिर्माण होता है अतः अपरिपक्क धातु होने के कारण उनमें शैथिल्य गुण उत्कटरूप में अभिव्यक्त होता है। शैथिल्य के परिणामस्वरूप उन धातुओं का आश्रय कर रहनेवाला श्लेष्मा भी शीघ्रता से केवल देह में अभिव्याप्त होता है।

श्रृंखला 3– दूष्यपरिवार में अन्य दूष्यों की तुलना में मेदधातु में द्रवगुणाधिक्य के कारण बहुत्व तथ अबद्धत्व अधिक उत्पन्न होता हे एवे मेद एवं कफ के अत्यधिक गुण समान होने के परिणामस्वरूप वह श्लेष्मा सम्पूर्ण शरीरव्याप्ति के पश्चात् सर्वप्रथम मेद के साथ ही मिश्रीभूत हो जाता है।

श्रृंखला 4– मेद एवं श्लेष्मा का परस्पर मिश्रीभाव होने के पश्चात् वह श्लेष्मा स्वयं विकृत होने के कारण जिस शरीरभाव के साथ संमिश्र हो जाता है वह प्राकृत भाव भी विकृत हो जाता है। प्रस्तुत प्रसंग में यह श्लेष्मा जिस मेद के साथ मिश्रीभूत हो जाता है वह स्वयं भी अपरिणत (अपक्व) होने के कारण शिथिल है एवं श्लेष्मा के साथ संपृक्त होते ही वह अत्यधिक शैथिल्ययुक्त हो जाता है तथा अधिक दुष्ट हो जाता है।

श्रृंखला 5– प्रस्तुत प्रसंग पर्यन्त श्लेष्मा एवं मेद ये दो शारीरभाव विकृत एवं दुष्ट हो चुके हैं। शरीर दोष, धातु एवं मलों से घटित है, तथा ये शरीरभाव देह में स्रोतसों के माध्यम से निरन्तर गतिमान् अवस्था में रहते हैं। विकृत श्लेष्मा तथा मेद निरन्तर गतिमान् होने के कारण शरीर में पुनः समानगुणधर्मी ऐसे अन्य भावों के साथ संसृष्ट हो जाते हैं। इस परिप्रेक्ष्य में वे भाव शरीरक्लेद तथा मांस है। यहां से सम्प्राप्ति का विभाजन मुख्य दो विभागों में हो जाता है।

अ) श्लेष्मा तथा मेद का– शरीरक्लेद एवं मांस उभय के साथ समसंसर्ग

आ) श्लेष्मा तथा मेद का– शरीरक्लेद के साथ अधिक तथा मांस के साथ सापेक्षत अल्प संसर्ग उपर्युक्त विभागों में प्रथम विभाग प्रमेहपिडका सम्प्राप्ति का सूक्ष्म प्रकाशन करनेवाला है। यद्यपि प्रमेहपिडका प्रमेह के उपद्रवस्वरूप में उत्पन्न होती है तथापि ये मेद की अतिदुष्टि जिस देह में है वहां बिना प्रमेह के भी दृष्टिगोचर होती है। विस्तारभय के कारण इस विभाव का विश्लेषण इस प्रसंग में करना सम्भव नहीं है अतः प्रस्तुत विवेचन के अधिकरणरूपी सम्प्राप्तिरूपी सम्प्राप्तिविभाग का विश्लेषण करना तर्कसंगत है।

श्रृंखला 6– सम्प्राप्ति का पुनः शरीर में मार्गक्रमण होते

होते शरीरज क्लेद का भी समावेश हो जाता है। शरीर में दूषित धातुपरिणमन परम्परा के परिणामस्वरूप जलमहाभूतप्रधान मलों की उत्पत्ति होते समय एक ऐसा अपरिणत (आम) एवं विकृत जलीय भाव उत्पन्न होता है जो कि विकृतावस्था का द्योतक है उसे क्लेद की संज्ञा से व्यवहृत किया जाता है। शरीर में क्लेद की अत्यधिक उत्पत्ति होती है। स्वेद एवं मूत्र ये प्रधान जलीय मल है। जल महाभूत की प्राकृत गति अधोगति है अतः यद्यपि जलप्रधान मल दो होते हैं तथापि अतिवृद्धि के कारण प्राप्त गुरूता के परिणामस्वरूप यह प्रायः मूत्रद्वारा ही परिणामित होना प्रारम्भ होता है। जैसे मूत्रवह स्रोतस् प्रायः शारीररचनादृष्टिकोण से कोष्ठ में है, तथा महास्रोतस् यह कोष्ठ का पर्यायवाची शब्द है। महास्रोतस् अर्थात् अभ्यन्तर रोगमार्ग है तथा स्वेदवह स्रोतस् शाखा में अर्थात् बाह्य रोगमार्ग में है अतः महास्रोतस् ''महानिम्न'' होने के कारण भी इस क्लेद की गति महास्रोतस् की दिशा में अर्थात् मूत्रवह स्रोतस् की दिशा में होना स्वाभाविक है एवं समानधर्मी मूत्र के द्वारा यह वृद्ध क्लेद शरीर से बाहर परिणामित होना प्रारम्भ होता है, अतः मूत्रमार्गद्वारा मूत्र के माध्यम से इस क्लेद का बहिर्गमन होने के कारण प्रभूतमूत्रता एवं अबिलमूत्रता ये लक्षण प्रकट होना आरम्भ होता है। उपर्युक्त क्लेद के साथ अन्य पृथ्वी एवं जल महाभूतप्रधान अपरिणत शारीरभाव गुरू गुण के कारण अधोगतिमान् होकर मूत्रवह स्रोतस् में जा वहां स्थानसंश्रय प्राप्त करते हैं। अनन्तर वहां अत्यधिक स्रोतोरोध होता है।

श्रृंखला 7– इस प्रकार से शरीर में सम्प्राप्ति का प्रारम्भ होकर निरन्तर मार्गक्रमण करती है तथा शरीर से जल महाभूत का गमन अभीक्ष्णशः (अनवरत) होता रहता है। आरम्भावस्था में श्लेष्मा केवल द्रव गुण से ही अत्यधिक

दुष्ट रहता है किन्तु उत्तरोत्तर उसके अन्य स्निग्ध, शीत, मन्द, श्लक्ष्ण, गुरू आदि सर्व गुण सम्प्राप्ति मे समाविष्ट हो जाते है। अतः श्लेष्मा का बल अधिकाधिक वृद्धिगत होता रहता है। जैसे–जैसे श्लेष्मा तथा अन्य सम्प्राप्ति घटकों के प्रकृति भूत गुणों में विकृति होती जाती है ठीक वैसे उस देहधारी में प्रमेहों की गुणों के प्रकोपप्रकर्ष के कारण स्थैर्यता होती है एवं अतिप्रकर्ष के कारण प्रमेह चिकित्सा मे असाध्य हो जाता है। यदि दोष अपने सर्व वर्णित गुणों से दुष्ट हो जाता है तो वह व्याधि असाध्य हो जाता है।

निष्कर्ष एवं उपसंहार–

प्रमेह व्याधि वर्तमान समय में वैद्य तथा रूग्ण उभय के लिये चिन्ता का प्रधान विषय है। अनुषङ्गी विकारों में प्रधान होने से यह चिरकालानुबन्धी है। प्रमेह की सम्यक् चिकित्सा इसका सम्यक् एवं निरवशेष सम्प्राप्तिविघटन करना ही है एवं उस परिणाम को प्राप्त करने हेतु सम्प्राप्ति का ज्ञान सर्व श्रृंखलाओं से होना अत्यावश्यक है। आचार्य चरक द्वारा वर्णित प्रमेहसम्प्राप्ति उनकी एक मौलिक देन है। प्रमेहनिदान के परिप्रेक्ष्य में ही उन्होंने विकारविघात–भावाभाव प्रतिविशेष वर्णन किये हैं, जो कि विकृतिविज्ञान के मूलभूत सिद्धान्तों में से एक है। इनका प्रमेह के प्रसंग में वर्णन करने का अभिप्राय यह है कि प्रमेह सम्प्राप्ति एक सूक्ष्म तथा अति चिन्तनीय विषय है तथा इसके वर्णन के आधार पर अन्य व्याधियों की सम्प्राप्ति का विचार करना भी सुलभ हो जाता है। प्रमेह व्याधि ही एक ऐसा व्याधि है जिसकी सम्प्राप्ति में सर्वाधिक सम्प्राप्ति घटक समावेशित होते हैं एवं दुष्ट होते हैं। प्रमेह का आचार्य चरक द्वारा निदान में वर्णित सम्प्राप्ति एक आदर्श सम्प्राप्ति है। अन्तिमतः वैद्यवर्ग, अध्यापक वर्ग तथा अध्येताओं को सम्प्राप्ति अध्ययन के उचित पद्धति का ज्ञान इस सम्प्राप्ति से अवश्य सम्भव है तथा सम्प्राप्ति के सम्यक् चिन्तन के पश्चात् ही उसका सम्यक् एवं निरवशेष विघटन करने में भी समर्थता अवश्य प्राप्त होगी एवं यही प्रस्तुत विवेचन का प्रधान एवं प्रामाणिक प्रयोजन है। इस प्रकार प्रमेह सम्प्राप्ति जैसे सूक्ष्म विषय का विचार यथामति किया गया है।

सन्दर्भ–

1. यथा दुष्टेण दोषेण यथा चानुविसर्पता।
   निवृत्तिरामयस्यासौ सम्प्राप्तिजार्तिरागतिः।। अ.हृ.नि.1/8
2. दोषदूष्यसंमूर्च्छनाविघटनमेव चिकित्सा।
3. स्थूलः प्रमेही बलवानिहैकः कृशस्तथैकः परिदुर्बलश्च।।
   (च.चि. 6/15, सु.चि. 11/3)
4. प्रमेहोऽनुषंगीणाम्। (च.सू. 25/41)
5. चक्रपाणि (च.सू. 25/41)
6. तत्र श्लेष्मलाहारसेविनो अध्यशनशीलस्याव्यायामिनो दिवास्वपन्रतस्य चाम एवान्नरसो मधुरतरश्च शरीरम् अनुक्रामन् अतिसेंहात् मेदो जनयति। (सु.सू. 15/32)
7. रसनिमित्तमेव स्थौल्यं कार्श्यं च। (सु.सू. 15/32)
8. बहुद्रवः श्लेष्मा दोषाविशेषः। (च.नि. 4/6)
9. (च.सू. 18/46)
10. कफः सपित्तः पवनश्च दोषा मेदोऽस्रशक्राम्बु वसालसीकाः। मज्जारसाजैः पिशितं च दूष्याः...।। (च.चि. 6/8)
11. घ्राणगन्धास्थि पार्थिवम्।
12. पुरीषं पार्थिवम्। (भानुमती टीका)
13. दुर्विरेच्या हि मधुमेहिनो भवन्ति...। (सु.चि. 12/6)
14. (च.नि. 1/11)
15. सांसिद्धिकं जले...। (तर्कसंग्रह)
16. संक्षेप्तः क्रियायोगो निदानपरिवर्जनम्। (सु.उ.1/25)
17. (च.नि. 4/4)
18. त्रयाणामेषां निदानादिविशेषाणां सन्निपाते क्षिप्रं श्लेष्मा प्रकोपमापद्यते, प्राक् अतिभयूस्त्वात्। (च. नि. 4/8)
19. स प्रकुपितः क्षिप्रमेव शरीरे विसृप्तिं लभते, शरीरशैथिल्यात्। (च.नि. 4/8)
20. स विसर्पन् शरीरे मेदसैवादितो मिश्रीभावं गच्छति, मेदसश्चैव बहुबद्धतवान्मेदसश्चैव गुणैः समानगुणभूयिष्ठतवात्।
   (च.नि.4/8)
21. स मेदसा मिश्रीभवन् दूषयत्येनत्, विकतृत्वात्।
   (च.नि. 4/8)
22. दोषधातुमलमूलं हि शरीरम्।
23. बिना प्रमेहमप्येता जायन्ते दुष्टमेदसः। (च.सू. 17/104)
24. स्थानान्यामागिन्पक्कानां मूत्रस्य रूधिरस्य च। हृदुण्डुकः फुप्फसश्च कोष्ठ इत्यभिधीयते। (सु चि.2/12)
25. (च.सू. 11/48)
26. (च.सू. 11/48)
27. प्रकृतिविकृतिभूतत्वात् इति प्रकृतिभिर्गुणैः सवैरेव विकृतित्वात्, सर्व एव यस्माच्छेल्ष्मणो गुणा विकृतास्तस्मात् प्रकोपप्रकर्षात् स्थिरो भवति, अतिप्रकर्षात्त्वसाध्यः इत्यर्थः।
   (चक्रपाणि च.नि. 4/8)

MANAGEMENT OF TYPE-2 DIABETES MELLITUS (MADHUMEHA) : AN AYURVEDIC APPROACH

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ABSTRACT :

The word 'Prameha' is mainly related with the excessive excretions through urine. The term diabetes mellitus does not represent a single disease entity but rather a set of disease state sharing certain characteristics. It is a group of disorder that shares the phenotype of hyperglycemia. Diabetes is characterized by various degrees of impaired glucose and homeostasis, resulting in long term macro-vascular and microvascular complications. Diabetes is the leading cause of end stage renal disease, a major cause of non traumatic amputations, responsible for 30% of the preventable blindness and a leading cause of cardiovascular mortality. The term Diabetes mellitus contains two words i.e. 'Diabetes' and 'Mellitus'. In Greek words the 'Diabetes' means 'to run through a siphon' and the term 'Mellitus' means honey.

Plants have played a significant role in maintaining human health and improving the quality of human life for thousands of years and have served as valuable components of medicines, seasoning, beverages, cosmetics and drugs. Diabetes mellitus is described in Ayurveda under the heading of Prameha as manageable disorders. The method of management described here is aimed at providing the practicing physician on insight of the disease.

KEY WORDS: Diabetes, Prameha, Hyperglycemia.

INTRODUCTION:

Now in 21st century the lifestyle and environmental conditions has tremendously changed. So people are deviated from nature i.e. from 'natural lifestyle'. This natural lifestyle has been explained in the Ayurvedic Samhita as "Dinacharya". In this fast lifestyle, most of the people get affected. In the higher income group people, their job style affects the physical, mental state and adds stress to them. This leads to various diseases like Madhumeha, Hypertension, Cardiac diseases etc.

Madhumeha has been classified under the Vatika type of Prameha. The Vata may be provoked either directly by its etiological factors, Avarana by Kapha and Pitta to its path or by continuous depletion of Dhatus. Vagabhata has classified the Madhumeha into two categories viz. Dhatukshayajanya Madhumeha and Avaranajanya Madhumeha. The word 'Prameha' is mainly related with 1 the excessive excretions through urine. Allopathic drugs used for the treatment of diabetes have their own side effect & adverse effects like hypoglycemia, nausea, vomiting, hyponatremia, flatulence, diarrhoea or constipation, alcohol flush, headache, weight gain, lactic acidosis, pernicious anaemia, dyspepsia, dizziness, joint pain. So instead of allopathic drugs, herbal drugs are a great choice which has minimum or no side effects & adverse effects (Kokar and Mantha, 1998). Ethno botanical information identified about 800 Indian plants which may have antidiabetic potential (Gupta et. al., 1986).

Recent advances in the understanding of the etiology and pathogenesis of diabetes have led to a revised classification. Presently the disease is classified on the basis of the physiological status.

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I. Type 1 diabetes (β-cell destruction, usually leading to absolute insulin deficiency)

A. Immune-mediated

B. Idiopathic

II. Type 2 diabetes (may range from predominantly insulin resistance with relative insulin deficiency to a predominantly insulin secretary defect with insulin resistance)

(b) Compounds: herbal, minerals and herbominerals

Single drugs:

1. Karvellaka: (Momordia charantia Linn.)

It contains alkaloid momordicine. Oral use of fruit juice causeshy poglycemicand hypocholestremic effect.

2. Meshashringi: Gudmara, Madhunashini 5 (Gymnema sylvestre R.Br.)

Normoglycemia (mg/dl)	Impaired fasting glucose (IFG) and Impaired glucose tolerance (IGT)	Diabetes Mellitus(DM)
Fasting plasma glucose (FPG) <110mg/dl	FPG >110 and <125 mg/dl(IFG)	FPG >126mg/dl
2 hrs plasma glucose <140mg/dl	2 hrs plasma glucose 140-199g/dl (IDT)	2 h PG >200mg/dl plus symptoms of diabetes, casual plasma glucose >200 mg/dl.

III. Other specific types of diabetes.

2 Diagnostic Criteria for Diabetes Mellitus The diagnosis of diabetes rests on the measurements of plasma glucose levels. Current Criteria for the diagnosis of diabetes impaired fasting glucose and impaired glucose tolerance is:

CHIKITSA SUTRA:

The main principle of management is shodhana and shamana chikitsa.

Shodhana chikitsa:

Shodhan usually done to a patient with good strength and need on expertise in diagnosis of disease and therapy. Any alteration in management can cause more harm than any relief or cure. Hence in practice of medicine Shamana chikitsa is followed nevertheless it does not undermine the importance of Shodhana.

Shamana chikitsa:

To be conveniently the modality of management divided into-

(a) Single drugs: herbs and minerals

In this Gymnemic acid and Quercitol alkaloids are found. It has well hypoglycemic effect with improving metabolism in liver, kidney and muscle. Paralysis of sweet perception is due to presence of copper in excess as content of leaf.

3. Jambu: (Syzygium cumini (Linn.) Skeels) Do morbid reduction in hyperglycemia and glycosuria. Its effect in NIDDM is clinically proven and is also helpful to control renal dysfunction and hyperlipidaemia.

4. Nimba: (Azadirachta indica A. Juss) The leaves are particularly very useful and stimulate liver function, lower the glycosuria and also reduce the clotting nature of blood so helpful to prevent diabetic vasculopathies.

5. Shilajeet : It is well known antioxidant and antihypercholestremic properties and rejuvenation effect. Very useful in diabetes and has been mentioned in many texts especially in Brihattrayi.

6. Loha bhasma: Iron help in insulin synthesis and enhance glucose absorption.

7. Yashada bhasma:

Zinc participates in formation of zinc hexamers which help in storage and subsequent release of insulin. Some other drugs are also helpful in the treatment of madhumeha likewise Sadabahara, Bhallataka, Methika, Gokshura etc.

Compound drugs:

1. Nyagrodhadi kashaya :

Most of contents like vata, udumber etc. helpful in lowering the blood sugar level and control the hyperlipidaemia. (Dose: 20-40 ml, B.D/TDS.)

2. Phalatrikadi kashaya:

Most of the dravyas here have katu, tikta and kashaya rasa which are essential in treating prameha. It is also very useful in diabetic carbuncles and diabetic nephropathies. (Dose: 20-40 ml, B.D/TDS.)

3. Chaturbeeja churna:

Equal quantity of methi, ajwain, mangrail and chandrashur seeds play important role in lowering the blood glucose level as well as best drug for improving diabetic neuropathies. (Dose: 3-6 gm, B.D with water.)

4. Nishamalaki:

This simple prepration (powder) is very effective in glucose control. Haridra and amalaki both acts as a super oxide scavenger. (Dose: 3-6 gm, B.D with water.)

5. Chandraprabha vati :

This prepration is not only useful in diabetes but also in treating urinary tract infections a common complication of diabetes. It takes care of nephrotoxicity. (Dose: 2 tablets B.D/TDS with water.)

6. Shilajatvadi vati:

It is a very effective combination for management of madhumeha, containing shilajatu, abhraka bhasma, loha bhasma, suvarna makshika bhasma and amber and also beneficial to prevent diabetic ulcers and carbuncles. (Dose: 2 tablets B.D with water.)

7. Navayasa loha :

It is useful in diabetes especially when taken with gomutra/shilajatu or triphala kashaya. It is useful in diabetic retinopathy and also reduces aneurysms and atherosclerosis. (Dose: 250-500mg B.D. with madhu.)

8. Pramehantaka rasa:

It contains the trivanga bhasma, loha bhasma, abhraka bhasma and gandhaka etc, very useful in the treatment of diabetes mellitus. (Dose: 250-500mg B.D. with honey.)

9. Basanta kusumakara rasa :

It is maximum used drug in treatment of diabetes mellitus and having property to increase insulin secretion. It is actually best drug for peripheral neuropathy and other lower motor neuron disorders. (Dose: 250-500mg B.D/TDS with honey.)

CONCLUSION:

Diabetic patients requires life style modification like food habbits, Dincharya (daily activities), Ritucharya (seasonal regimen) etc. With judicious utility of the principle of management of Madhumeha and as well as appropriate use of valuable single and compound drugs mentioned in Ayurvedic literatures. Significant role of Ayurveda playes the way in the management of diabetes mellitus, which is going to hunt India as fifty percent of the world's diabetic population will be in our country in the upcoming years.

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INTEGRATIVE APPROACH TO THE MANAGEMENT OF MADHUMEHA

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ABSTRACT :

Madhumeha is described as one of the 20 variety of Prameha. In disease Madhumeha, person passes urine resembling honey (sweet). In modern medicine, Madhumeha is comparable to disease Diabetes mellitus because the sign and symptoms of Diabetes mellitus have great resemblance with Madhumeha. Diabetes mellitus (DM) refers to a group of common metabolic disorders that share the phenotype of hyperglycemia. Several distinct types of DM exist and are caused by a complex interaction of genetics and environmental factors. Depending on the etiology of the DM, factors contributing to hyperglycemia include reduced insulin secretion (autoimmune destruction of cells), decreased glucose utilization (insulin resistance), and increased glucose production. Diabetes mellitus is fairly common and one of the chronic disease which is responsible for significant morbidity, reduced life expectancy and diminished quality of life. It has seen that there is no any organ or system spared from the diabetic complications like nephropathy, neuropathy, retinopathy etc.

In present era, the incidence of diabetes is increasing much more rapidly due to improper food habit, sedentary life style, excessive stress and strain. The management of Diabetes mellitus needs multi-pronged strategies involving integrative approach. The classic component of Ayurvedic management viz. Aushadha (Drugs), Ahara (Diet) and Vihara (Lifestyle including exercise) are the mainstay for the prevention and management of Diabetes mellitus. Ayurveda has mentioned various herbal medicinal formulations, along with correct dietary regimen and physical exercise for the treatment of Madhumeha.

Key Words: Prameha, Madhumeha, Diabetes mellitus, Diet, Lifestyle.

INTRODUCTION :

In Ayurveda, Prameha as a disease entity was recognized in distant past. The earliest reference of Prameha is found in Vedas, which is first documented knowledge of universe about this chronic disease. Prameha comprises of number of disease with various physical and chemical Changes in urine. The manifestation of the disease is described as “Prabhutavilamutrata” which means frequent and copious urine with turbidity. All the Prameha are broadly classified into two groups viz., sahaja prameha (hereditary) and apathyanimittaja prameha (due to improper diet & lifestyle) or krisha pramehi and sthula pramehi. It can also be correlated with the classification given by Acharya Vagbhatta, i.e. Dhatukshayajanya madhumeha and Avaranajanya madhumeha respectively. In Madhumeha all the doshas and dushyas get vitiated, but the vata dosha and oja (essence of all the dhatus) dushya are predominantly involved. All varieties of Prameha if neglected will, in course of time, become madhumeha.

The Concept of Madhumeha :

Madhumeha is the type of vatika prameha. The word 'Madhumeha' is a combination of two terms “Madhu” mean honey and “Meha” means excessive flow. It means in disease Madhumeha person passes urine resembling with honey (sweet and astringent).

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Charaka has also described the term Ojomeha for the disease Madhumeha which may be because of resembleness of Oja with madhu (Oja having sweet taste and colour of Madhu) or due to involvement of Oja Dhatu in the pathogenesis of disease Madhumeha. Sushruta has used term Kshaudrameha for the Madhumeha. Acharya Vagbhatta has mentioned that Ojas which is unctuous and sweet is converted by vata to becomes non-unctous and astringent. Such oja which is astringent and little of sweet, produces Madhumeha. It arises in two ways, (i) that due to increase in vata due to dhatukshaya and (ii) that due to avarana of vata by the doshas.

The different aspect of pathogenesis of madhumeha is described below:

- Madhumeha due to Suddha vata : Caraka has explained that due to depletion of Kapha and Pitta, vata get aggravate and causes the excretion of dhatus (vasa, majja, oja, lasika) through urine resulting into madhumeha. This type of madhumeha is asadhya (incurable).
- Madhumeha due to dhatukshaya : Charaka has mentioned that due to excessive loss of 'Oja' (vital essence) and other important Dhatus, Vata get vitiated which lead to excretion of urine resembling honey and in tern Madhumeha is resulted.
- Avaranajanya Madhumeha: In Charaka Samhita (C. S. Su. 17/80) etiopathogenesis of Madhumeha is described as excessive intake of heavy, unctuous, amla and lavana rasa foods, newly harvested food and drinks, over indulgence in sleep and sedentary habit, lack of physical exercise and stress, avoidance of seasonal purification of body, the Kaph, Pitta, Meda and mamsa increases in excess, resulting in obstruction of Vata Dosha. This vitiated Vata Dosha attracts the vital essence (the Oja) and carries it to the Mutrashaya, then the formidable disorders of Madhumeha is born. In this disease signs and symptoms pertaining to vata, pitta and kapha are manifested quite frequently and vanish at times and appear again.
- Kala Prabhavaja Madhumeha: This type of Madhumeha is described by Sushruta & Vagbhata. Though direct pathogenesis is not mentioned but it is said that when all types of Prameha if ignored or not treated properly, they get transformed into Madhumeha.

The Concept of Diabetes mellitus:

Diabetes mellitus is a metabolic disorder characterized by hyperglycemia, glycosuria, hyperlipaemia, negative nitrogen balance etc. It is diagnosed by symptoms of diabetes plus random blood glucose concentration =11.1mmol/L (200 mg/dL)or Fasting plasma glucose = 7.0 mmol/L (126 mg/dL) or Two-hour plasma glucose =11.1 mmol/L (200 mg/dL) during an oral glucose tolerance test (WHO Critaria). A widespread pathologic changes is thickening of capillary basement membrane, increase in vessel wall matrix and cellular proliferation resulting in vascular complications like lumen narrowing, early atherosclerosis, sclerosis of glomerular capillaries, retinopathy, neuropathy and peripheral vascular insuffiency. Several distinct types of DM exist and are caused by a complex interaction of genetics and environmental factors.

Two major type of diabetes mellitus are:

(1) Type 1 Diabetes mellitus and (2) Type 2 Diabetes mellitus.

Type 1 Diabetes mellitus : It was previously termed as juvenile-onset diabetes and insulin-dependent diabetes mellitus (IDDM), because of its occurrence in younger age and these patients had absolute requirement for insulin replacement as treatment respectively. However in new classification neither age nor insulin-dependence are considerd as absolute criteria. This type accounts for about 10-20% cases of DM. Based on underlying etiology, type 1 DM is further divided into 2 subtypes i.e. (i) type 1A DM, characterized by autoimmune destruction of ß-cells which leads to insulin

deficiency and (ii) type 1B DM,which is idiopathic and these patients are negative for autoimmune markers.

Type 1 Diabetes is slowly progressive T-cell mediated autoimmune disease. Hyperglycemia accompanied by the classical symptoms of diabetes mellitus occurs only when 70-90% of â-cell have been destroyed. Type 1 DM is the result of interactions of genetic, environmental, and immunologic factors that ultimately lead to the destruction of the pancreatic beta cells and insulin deficiency. Individuals with a genetic susceptibility have normal beta cell mass at birth but begin to lose beta cells secondary to autoimmune destruction that occurs over months to years. In Type 1 Diabetes some environmental factors (certain viral infections, and chemicals like alloxan, streptozotocin and pentamidine) initiates the autoimmune destruction of ß-cell in genetically susceptible individuals.

Type 2 Diabetes mellitus: This type comprises about 80% cases of DM. It was previously called as maturity-onset diabetes (MOD) or non-insulin dependent diabetes mellitus (NIDDM) of obese and non-obese type. Insulin resistance and abnormal insulin secretion are central to the development of type 2 DM. Insulin level in blood may be low, normal or even high. Type 2 DM has a strong genetic component. The concordance of type 2 DM in identical twins is between 70 and 90% and individuals with a parent with type 2 DM have an increased risk of diabetes. The disease is polygenicand multifactorial since in addition to genetic susceptibility, environmental factors (such as obesity, nutrition, and physical activity) modulate the phenotype.

Type 2 DM is characterized by three pathophysiologic abnormalities: impaired insulin secretion, peripheral insulin resistance and excessive hepatic glucose production. Obesity, particularly visceral or central (as evidenced by the hip-waist ratio), is very common in type 2 DM. In the early stages of the disorder, glucose tolerance remains near-normal, despite insulin resistance, because the pancreatic beta cells compensate by increasing insulin output. As insulin resistance and compensatory hyperinsulinemia progress, the pancreatic islets in certain individuals are unable to sustain the hyperinsulinemic state. IGT, characterized by elevations in postprandial glucose, then develops. A further decline in insulin secretion and an increase in hepatic glucose production lead to overt diabetes with fasting hyperglycemia. Ultimately, beta cell failure may ensue.

Risk Factors for Type 2 Diabetes Mellitus:

- Family history of diabetes
- Obesity (BMI >25 kg/m)
- Habitual physical inactivity
- Previously identified IFG or IGT
- History of GDM or delivery of baby>4 kg (>9lb)
- Hypertension (blood pressure >140/90 mmHg)
- HDL cholesterol level <35 mg/dL (0.90 mmol/ L) and/or a triglyceride level >250 mg/dL (2.82 mmol/L)
- Polycystic ovary syndrome or acanthosis nigricans
- History of vascular disease

Complications of Diabetes:

Acute complications: Diabetic ketoacidosis (DKA) and hyperglycemic hyperosmolar state (HHS) are acute complications of diabetes. Both disorders are associated with absolute or relative insulin deficiency, volume depletion, and acid-base abnormalities.

Chronic Complication: The chronic complications of DM affect many organ systems and are responsible for the majority of morbidity and mortality associated with the disease. Chronic complications can be divided into vascular and nonvascular complications. The vascular complications of DM are further subdivided into microvascular (related to damage of the small blood

vessels e.g. retinopathy, neuropathy, nephropathy etc.) and macrovascular (related to atherosclerosis of larger arteries e.g. Coronary artery disease, Peripheral arterial disease, Cerebrovascular disease etc.) complications. Nonvascular complications include gastroparesis, infections, skin changes and cataract. Long-standing diabetes may be associated with hearing loss.

Mechanism of Complications : The most acceptable theory of mechanism of complications in diabetes is described as increased intracellular glucose leads to the formation of advanced glycosylation end products (AGEs) via the nonenzymatic glycosylation of intra- and extracellular proteins. Nonenzymatic glycosylation results from the interaction of glucose with amino groups on proteins. AGEs have been shown to cross-link proteins (e.g., collagen, extracellular matrix proteins), accelerate atherosclerosis, promote glomerular dysfunction, reduce nitric oxide synthesis, induce endothelial dysfunction, and alter extracellular matrix composition and structure.

The another theory is based on the observation that hyperglycemia increases glucose metabolism via the sorbitol pathway. Intracellular glucose is predominantly metabolized by phosphorylation and subsequent glycolysis, but when increased, some glucose is converted to sorbitol by the enzyme aldose reductase. Increased sorbitol concentration alters redox potential, increases cellular osmolality, generates reactive oxygen species, and likely leads to other types of cellular dysfunction.

Management of Madhumeha : The causes, pathogenesis, symptoms, diagnosis and preventive measures of Madhumeha have been discussed along with Prameha roga. So the principles of treatment of prameha roga may be applicable to madhumeha roga. Successful management of any disease is only possible if the etiopathology of that disease is known. Prameha is Kulaja vikara which is precipitated by over-eating and sedentary lifestyle. Such patients are usually over weight, whereas there is another group where vata is predominant who are asthenic and for them altogether different line of treatment is advocated.

Same has been emphasized by charaka that there are two types of therapies available for treating Prameha i.e. “Sambrihana chikitsa” for krish and durbal pramehi which may help the body nourishment and “Samshodhan chikitsa” for sthula and balvan pramehi so that the effect of over eating may be eversed. Acharya Caraka has also mentioned the “nidanaparivarjan” for the management of Prameha. In sthula pramehi, the treatment mod alities described for Samtarpanajanya diseases can also be applied. The treatment of madhumeha as mentioned in Ayurvedic classic can broadly be divided into three categories:

1) Ahara (Dietary Management)
2) Vihara (Lifestyle including Exercise)
3) Aushadha (Drugs)

Ahara (Dietary Management) : The nidana-parivarjana (avoidance of etiological factors) are the prime treatment principle in the management of every disease. Etiological factors of madhumeha i.e. dadhini, soup of meat of gramya, audaka and anupa animals, payansi, nava annapanam, guda vaikritam and all the articles that aggravate Kapha should be avoided. These factors can lead to increase in blood sugar, cholesterol, triglycerides and fatty acids, which causes obesity and ultimately produce insulin resistance.

Pathya described in prameha are old shali, sastika, yava, godhuma, kodrava, uddalaka, chanaka, adhaki, kulattha, mudga, shaka of tiktagana and kashayagana cooked with oil of danti, ingudi, sarsapa, atasi, preparation of yava along with madhu and amalaka etc. These factors leads to decrease in blood sugar, LDL cholesterol, triglycerides and fatty acids, and causes weight reduction and ultimately cure insulin resistance.

Two basic types of diet are used in the treatment of diabetes: low energy and weight reducing diets

(for obese patient) and weight maintenance diets (for non-obese patient). Management of obese people (both diabetic and non-diabetic) with a diet low in refined carbohydrate and high in unrefined carbohydrate, and restricted in total energy content results in increased insulin sensitivity. Increased insulin sensitivity causes decline in blood glucose in the obese diabetic patient. A diabetic patient is advised to consume plenty of fresh vegetables, whole grain products, fruits less in carbohydrate, pulses and less oils. Consumption of mono and disaccharides (fructose, sucrose and glucose) should be restricted. Confectionary, pudding, biscuits, cakes should be avoided. Foods with high glycemic index should be avoided.

Vihara (Lifestyle management): It has been mentioned in ancient classics that, lack of exercise (Asyasukham) and excessive sleep during day and night time (Swapnasukhama) play important role in etiology of madhumeha. These factors are the major cause of obesity, which leads to insulin resistance. Soe has described the role of physical activity in the management of Prameha. For madhumehi it has been said that they should move from one to the other village and earn their living by begging and lives with animals. A poor and friendless patients of prameha should live on alms, lead a life of perfect continence like an ascetic, forego the use of shoes and umbrella and walk a hundred yojanas or more on foot without staying for more than one night at a single village.

Exercise is useful for lowering plasma glucose and increasing insulin sensitivity in diabetic patients. The ADA recommends 150 min/week (distributed over at least 3 days) of aerobic physical activity. Avoidance of smoking is also very necessary because it causes insulin resistance. Excessive consumption of alcohol can increase the risk of diabetes by damaging the pancreas and liver and by promoting obesity.

Aushadha (Drugs): A number of herbal drugs and rasa bhasma preparations are advocated for the treatment of madhumeha. A short summary of the various drugs described for the treatment of madhumeha in different Ayurvedic classic is given below :

a. Single drug: Amalki, Haridra, Karavellaka, Nimb-patra, Jambu, Bilva, Methika, Asana, Meshasringi, Shilajatu etc.

b. Compound preparations used in Prameha xercise is extremely important in the management of diabetes because of its effect on blood glucose and free fatty acids. All the ancient scholars

- Kwatha : Vidangadi Kvatha, Phalatrikadi Kvatha, Manjisthadi Kvatha, Mustadi and Triphaladi Kvatha
- Churna (powders) : Triphaladi Churna, Nyagrodhadi Churna, Vijayasara Churna, Jambu Bija Churna, Sarvamehahar Churna,
- Gutika (Vati) : Chandraprabha Vati, Pramehantaka Vati.
- Guggulu: Gokshuradi Guggulu, Trikatvadi Guggulu.
- Asava-Arista: Lodhrasava, Madhukasava, Dantyasava, and Deodarvadiarista.
- Various Yoga : Haridradi Yoga, Asvathavigadi Yoga, Triphala Catuska Yoga, Abhraka Yoga. Amrita, Pippali, Nimb Yoga.
- Rasa: Basanta Kusmakar Rasa, Basanta Tilaka Rasa, Mehamudgar Rasa, Brihat Vangesvara Rasa, Prameha Gaja-Kesari Rasa, Trivangas, Svarna Vanga, Meha Vajra Rasa, Meha-hara Rasa, Prameha Chintamani Rasa, Prameha Kulantaka Rasa.

CONCLUSION:

The main Patho-physiology behind Diabetes mellitus is the disturbed metabolism of the carbohydrates, fats and proteins due to either absolute or relative lack of Insulin. Sedentary life, improper food habits, lack of exercise and stress precipitate this disease. The Diabetes mellitus has been broadly classified as type I and type II DM. The type I Diabetes mellitus is nearer to

"Dhatuapakarshanajanya Madhumeha" while the type II Diabetes mellitus resembles to "Avaranajanya Madhumeha". In Madhumeha all the doshas and dushyas get vitiated, but the vata dosha and oja dushya are predominantly involved. In pathogenesis of Madhumeha the vitiated Kaph, Pitta, Meda and mamsa obstruct the path of Vata Dosha. This vitiated Vata Dosha attracts the vital essence (the Oja) and carries it to the Mutrashaya, then it produces Madhumeha. Treatment of Madhumeha have been approach in ahara (diet), vihara (lifestyle) and aushadha (medicine). Low energy and fibre rich diet is preferable to satisfying the patient as well as to control the incidence of complication and glycemia. Anaerobic exercise like walking, jogging, swimming etc. are helpful for peripheral glucose utilization. Various pramehahara drugs (herbal or herbomineral formulations), insulinotropic drug (which increased the insulin secretion), hepatic gluconeogenesis inhibitor, inhibitor of rapid glucose absorption and insulin sensitizers etc. and insulin are available for the management of diabetes mellitus.

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A PILOT STUDY ON EFFECT OF NEELKANTHI (AJUGA BRACTEOSA WALL EX BENTH.) ON MADHUMEHA (DIABETES MELLITUS)

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ABSTRACT :

Madhumeha is the vatika variety of prameha characterized by passage of excessive quantity of urine resembling honey in taste and color along with sweetness of whole body. The features of Madhumeha are equivalent to that of Diabetes mellitus. Neelkanthi (*Ajuga bracteosa* Wall Ex Benth) is a folklore medicine widely used in different areas of Himachal Pradesh for the treatment of Madhumeha. It has tikta (bitter),kashaya (astringent) rasa (taste), ruksha (nonunctuous), sheeta (cold) guna (property); katu (pungent) vipaka (biotransformation) and sheeta (cold) veerya (potency). A clinical trial of Neelkanthi Churna (powder) in the dose of 6 gm/ day in divided doses was conducted in 10 patients of non insulin dependent diabetes mellitus (NIDDM) with the age group of 40 to 70 years. After 60 days, general symptoms and signs improved significantly and fasting blood sugar (FBS) and urine sugar were reduced by 17.87% and 53% respectively which were also significant statistically. No side effect, of the therapy were observed. Further, experimental and clinical study for longer duration on large number of patients in appropriate form and adequate dose is required to establish the antidiabetic role of Neelkanthi.

Key-words:

Madhumeha, Diabetes, Neelkanthi, Vatika Prameha, *Ajuga bracteosa* Wall Ex Benth.

INTRODUCTION

Madhumeha is incurable and advanced stage of prameha characterized by excretion of urine, which resembles honey in taste and characteristics and is also accompanied by sweetness of whole body of the patient . Twenty types of prameha are enumerated in classical texts and Madhumeha is considered under Vataja category. Prameha has been mentioned as anushangi roga (adherent disease) i.e., Prameho Anushanginam by Charaka; and santarpanajanya roga caused by saturation of body due to overeating as mentioned by Vagbhatta . Because of difficulty in treatment, seriousness and complications, prameha has been considered as one of eight Maharogas (major diseases). Sushruta has also described Madhumeha as 'Medo dushtijanya vikara'. Despite availability of a large number of oral hypoglycaemic agents, none is an ideal for the treatment of the NIDDM patients; majority of individuals can not be adequately controlled with single drug and secondary failure (5-10% per year) to oral treatment is common. Neelkanthi *(Ajuga bracteosa)* is a folklore medicine widely used in Kangra district of Himachal Pradesh for the treatment of Madhumeha. It has tikta (bitter), kashaya (astringent) rasa (taste), ruksha (nonunctuous), sheeta (cold) guna (property), katu (pungent) vipaka (biotransformation) and sheeta (cold) virya (potency) . Due to these properties this drug might have the potential to relieve the signs and symptoms of Madhumeha; therefore it was selected for the clinical observation.

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AIMS

1. To study the effect of Neelkanthi in relieving signs and symptoms and reducing blood glucose leveland urine sugar in patients with Madhumeha.

MATERIALS AND METHODS

Selection of Patients

A total of 14 patients were selected for the present study from the out patient department (OPD) and in patient department (IPD) of Kayachikitsa Department, Rajiv Gandhi Government Post Graduate Ayurvedic College Hospital, Paprola, Himachal Pradesh, India irrespective of their sex and socioeconomic status.

INCLUSION CRITERIA:

1. Patients willing to participate in the trial.
2. Age between 35-70 years
3. Only uncomplicated cases of NIDDM
4. Patients fulfilling the WHO criteria for DM i.e. with symptoms of DM plus random blood glucose >200 mg/dl and presence of sugar in urine or fasting blood glucose (FBS) > 126mg/dl or 2- hour blood glucose >200 mg/dl during an oral glucose tolerance delete test.

EXCLUSION CRITERIA:

1. Patients unwilling to participate in the trial
2. Patients presenting with complications like severe renal disease, retinopathy, ischemic heart disease, etc.
3. IDDM/Juvenile diabetes, pancreatic or liver surgery.
4. Patients with major medical diseases like cancer, concurrent infection like tuberculosis etc.

ETHICAL APPROVAL

The research protocol was approved by the "Institutional Ethics Committee" R.G.G.P.G. Ayurvedic College, Paprola, Himachal Pradesh.

TRIAL GROUP

It was a single drug trial in a single group of patients as a part of educational research programme at MD level. The trial drug Neelkanthi Churna was given in the dose of 3gm/day in divided doses. Patients having FBS <140mg/dl were decided to give the drug in dose of 3 gm/day in three divided doses before food while those with FBS>140 mg/dl were to be given the drug in dose of 6 gm/day in three divided doses before food with water. All the patients that completed the trial had FBS >140 mg/dl. Out of 14 patients registered, 10 patients turned up for complete follow ups and remaining four were dropped out from the clinical study because they did not take the medicine as per given instruction or discontinued it.

DURATION OF TRIAL:

Patients were examined weekly and data was collected at an interval of 15 days and duration of trial was 60 days.

FOLLOW UP STUDIES

The patients were examined weekly during the treatment and then after 1 month for follow up.

PREPARATION OF DRUG

Panchanga (whole plant) of Neelkanthi *(Ajuga bracteosa)* was collected from outskirts of Paprola and Chamba and the plant was taxonomically identified by experts from deptt. of Dravyaguna, Govt.Ayurvedic College, Paprola. Panchanga of the plant was dried under shadow and fine powder was prepared in the Govt. Ayurvedic Pharmacy, Paprola.

PROPERTIES OF NEELKANTHI CHURNA

Physical Properties

1. Svarupa (form) : Powder (Churna)
2. Varna (colour) : Dusty-green
3. Rasa (Taste) : Tikta (bitter), Kashaya (astringent)
4. Gandha (smell) : Tikta (bitter)
5. Packing : The churna was packed in packets of 50 gm in the form of capsules of 500mg.

Chemical Properties

Chemical analysis of Neelkanthi churna revealed that it contains tannins, glycoside, ceryl alcohol, beta-sitosterol, gamma-sitosterol, ceretic acid and palmitic acid.

CLINICAL ASSESSMENT CRITERIA

Clinical Assessment

***1. Prabhutamutrata* (Polyuria) :-**

Frequency /Day	*Frequency /night*	*Volume*	*Score*
1 - 4	-	< 2 litre	0
5 - 7	2 - 3	2 - 2.5 Litre	1
8 - 10	3 - 5	2.5 - 3.5 Litre	2
> 10	6 - 8	> 3.5 Litre	3

2. *Pipasa adhikya* (Polydispsia)

Frequency /Day	*Frequency /night*	*Volume*	*Score*
1 - 4	-	<2 litre	0
5 - 7	2 - 3	2 - 2.5 Litre	1
8 - 10	3 - 5	2.5 - 3.5 Litre	2
> 10	6 - 8	> 3.5 Litre	3

3. *Kshudha adhikya* (Polyphagia)

Meals	*Extra*	*Quantity (Chapati)*	*Score*
3	0	4 - 6	0
3	1 - 2	6 - 8	1
3	2 - 3	8 - 10	2
3	> 3	10 - 12	3

4. Vulval Pruritus/ Balanitis	*Score*
No Itching	0
In the night	1
In the day	2
Whole day and night	3

5. *Karapadasuptata* (numbness)	*Score*
No numbness	0
In the morning	1
In the night	2
At pressure points whole day and night	3
Whole day and night continuous	4

6. *Shaithilya* (Fatigue)

Tiredness	*Routine Activity*	*Score*
After 2 Km	Normal	0
After 1 Km	Normal	1
After 1/2 Km	Disturbed	2
After routine work	Disturbed	3
During routine work	Disturbed	4

7. *Karapadadaha* (Burning hands and feet)	*Score*
No burning	0
In the morning	1
In the night	2
Whole day and night off and on	3
Whole day and night continuous	4

8. *Mukha Shosha* (Dryness of mouth)	*Score*
No Dryness of mouth	0
Desire of taking water	1
Have to take sips to moisten oral mucosa	2
Crusting of oral mucosa due to dryness	3

9. Joint Pains

Movement	*Routine Activity*	*Score*
Normal	Normal	0
Slight limitation	Slightly affected	1
Moderate limitation	Reduced	2
Severe limitation	Reduced	3

10. Calf Tenderness	*Pain*	*Score*
No tenderness	No pain	0
In the morning	Mild	1
Even on light touch	Moderate	2
Even during rest and light touch	Severe	3

11. Dysuria	*Score*
No pain during micturition	0
Mild pain during micturition	1
Moderate pain during micturition	2
Severe pain during micturition	3

Laboratory Observations

Grading for urine sugar is as under:

Urine - Sugar	**Score**
Nil	0
Trace	1
+	2
++	3
+++	4
++++	5

STATISTICAL ANALYSIS

Student's paired t-test was used for subjective and objective criteria to calculate the significance of data. The obtained results were interpreted as follows:

Û Significant $p < 0.05$ Û Highly significant $p < 0.01$

OBSERVATION AND RESULTS

This study was an attempt to investigate the effects of Neelkanthi Churna, a folklore drug in the management of Madhumeha and also to assess the results of previous study done on this drug in this (12) institute .

DEMOGRAPHIC PROFILE

Only one (7.14 %) patient was in age group of 35 - 44 years, 4 (28.57 %) in 45 -54 years, 6 (42.85 %) in 55 - 64 years, and 3 (21.42%) were in 65 - 70 years. Female patients (9 i.e. 64.28 %) outnumbered the male patients who were 5 i.e. 35.71%. All the patients (100 %) were Hindus. 9 (64.28 %) patients were housewives, 3 (21.42 %) servicemen and out of remaining two, one (7.14%) was businessman while other was a teacher. 9 patients (64.28%) belonged to middle socio economic status while 4 (28.57%) were from middle class and only one (7.14%) patient was from upper class. 3 (21.42%) were vegetarian and 11 (78.57%) took mixed diet. 7 (50%) patients preferred madhura rasa, 3 (21.42%) amla rasa, 1 (7.14%) preferred lavana rasa while 3 (21.42%) patients had no specific choice of rasa. 12 (85.71%) out of 14 were on mixed diet and 2 (14.28%) were taking only wheat (chapati) as staple diet. None was found taking only rice as staple diet and 10 (71.42%) patients were having no addiction and 4 (28.57%) patients were addicted to smoking and alcohol both. 7 (50%) were of Vata Kaphaja prakriti, 4 (28.57%) were of Pitta Kaphaja prakriti and 3 (21.42%) were of Vata Pittaja prakriti. All 14 (100%) patients were married and were from rural area and 5 (35.71%) were uneducated, 4 (28.57%) were having middle level education; matriculates were also 4 (28.57%).

CONSTITUTIONAL PROFILE

11 (78.57%) patients had BMI in the range of 20 - 24.9 while 3 (21.42%) had BMI ranging from 25 - 30. 7 (50%) patients were having the disease of less than one year duration, 6 (42.85%) between 1 - 5 years and only one (7.14%) had the disease for greater than 5 years. Only 2 (14.28%) presented with positive family history of the disease.

7 (50%) patients had history of vision disorder, 2 (14.28%) had past history of hypertension, only 1 (7.14%) had sthaulya while 4 (28.57%) patients had no past history of any associated disease.

9 (64.28%) patients were normotensive, 2(14.28%) were in prehypertensive stage while 1 (7.14%) was in stage I and 2 (14.28%) were in stage II hypertension.

9 (64.28%) patients had FBS > 200, 4 (28.57%) had FBS between 120 and 160 while only one (7.14%) patient had FBS between 161 and 200.

7 (50%) patients took rest for 1-2 hours after meals at lunch time, 2 (14.28%) took rest for less than 1 hour; 4 (28.57%) took no rest at all while only one patient took rest for more than two hours.

12 (85.71%) had normal appetite while 2 (14.28%) patients had their appetite increased and no patient reported decrease in appetite. 13 (92.85 %) patients had normal bowel habit and only one (7.14%) had constipation and no patient had irregular bowel habit.

9 (64.28%) did no exercise at all and only 5 (35.71%) patients used to go for morning walk.

INCIDENCE OF VARIOUS SIGNS AND SYMPTOMS

Table No. 1

Incidence of Signs and Symptoms in 14 Patients of *Madumeha*

Signs and Symptoms	No. of Patients	Percentage
Polydipsia	6	42.85
Polyuria	12	85.71
Polyphagia	2	14.28
Dysuria	3	21.42
Fatigue	13	92.85
Numbness	3	21.42
Burning sensation in hands and feet	3	21.42
Calf Tenderness	3	21.42
Dryness of mouth	8	57.14
Joint pains	4	28.57
Pruritus vulvae	2	14.28

CLINICAL PROFILE

Table No. 2

Effect of Neelkanthi Churna on Symptoms and Signs of Madhumeha (D.M.)

S. No.	Name of Sign/Symptom	n	Day 0	Day 15	Day 30	Day 45	Day 60	%age relief	S.D.	S.E ±	t	P
1.	*Prabhuta mutra* (Polyuria)	9	1±0	0.55±0.49	0.33±.47	0.11±0.31	0.22±0.41	78	0.45	0.15	5.13	<.001
2.	*Pipasa* (Polydipsia)	4	1.5±0.5	1.25±0.43	1±0.70	0.5±0.5	0.75±0.43	50	0.5	0.25	3	>.05
3.	Polyphagia	2	1±0	1±0	1±0	0.5± 0.5	0.5±0.5	50	0.71	0.50	0.98	>.05
4.	Vulval Pruritus	1	1	1	1	0	0	100	-	-	-	-
5.	*Karpada suptata* (Numbness)	3	2.6±0.47	2.33±0.94	1.66±.47	1.66±0.47	1.33±0.94	50	0.1	.058	11.43	<.01
6.	*Shaithilya* (Fatigue)	10	2.1±0.83	2.1±0.83	1.9±0.7	1.5±0.67	1.5±0.67	28.6	0.69	2.71	0.22	<.05
7.	*Karpada-Daha* (Burning Hands &Feet)	3	2.66±.47	2.66±0.47	2±.47	1.33±0.81	1.33±.47	50	0.58	3.95	.34	>.05
8.	*Mukha Shosha* (Dryness of Mouth)	6	1.16±.37	1±.47	0.33±.57	0.33±0.47	0.33±0.47	71.5	0.41	0.17	4.99	<.01
9.	Joint pains	3	1.66±0.47	1.66±0.47	1.33±0.47	1.33±0.47	1.33±0.47	19.9	0.33	0.19	1.73	>.05
10.	Calf Tenderness	3	1.33±0.47	.33±0.47	0.66±0.47	0.33±0.47	0±0	100	0.58	0.34	3.96	>.05
11.	Dysuria	2	1.5±0.5	1±1	0.5± 0.5	0±0	0±0	100	0.71	0.5	3	>.05

Laboratory Profile

Table No. 3

Effect of Therapy on Fasting Blood Sugar

	Mean score ± S.D.					% change	S.D.	S.E. ±	t	p
	Day 0	Day 15	Day 30	Day 45	Day 60					
Fasting Blood Sugar	191.74 ±41.68	174.62 ±39.85	175.5 ±45.93	157.18 ±35.45	157.47 ± 40.61	17.87	27.30	8.64	3.97	<0.01

Table No. 4

Effect of Therapy on Urine Sugar.

Mean score ± S.D.					% change	S.D.	S.E. ±	t	p
Day 0	Day 15	Day 30	Day 45	Day 60					
Urine n 2.83 Sugar =6 ±0.89	2 ±1.52	1.5 ±1.60	1.33 ±1.10	1.33 ±1.49	53	1.22	0.5	3	<.05

Table No. 5

Effect of Therapy on Other Investigations.

Invest.	Mean score ± S.D.			% change	S.D.	S.E. ±	t	p
n=10	Day 0	Day 30	Day 60					
Hb	10.5±.46	10.94±.43	10.7±0.60	2.3	0.69	0.22	1.01	>.05
S.Choles terol	186.15±35.23	162.85±27.83	164.9±34.75	11.4	36.34	11.49	1.85	>.05
Blood Urea	25.41±6.01	24.08±4.53	28.26±13.66	11.2	12.29	3.86	.73	>.05
Serum Creatinine	0.85±0.19	0.78±0.12	0.95±0.22	11.7	0.28	0.09	1.15	>.05
SGOT	23.03±3.70	26.35±13.82	23.38±4.92	1.5	5.29	1.67	.21	>.05
SGPT	19.93±2.96	30.06±26.59	23.76±7.20	19.2	8.97	2.84	1.35	>.05

Hb: Hemoglobin, SGOT : Serum glutamate oxaloaceate transaminase, SGPT: Serum glutamate pyruvate transaminase

Overall effect of therapy in the patients of Madhumeha

Table No. 6

S.No.	Over all effect of therapy on patients of Madhumeha	Trial group
1.	Markedly Improved (> 75 % relief in symptoms and signs FBS 80 - 100 mg /dl and urine sugar nil)	0
2.	Moderately Improved (> 50 % relief in symptoms and signs, FBS 101 - 110 mg/dl and urine sugar nil)	2 (20 %)
3.	Improved (> 40 % relief in symptoms and signs, FBS : 111 - 126 mg/dl and urine sugar - nil)	0
4.	Not Improved (< 40 % relief in symptoms and signs, FBS > 126 mg/dl and urine sugar > 1 +)	8 (80 %)

DISCUSSION:

Demographic Profile

42.85% belonged to age group of 55-64 years. There is progressive decrease in insulin sensitivity (12) with age. Maximum incidence of type 2 Diabetes mellitus is seen at the age > 45 years.Male : female ratio was 1:1.8. This is contrary to general trend of male predominance of NIDDM in India-Prevalence of type 2 Diabetes mellitus in India Study, 2001 revealed male to female ratio as 100.6 : 99.4. These findings may be due to the faulty eating habits of housewives.

All the patients (100%) were Hindus. This reflects the prevalence of Hindu religion in this region. 64.28% patients were housewives and 21.42% of patients were servicemen. This may be because of the fact that housewives suffering from type 2 DM have mostly lead sedentary life style, lesser physical activity and so more chances of central obesity. 64.28% belonged to middle socioeconomic status (Rs. 2000- 7000 per month) while 28.57% were from lower class i.e. < Rs.2000 per month and only 7.14% belonged to upper class i.e. > Rs.7000 per month. The prevalence of DM is found to be lower in low socioeconomic group as compared to high income group.

78.57% took mixed diet and only 21.42% were vegetarian. The recent studies indicate that the diet of diabetics do not appear to differ from that of non-diabetics except in quantity.

Maximum of the patients preferred madhura rasa followed by amla rasa in their diet. It supports the view of Charaka and Sushruta that madhura and amla rasa are causative factors of Madhumeha.

85.71% were on mixed diet.

71.42% patients had no addiction while 28.57% patients had addiction of smoking and alcohol both. 50% belonged to vata-kaphaja prakriti. Increased kapha and vata is a major factor in the pathogenesis of Madhumeha.

All the patients were married. The prevalence is more in married females than unmarried probably due to their increased weight gain with pregnancy. No such correlation was found among males. All the patients were from rural areas. According to existing knowledge prevalence of DM is higher in urban than rural areas

Constitutional Profile

2 78.57% patients had BMI between 20-24.9 Kg/m and were considered as normal weight, followed by 21.42% with BMI between 25-30 Kg/m2 and were considered as overweight.

50% had the disease from less than 1 year and42.85% of patients had it between 1-5 years. 85.71% patients had no family history of Madhumeha while 14.28% patients presented with positive history of Madhumeha in their family. This finding does not correlate well with modern knowledge of strong genetic component in the manifestation of type-2 DM.

50% patients had history of vision disorders, 14.28% of hypertension, and 7.14% of sthaulya while 28.57% patients had no past history of any associated disease.

64.28% patients were normotensive, 14.28%patients were prehypertensive, 7.14% were in stage I hypertension and 14.28% were in stage II hypertension. Hypertension is present in 50% of patients with type 2 diabetes.

FBS was taken as an index of severity of the disease. 64.28% patients had FBS>200 mg/dl, 28.57% had FBS between 120-160 mg/dl and 7.14% between 161-200 mg/dl. 50% patients took rest for 1-2 hours after lunch, 14.28% for <1 hour and 7.4% patients took rest for >2 hours after lunch.

85.71% patients had normal appetite, followed by 14.28% patients with increased appetite in . accordance with textual references. 92.85% had normal and regular bowel habits followed by 7.14% patients with constipation. 64.28% were not doing any exercise while morning walk was done by 35.71% of patients. Our results support the classical description for Madhumeha.

Clinical Profile

Prabhutamutrata (Polyuria):- Polyuria occurs due to hyperosmolarity of the blood. The percentage of relief was 78% and was highly significant (t=5.13, p<0.001).

Pipasa (Polydipsia)- The intense thirst appears because of obligatory renal water loss combined with the hyperosmolarity, triggering the osmoreceptors in the thirst center of the brain. The mean score for pipasa came down relieving the symptom by 50% and it was statistically insignificant at p>0.05 (t = 3).

Polyphagia- Increase in appetite in patients of diabetes occurs due to the catabolism of proteins and fats which in turn induces negative energy balance. The effect of therapy on polyphagia was statisficatly insignificant at P>0.05 (t = 0.98)

Vulval Pruritus- It occurs due to infection of vulva because glucose is a good media to grow pathogens. This symptom was present in only one patient and 100% relief was obtained.

Karapadasuptata- This is the feature of hyperglycemia induced neuropathy. The percentage of r elief was 50 % and was significant at p< 0.01 (t = 11.43).

Shaithilya (Fatigue):- It is resulting from excessive loss of electrolytes through urine. The percentage of relief was 28.6 % and also significant statistically at p < 0.05 (t = 2.71).

Karapadadaha (Burning Hands and Feet)- This is also a feature of diabetic neuropathy The percentage relief of 50% was statistically insignificant at p>0.05 (t = 3.95).

Mukha Shosha (Dryness of Mouth)- It is caused by excessive loss of water through urine. The relief of 71.5% was significant at p < 0.01 (t = 4.99)

Joint Pains- Joint pain may occur when the treatment is delayed. The percentage relief was 19.9 % which was insignificant at p >0.05 (t = 1.73).

Calf Tenderness- At completion of trial it had a relief of 100 %, it was insignificant statistically at p > 0.05 (t = 3.96).

Dysuria- Uncontrolled diabetes is associated with an increased susceptibility to infection. Dysuria may result from urinary tract infection. The relief was 100 % but it was statistically insignificant at p > 0.05 (t = 3).

Adverse Effects- Few patients complained of burning sensation in epigastic region after taking Neelkanthi Churna (capsules). It might be due to development of gastritis, whether it was caused by trial drug requires further study.

Laboratory Profile

Fasting Blood Sugar- The mean FBS 191.74 ± 41.68 mg/dl gradually came down to157.47 ± 40.61 mg/dl after 60 days. The percentage decrease in FBS was 17.87 % and it was significant at p < 0.01 (t = 3.97). (Table no.3).

Urine Sugar- The mean score of sugar in urine was 2.83 ± 0.89 before treatment which reduced to 1.33 ± 1.49 after 60 days. The percentage relief was 53 % and it was statistically significant at p<0.05 (t = 3). (Table no.4)

Possible Mechanism of Action of Drug According to Sushruta, drugs which are tikta (bitter), katu (pungent), kashaya (astringent). sara fo'o

(mobility) in property with katu-vipaka and ushna veerya and shoshaka (absorbing) and chhedana (extracting) actions should be selected for the treatment of Madhumeha. Because of its tikta (bitter) and kashaya (astringent) rasa and katu vipaka, Neelkanthi may have potential to relieve signs and symptoms of Madhumeha. Being ruksha, kashaya it decreases output of over all body fluids e.g. urine, sweat. In Madhumeha there is excessive Apdhatu in the body and main line of treatment for excessive fluid there is shoshana, which is done by Ruksha (dry) guna. Due to its katu vipaka it helps to improve digestion and also has medoghna (alleviating excess fat) property.

Neelkanthi may have pacified kapha and pitta by its ruksha and sheeta properties respectively, thus removing avarana (obstruction) of Vata by remaining two doshas and it may have normalized dhatvagni particularly medodhatvagni by katu vipaka either directly by acting on it or by activating it indirectly through jatharagni.

The drug under trial has been used in crude form. It may interfere with glucose absorption from gut, leading to reduced glucose load in blood. Some of the chemical constitutents of Neelkanthi may be responsible for its therapeutic role in Madhumeha but it requires further study.

CONCLUSION

Statistically significant improvement was seen in only 4 symptoms and signs of Madhumeha namely prabutamutrata, karapadasuptata, shaithilya and mukhashosha. There was statistically significant reduction in FBS and urine sugar of the patients. Thus, it can be concluded that Neelkanthi *(Ajuga bracteosa)* may have significant role in Madhumeha. No significant adverse effects were observed except complaint of burning sensation in epigastrium by few patients. However, this is only a preliminary study and further clinical and experimental studies of longer duration on larger sample in the form of ghana satva (extract) and also in slightly higher dose with follow up are required.

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CLINICAL STUDY OF VASAKADI KWATH ON DIABETIC RETINOPATHY

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ABSTRACT :

Today's sedentary lifestyle with full of strers, improper nutritional diet, low protein, poor fiber intake, and high intake of refined products are expected reasons for developing lifestyle related disorders including diabetes mellitus.

Diabetes mellitus is a complex syndrome characterized by particular complets lack of insulin secretion or increased cellular resistance to insulin resulting into persistent hyperglycemia with or without glycosuria which results from derangement in the mechanism of blood sugar homeostasis.

Uncontrolled diabetes mellitus leads to variety of complications including retinopathy which is one of the major causes of blindness.

The study was conducted for clinical evaluation of "effect of vasakadi kwath on diabetic retinopathy".

Present study of 4 months comprises of 12 patients i.e. 24 ocular fundii with clinical features c/o of diabetic retinopathy and divided into two groups i. e.I- drug treated group and II- control group.

The results were found encouraging on each components of diabetic retinopathy in patients of type II diabetes mellitus and effect was stable even after withdrawal of drug.

Key Words: Vasakadi kwath, Diabetes-Retinopathy ,Timir.

INTRODUCTION

The prevalence of diabetic retinopathy (DR) is strongly related to the duration of diabetes. Nearly all the patients with type (IDDM) and more than 60% of the patients with type II (NIDDM) diabetes have some degree of retinopathy.

Apart from retinopathy, diabetes mellitus is accompanied by other ocular complications namely diabetic cataract, changes in refraction, ophthalmoplegia, optic neuritis and raised intraocular tension. Diabetic retinopathy is one of the most dreaded complications of diabetes mellitus and is still a challenge to ophthalmologists all over the world.

The medical management of diabetic retinopathy includes the control of diabetes by oral hypoglycemic drugs and insulin. Aldose reductase inhibitors, antiplatelet agents like ticlopidine, ACE inhibitors like captopril, Interferon, G. H. inhibitors, Vasodilators like Ibudilast, Isoxsuprine and aspirin have also been tried in various stages of diabetic retinopathy. Surgical treatment advocated in particular stage of disease includes panretinal (scat tered) photocoagulation, focal photocoagulation and vitrectomy.

Vasakadi Kwath has been described for the management of Prameha roga as well as some eye ailments. Bhavprakash has mentioned its use only in the management of netra roga in madhyama khand (chapter 63/247). Keeping these points in view the present study "Effect of Vasakadi Kwath on diabetic retinopathy" was planned. Material and method: Twelve cases i.e. 24 ocular fundii were randomly selected from the outdoor patients of Department of Shalakya Tantra and Upgraded department of Ophthalmology, Sir Sunderlal Hospital, I.M.S., B.H.U. and distributed equally into two groups viz.. Group-I i.e. Ayurvedic Drug treated

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group and Group II i.e. Anti diabetics drug Treated group. Vasakadi Kwath is given to the patients of group I in a dose of 40 ml three times per day for three months along with antidiabetic drug. Group II patients received only antidiabetic drug for three months.

All the cases were examined initially in outdoor patient department and were selected for study on the basis of clinical presentation and diagnostic criteria by using Performa described by Lee P et al Am.j. ophthalmology (1966).

OCULAR EXAMINATION:

Visual acuity was tested by snellen's test type and fundus examined for microaneurisms, soft exudates, hard exudates, cotton wool spots, hemorrhages and arterio-venous changes under full myd r i as i s a c h i e ved by Phenylepherine 1.0% or cyclopentolate 1% eye drops.

Each components ware graded in degrees of severity from zero to five, according to the extent of retinal area involved with the exception of venous dilation, which was graded according to changes in the arteriovenous ratio.

Specific Procedure: Fundus photography for the assessment of progression or retardation of retinopathy was also done by using fundus camera initially pretreatment photographs and at third and final visit after 90 days post treatment photographs after full mydriasis.

Relevant pathological investigations like Hb%, TLC, DLC, ESR (Westergen method), glycosylated hemoblogbin (HbA1C) fasting and post-prandial sugar, blood urea and serum creatinine and lipid profiles were carried out during the time of registration and at the final visit Patients were examined at 30 days interval for 3 subsequent follow ups. The Ayurvedic drug treated group patients were asked to review after one more month. This was done in order to see the effect of drug withdrawal on various components of diabetic retinopathy. Final assessment of efficacy was made on the basis of :

1. Improvement of visual acuity at Snellen's test type (improvement at least by one line).
2. The retardation or progression of graded retinopathy components like-venous dilation. Microaneurysms, hemorrhages, exudates. All the pretreatment (graded & non graded retinopathy components) and subsequent follow up of graded & non graded components were analyzed statistically by using paired 't' test within the group and unpaired 't' test between the groups.

OBSERVATION AND RESULTS:

Table : Showing difference of visual acuity before and after treatment

Visual activity	No. of patients		Percentage	
	BT	AT	BT	AT
6/6 to 6/9	15	16	62.5	66.67
6/12 to 6/18	5	4	20.83	16.67
6/24 to 6/36	4	4	16.6	16.67
6/60 and below 6/60	0	0	00	00
Total	**24**	**24**	**100**	**100**

Table : Showing the difference in Microaneurism value between Group-I and Group II.

Groups	Microaneurisms Score Mean ± SD		Within the group comparison BT-F3 (paired t test)	Between group comparison on difference of BT and F3 unpaired t test
	BT	F3		
Group I	2.58 ± 1.08	2.00 ± 0.74	0.580.51 t = 3.92 p < 0.01 HS	t = 1.69 p > 0.05 NS
Group II	2.17 ± 0.39	1.92 ± 0.29	0.250.45 t = 1.92 p > 0.05 NS	

Table: Showing the difference in Hemorrhages value between Group-I and Group II.

Groups	Hemorrhages Score Mean ± SD		Within the group comparison BT-F3 (paired t test)	Between group comparison on difference of BT and F3 unpaired t test
	BT	F3		
Group I	2.83 ± 0.83	1.92 ± 0.79	0.92 ± 0.51 t = 6.17 p < 0.01 HS	t = 4.01 p < 0.01 NS
Group II	0.75 ± 0.62	0.75 ± 0.45	0.00 ± 0.60 t = 0.00 p > 0.05 NS	

Table : Showing the difference in Hard Exudates value between Group-I and Group II.

Groups	Hard Exudates Score Mean ± SD		Within the group comparison BT-F3 (paired t test)	Between group comparison on difference of BT and F3 unpaired t test
	BT	F3		
Group I	2.00 ± 1.35	1.42 ± 0.99	0.58 ± 0.51 t = 3.91 p < 0.01 HS	t = 3.58 p < 0.01 HS
Group II	0.50 ± 0.08	0.75 ± 0.62	-0.25 ± 0.62 t = 1.39 p > 0.05 NS	

Table: Showing the difference in Soft Exudates Score value between Group-I and Group II.

Groups	Soft Exudates Score Mean ± SD		Within the group comparison BT-F3 (paired t test)	Between group comparison on difference of BT and F3 unpaired t test
	BT	F3		
Group I	1.83 ± 1.53	1.08 ± 0.99	0.75 ± 0.62 t = 4.18 p < 0.01 HS	t = 2.87 p < 0.01 HS
Group II	0.42 ± 0.79	0.50 ± 0.52	-0.08 ± 0.79 t = 0.36 p > 0.05 NS	

DISCUSSION :

The compound which can decrease VEGF formation, advanced glycocylated end products (AGEs) or work on protein Kinase C (PKC) can check the progress of course of diabetic retinopathy directly or indirectly.

In present study Octacosonal present in T. cardifolia inhibit endothelial cell proliferation by down regulation of VEGF gene expression. Hypoglycemic activity by -glucosidase inhibitor activity is present in Terminalia chebula and Adhatoda Vasika. Ascorbic Acid found in Emblica officinalis and Xanthone in swertia Swrertia chiraita has potent antioxidant property. Vasicine (Preganine) found in Adatoda vasika has potent haemostatic property, gallic and chebulic acid inT. chebula has anti-inflammatory activity (COX and LOX inhibitor, Eiocosonoids Inhibitor), and that why it helpful in preventing changes of diabetic retinopathy like hemorrhages.

It was observed that out of 24 eyes 15 patients (62.5%) Class 6/6-6/9, 20.83% eyes in class 6/12-6/18 and 4/16.67% having visual acuity ranging between 6/24-6/36 and after treatment it becomes 62.5%, 11.67%, 20.80% and 16.67% in visual acuity ranging between 6/6-6/9, 6/12-6/18 and 6/24-6/36 respectively.

Diabetic retinopathy seems to be a disease due to the vitiation of 'Alochak Pitt' which exists is the eyes and is responsible for normal and clear vision. The drug 'Vasakadi Kwath' has many components of 'Sheet Virya' and 'Madhur Vipaka' drugs. Due to these properties the drug pacifies the Pitta, especially the 'Alochak Pitta' and helps in the retardation of the process of diabetic retinopathy.

CONCLUSION

The incidence of diabetic retinopathy after 10 years is 50% and after 30 years is 90% and it is extremely rare to develop within 5 years. Diabetic retinopathy can be correlated with Timira which slowly progress into lingnas. Sometime loss of vision can be sudden due to hemorrhage and retinal detachment.

Clinical study highlights the value of Vasakadi Kwath on the course of diabetic retinopathy.

It was found that the drug -

1. Increases the process of absorption of retinal hemorrhages, hard and soft exudates and also prevented their recurrence.
2. Showed a trend of retardation of components like microaneurisms and pre proliferative changes and prevented venous dilatation.
3. aused improvement in visual activity of the eyes which were showing progressive loss of vision.
4. The drug has some role in reduction of serum triglyceride level but the same time HDL level is also found to be reduced.
5. Has no significant effect on blood sugar level. It may be due to study had been done on patients those who were already on controlled blood sugar level.
6. has no adverse effects during the course of therapy and after withdrawal of drug. Although, effects of the drug were found positive, this drug may be taken for further long term studies on larger sample size to reach any definite conclusion.

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शेष भाग पृष्ठ 15 पर

Bhai Uddhavdas Mehta Memorial All India Ayurveda PG Students Essay Competition- 2015

Bronze Medal (3rd Prize) Winner Essay

"NECESSITY OF BASIC SCIENCES FOR THE DEVELOPMENT OF AYURVEDA"

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Background-

Ayurveda (the science of life) is one of the branches of vedas. Ayurveda is a holistic healing science which comprises of two words, Ayu and Veda. Ayu means life and Veda means knowledge or science. So the literal meaning of the word Ayurveda is the science of life. Ayurveda is a science dealing not only with treatment of some diseases but is a complete way of life. It is regarded as upaveda of Atharva-veda but, infact,it is a stream of knowledge coming down from generation to generation since eternity parallel to the vedic literature that is why its emergence has been said to be from the creator (Brahma) himself prior to the creation.It is called eternal . All this shows its long tradition and deep attachment to the Indian culture.

Aim of Ayurveda-

Prayojanam chasya svasthasya svasthyaraksanam-atursya vikaraprasamanam cha [C.S.-30/26]

The objective of Ayurveda is to protect health of the body and to alleviate disorders in the diseased.

Dharmarthakamamoksanamarogyam-

[C.S.-I/16]

Disease-free condition is the best source of virtue, wealth, gratification and emancipation while the disease is destroyer of this source, welfare and life itself

Subject Matter of Ayurveda-

Hetulingaousadhgynam svasthaturaparayanam - [C.S.-I/24]

Ayurveda provides knowledge of aetiology, symptomatology and therapeutics, best way for both the healthy and the sick, tri-aphormismic, continuing since time immemorial and virtuous which was first known to Brahma the creator.

Salient Features of Ayurveda-

There are several aspects of this system of medicine which distinguish it from other approaches to health care:

1. Ayurveda describes three fundamental universal energies which regulate all natural processes on both the macrocosmic and microcosmic levels. That is, the same energies which produce effects in the various galaxies and which are operating at the level of the human physiology in our own physiology. These three universal energies are known as the Tridosa.
2. Ayurveda is a complete medical system which recognizes that ultimately all intelligence and wisdom flows from one Absolute source (Paramatma).Health manifests by the grace of the Absolute, acting through the laws of Nature (Prakriti).Ayurveda assists Nature by promoting

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harmony between the individual and Nature by living a life of balance according to her laws.

3. It focuses on establishing and maintaining balance of the life energies within us, rather than focusing on individual symptoms.

4. It recognizes the unique constitutional differences of all individuals and therefore recommends different regimens for different types of people. Although two people may appear to have the same outward symptoms, their energetic constitutions may be very different and therefore call for very different remedies.

5. Finally, the ancient Ayurvedic physicians realized the need for preserving the alliance of the mind and body and offers mankind tools for remembering and nurturing the subtler aspects of our humanity. Ayurveda seeks to heal the fragmentation and disorder of the mind-body complex and restore wholeness and harmony to all people.

6. To balance the elements and the doshas of the body and the senses, there are many treatments, therapies, and exercises available. To balance the elements of the mind, meditations, mantra, and exercises are often used. Massage and rasayana treatments, along with visualization, pranic breathing, and other practices, allow personal access to intuition, and the innate knowledge of the soul.

7. Ayurveda believes five basic elements Pancamahabhutas (space,air,fire,water and earth) manifest in the human body as three basic humours known as tridosas (Vata,Pitta and Kapha). These three govern creation, maintenance and destruction of bodily tissues as well as the assimilation and elimination. Each person is born with a unique combination of these dosas which decides their basic constitution called Prakriti. Understanding of each person's Prakriti for deciding their personal diet and exercise pattern, supplements and medicinal herbs, cleansing and rebuilding therapies that is right for them are among the chief methods, Ayurveda employs for the maintenance and restoration of health.

BASIC SCIENCE- "Motivated by curiosity''

"Basic science" is really "fundamental science" - It is the science at the heart of human knowledge. History shows that basic science not only saves lives but it is a critical component of knowledge development. Basic medical science must also be defended from the attacks of animal rights activists. Physicists may want to understand how matter and forces interact and to describe the fundamental laws that govern their interactions. Biologists and medical scientists may want to understand how cells develop to form entire organisms, how they communicate and defend themselves.

Benefits of basic science- Four classes of benefits can be distinguished, which are dealt with below in turn:

1-Contributions to culture

2-The possibility of discoveries of enormous economic and practical importance

3-Spin-offs and stimulation of industry

4-Education

Introduction-

The basic life sciences comprise the fields of science that involve the scientific study of living organisms–such as microorganisms, plants, animals, and human beings – as well as related considerations like bioethics. While biology remains the centerpiece of the basic life sciences, technological advances in molecular biology and biotechnology have led to a burgeoning of specializations and interdisciplinary

fields. Some basic life sciences focus on a specific type of life, For example-zoology is the study of animals, while botany is the study of plants. Other life sciences focus on aspects common to all or many life forms, such as anatomy and genetics. Yet other fields are interested in technological advances involving living things, such as bioengineering. Another major, though more specific, branch of basic life sciences involves understanding the mind–neuroscience. The basic life sciences are helpful in improving the quality and standard of life. They have applications in health, agriculture, medicine, and the pharmaceutical and food science industries. The basic life sciences are like Agriculture, Anatomy, Biophysics, Biochemistry, Epidemiology, Biotechnology, Genetics, Microbiology, Pathology, neuroscience etc. There meaning and there importance in ayurveda describe below.

Name of the basic Sciences and its important role in Ayurveda-

Agriculture – Study of producing crops and raising livestock, with an emphasis on practical applications .It is crystal clear from critical analysis of Vedic period literature that the man at that time was highly civilized, well educated and had developed adaptation with the nature. Man had established social, economic and political systems and he was aware that all the Dravyas on the earth have medicinal values and they may give results for physical and mental well being if utilized after research as per classics. In Vedas 3 types of medicinal Dravyas are discussed viz Khanija, Vanaspatika, Pranija which are discussed in Charaka Samhita and Sushruta Samhita in terms of Jangala, Oudbidha, Partheeva. Since ancient times with growth in population, agricultural profession also got encouragement resulting in highly developed resources, contamination free soil with its classification, soil types, rain, season and importance of time etc. had given due importance from agriculture point of view. Man had successfully understood the importance of agriculture for production of grain and medicinal herbs. Thus in this sector number of researches were carried out in Vedic period resulting in co-operation between natural resources, various resources related to agricultural profession, different types of methods for cultivation, preservation of grains and medicinal herbs, methods to improve production etc. were researched scientifically."Ayurvedic sages wrote two thousand six hundred years ago that the food or medicinal plants grown in a polluted environment lose their rasa (taste or pharmaceutical properties) and gandha (flavour) and change their characteristic life and health promoting qualities. It is further added that when there is kala vikriti, meaning the seasons are not on time and the rainfall pattern is disturbed, then also the nutritional and medicinal qualities of various foods are destroyed."

"While people differ in dissimilar entities like constitution etc, there are other common factors that cause derangements and diseases that have similar period and symptoms and they can spread and destroy the community. These factors in communities are air, water, place and time."

1. Air, is out of balance if it is not in accordance with the season, excessively moist, speedy, harsh, cold, hot, rough blocking, terrible sounding, excessively clashing, whistling and affected with unsuitable smell, vapours, gravel dust and smoke…

2. Water should be known as devoid of merit when it is excessively deranged in respect to smell color, taste, and touch; is too slimy, deserted by aquatic birds, and aquatic animals are reduced.

3. Place should be considered as unwholesome when normal color, smell, taste and touch is too much affects…it contains excessive moisture, is

troubled by reptiles, violent animals, mosquitos, locusts, flies, rats owls, vultures, jackals, etc has fallen, dried and damaged crops, smoky winds, birds and dogs cry there, bewilderments and painful conditions of various animals and birds; a community with abandoned and destroyed virtues like truthfulness, modesty, conduct, behavior and other merits, rivers constantly agitated and over flooded, frequent occurrence of meteorites, thunder-bolts and earthquakes…the sun, the moon and the stars with rough, coppery, reddish white and cloudy appearance.

4. Time should be known as unwholesome if it is having signs contrary and excessive of deficient to those of the season.

(If) all these conditions prevail, the earth also does not provide properly the rasa – taste, virya – potency, vipaka – digestive effect, and prabhava – various pharmaceutical properties and their effects to herbs, consequently do to the absence of the requisite properties "

Ayurveda uses three constitutional types called doshas. They can be thought of as characteristics of the body, mind, sense complex that fall into three categories,Vata, Pitta, and Kapha. However, we can say that like our body, the earth, once disturbed, depending on the type of disturbance can display signs relative to an imbalance in the characteristics in these doshas. Each dosha has a balanced state, of which the body functions optimally and efficiently. The characteristics or gunas active to these doshas, when unbalanced, disturb the dosha. Each dosha has a predominant mix of one or two elements and a causative factor.

"Vata is predominantly space and air. It's causative factor is for movement in the body. Vata is them most powerful dosha. It is the only dry dosha and easily prone to denaturing disturbances.

Pitta is fire. It's causative factor is digestion and metabolism.

Kapha elements are earth and water. It's causative factors are the growth of body tissues."

Consider an example of an externally imposed vata imbalance in an forest, and in human lungs. If a once lush balanced ecology in a forest is logged heavily, removing water, and earth in the form of trees and canopy vegetation (formed by kapha), vata (air) becomes disturbed. In Ayurveda when kapha is decreased, vata will increase. Thus, when earthen boundaries are removed, (like the trees) and the earth anchors in the form of tree roots loosen their grip in the earth (in the case of clear cutting where only the stump is left), the soil becomes crumbly, disturbs easily by wind and dries out. The earth and more specifically, the soil that is left behind has characteristics similar to that of a vata imbalance in the human body; the skin is dry and rough and body weight erodes away. Pitta is furthermore disturbed. The soil ecology, its ability to sustain and regenerate life, deteriorates do to new extremes in water and sun (fire) that affects the photosynthesis of understory plants, liken to the metabolism (pitta) of a human body. When rainfall does occur, the water moves swiftly, creating soil erosion. Eroded sediment can pollute streams which in turn influences the survival of aquatic plants and fish. "Computer models have shown that clear cutting can modify the energy and hydrologic balance of areas resulting in local or regional climate change. Bodies have microclimates created when the organs are functioning properly. The lungs, for example are a microclimate in the body. In Ayurveda, the lungs, (like a forest) and the stomach are important sites of kapha dosha, the force in the body which is governed by the elements of water and earth. Similar to the forest, the lungs have alveolus, likened to the leaves of a tree where oxygen and carbon dioxide are exchanged. If these tiny moist permeable sacs are "dried" do to smoking, vata is imbalanced. This imbalance has ranging effects to imbalances in metabolism (pitta), excess vascular

constriction (vata), and decreased lung capacity (blood/oxygen exchange (kapha).A microclimate is sustained by the active members of an interdependent ecology, and the trees play a very important role. On a warm, windy day, up to 100 litres of water is removed from the soil by a tree and transported through the tree's xylem system and moved into the atmosphere. (Vata/ Kapha) The tree relies on an intricate system of large perennial roots and smaller short-lived feeder roots that uptake water and oxygen and mineral food (kapha) from the soil, and send it through the hydrolic system in the trunk, to the leaves for respiration through the "mouths" on a leaf called stomas. Once a forest has been clearcut, the atmospheric and ground moisture changes (kapha) and the shade is gone the temperature increases during the day and decreases at night (vata). Less carbon dioxide is trapped in the atmosphere around the clear cut. As a consequence the soil organisms that feed on decaying matter die or move into deeper earth and thus homeostasis has been disturbed (pitta). The building of humus (a kapha process), by which tree leaves, and an exact relationship or moisture and heat create verdant topsoil at once slows. All these changes represent a tri-doshic imbalance to the ecology. By agriculture technique we can also cultivate rare, endangered medicinal plants which are necessary for disease.

Biochemistry– Study of the chemical reactions required for life to exist and function, usually a focus on the cellular level. By the help of Biochemistry we can do BIOCHEMICAL ANALYSIS OF DOSHA DHATUMALA. Bio means life and chem means chyle (Juice) that is the reason why we cannot determine the solid or insoluble part of body substances in Biochemistry. Keeping these limitations in mind of Biochemistry one should design the biochemical test for var-ious body substances especially for dhatus. They should be based on various body fluids chemical analysis or extracts of solid substances for sthirdhatu, which plasma has developed. Number of methods such as electrophoresis,chromatography and ultra centrifugation by which proteins can be separated and identified. For vaikrit dosha,dushya and mala venous blood should be used.Therefore plasma and serum can be used for biochemical tests for all the dhatu other than Rakta.For Rakta dhatu whole blood must be used. Biochemistry also plays important role in Agnimandhaya, srotodusti during seasonal change specially in disease condition like in types of Pandu, Kamla, Kumbhakamla, Raktapitta, Prameha etc.

Bioengineering – Study of biology through the means of engineering with an emphasis on applied knowledge and especially related to biotechnology .

Biotechnology – Study of the manipulation of living matter, including genetic modification and synthetic biology .Biotechnology is a concept that became popular in 1970 with the development of molecular biology. Fermentation technique developed by the ancient technique developed by the ancient Ayurvedic physicians. Ayurvedic masters of ancient India, established a four pronged research program that is directly related to humans, plants, animals and microbes. Their ultimate objective was the sustainable utilization of biological resources for ensuring food and health. Ayurvedic scholars of ancient India had developed a separate branch of science which deals with plant biotechnology and is known as vrikshaayurveda, literally translated as Arboreal medicine. This arboreal medicine was introduced as a separate branch of Ayurveda. Major subject brought under Vrikshaayurveda contains eg: Identification and classification of soil, soil convertion, treatment with bio-medicines. Also, developed a number of new techniques related to aroma including technique, colour inducing technique, floral techniques, fruit preservation technique, taste altering technique of fruits.

Rasayana and shodhan chikitisa etc. also comes under biotechnology .

Biomedical research –Study of health and disease. In ayurvedic practice many traditional vaidyas are using their own formulating drugs although these are not mentioned in the classical text but they are very useful in curing disease. These drugs cure disease by their rasa, guna, virya, prabhava effects.

Biophysics – Study of biological processes through physics, by applying the theories and methods traditionally used in the physical sciences .Biophysics is a wellspring of innovation for our high-tech economy. The applications of biophysics depend on society's needs. In the 20th century, great progress was made in treating disease. Biophysics helped create powerful vaccines against infectious diseases. It described and controlled diseases of metabolism, such as diabetes. And biophysics provided both the tools and the understanding for treating the diseases of growth known as cancers. Today we are learning more about the biology of health and society is deeply concerned about the health of our planet. Biophysical methods are increasingly used to serve everyday needs, from forensic science to bioremediation. Biophysics provides that insight and technologies for meeting these challenges, based on the principles of physics and the mechanisms of biology. Biophysics discovers how to modify microorganisms for biofuel (replacing gasoline and diesel fuel) and bioelectricity (replacing petroleum products and coal for producing electricity).Biophysics discovers the biological cycles of heat, light, water, carbon, nitrogen, oxygen, heat, and organisms throughout.

Epidemiology–A major component of public health research, studying factors affecting the health of populations. It is the cornerstone of public health, and informs policy decisions and evidence-based practice by identifying risk factors for disease and targets for preventive healthcare. Major areas of epidemiological study include disease etiology transmission, outbreak investigation, disease surveillance and screening, biomonitoring, and comparisons of treatment effects such as in clinical trials. Epidemiologists rely on other scientific disciplines like biology to better understand disease processes, statistics to make efficient use of the data and draw appropriate conclusions, social sciences to understand proximate and distal causes better, and engineering for exposure assessment. In ancient India, Ayurveda considered disease to be a manifestation of imbalance in 3 bodily humors, called doshas. In Ayurveda epidemiological diseases can be co-related with the Samsargaja vyadhi which comes under Swasthavritta.

Genetics - Study of genes and heredity. Ayurveda is science of life from thousands of years. Ayurvedic acharya's has great knowledge about genetics. Hereditary and congenital types of diseases are classified by Sushruta. Ayurveda mentioned different diseases like sthaulya (obesity), klaibya (impotence), prameha (diabetes) etc. Which is due to defect in genetic component of a person. Prakriti (different types of personality) is also mentioned as concept of genetics. Present article through some glimpses on various concepts of genetics in Ayurveda. Prakriti is considered asqualitative and quantitative unchangeable doshika predominance from birth to death. Prakriti plays important role during prognosis and treatment of diseases.Dominant doshas during union of shukra and shonita determines prakriti of an individual. Hereditary diseases are diseases which are caused by abnormal sperm and ovum. Hereditary diseases are classified as maternal and paternal Ayurveda, India's natural health care tradition, has a unique way of classifying human population based on individual constitution or prakriti. Ayurveda's tridosha theory identifies principles of motion (vata), metabolism (pitta), and structure (kapha) as discrete phenotypic groupings.

"Tatra adibalapravritta ye Shukrashonita doshanvayah, Kustarshaprabrutayah, tch api dvividhah" Sushruta Samhita (sutra sthana. 24/4) Even in Charaka Samhita which is regarded as one of the oldest texts in Ayurveda, there is a references about genes. He called it Bijabhagavayava, meaning bija (meaning seed indicating) male sperm & female ovum bijabhaga indicating chromosomes. Bijabhagavayava indicating genes. If parents have certain diseases by the imbalance of vata pitta or kaphas then it is reflected in the bijabhagavayava, and hence can cause illness of the offspring. Hence ayurveda advises cleansing of the male & female body before planning to have a child and to take rejuvenation therapy to restore health which prevents the appearence of genetic disorders. Microbiology– Study of microscopic organisms (microorganisms) and their interactions with other living things.Vedic Bharat is concerned, the Germ theory of diseases was first established by Vedic Rishis and was recorded in Vedas. In fact, Vedas are first text in the world to record nexus between microbes and disease. Rigveda, Yajurveda, and Atharvaveda followed by Ayurvedas provide rich insight into microbial sciences that existed in Bharat many thousands of years ago.In Rigveda (1/191), Rish. Agastya pinpoints out that there are two types of poisonous creatures viz. those exceedingly poisonous and others are less poisonous. Of them, some are visible venomous, while others are invisible one. Some of them live in water, while others live on earth. Perhaps .ish. Agastya is the first person to state that invisible creatures are also toxin producers. He also prescribes antidotes as remedy for the poison. Atharvaveda reiterates that whenever there is accumulation of toxins within the body, disease results. In Vedas, prime etiological factors of diseases mentioned are- a) Endogenous toxins, its accumulations, and causation of a disease; b) 'Krimi' –'Drisya' (visible), 'Adrisya' (invisible); and c) Imbalance of tridosha. There are large number of suktas in the Vedas which provides information about microbiological knowledge in the ancient Vedic texts. Kankotan Sukta by Rishi Agastaya (Rigveda 1/191); Krimighnam Sukta (Atharvaveda 5/23), Kriminashnam Sukta (AV. 2/32), Krimijambhanam Sukta (AV. 2/31) all by Rishi Kanva; Rakshognam Sukta (AV. 5/29) by Rishi Chatan; Kriminashnam Sukta (AV. 4/37) by Rishi Badrayani and other suktas provides insight into the Microbial sciences in Vedas. Not only the Vedas, Ayurvedic texts like Charaka Samhita, Susruta Samhita, Ashtanga Hridaya and many others provides rich insight into Vedic Microbiology. In Charak Samhita many concepts related with Microbiology like KRIMI, JANPADODHWANSHA, Types of infectious JWARA etc. Molecular biology– It is the study of biology and biological functions at the molecular level, some cross over with biochemistry.In ayurvedic system of medicine, it is considered that a living system is made of panchmahabuta, in the form of Vata, pitta and kapha at the physical level and satwa, raja and tama at the mental level.This covers the psychosomatic constitution and commonly known as the Tridosh theory. The imbalance in these body humours is the basic cause of any type of disease manifestation. Till date, several objective parameters have been proposed to monitor the level of these basic humours but none of them is complete. In this exercise, now it is proposed to consider free radical theory of diseases as one of the objective parameters. To be more specific, vata can be monitored in terms of membrane bound signal transduction, pitta as the process of phosphorylation and dephosphorylation of different proteins (signalling moieties and enzymes) and kapha can be viewed as the degree of gene expression as protein synthesis. This can be correlated with the ojas of the body or total body defence mechanism. Neurobiology – study of the nervous system, including anatomy, physiology and

pathology. In Ayurveda all diseases cause by vata according to Sharangadhara. Vata is of five types. In Charak samhita a separate chapter of VATAVYADHI. Sushruta and other Acharya's also mentioned the importance of vatavyadhi. Nervous system related disease comes under Vatavyadhi. Pathology – study of diseases, and the causes, processes, nature, and development of disease. Under normal conditions, the doshas, dhatus and malas correspond to certain standards regarding their quantity, quality and function. However, this situation is not static, and due to several endogenous and erogenous factors, the doshas may become unbalanced, resulting in disease. Every disease is related to an imbalance of the doshas. Other coherent factors can be: the disturbance of the biological factors (agnis), the formation and accumulation of undigested nutrients (ama), obstruction of the body channels (shrotorodha), and a disturbed assimilation in the tissues.Ayurveda gives us a model to look at each individual as a unique makeup of the three doshas (Prakriti) and thereby design treatment protocols that specifically address a persons health challenges. When any of the doshas (Vata, Pitta or Kapha) become imbalance, Ayurveda will suggest specific lifestyle and nutritional guidelines to assist the individual in reducing or increasing the doshas that has become imbalance. If toxins in the body are abundant, then a cleansing process known as Pancha Karma is recommended to eliminate these unwanted toxins. Examples: Obesity: Mainly due to absence of physical activity. Other causes may be sleeping during the day, intake of Kapha - increasing foods, finally results in the accumulation of fat. These block the channels of nutrition. This blocking causes an increase in hunger because the body does not get nutrition. Rheumatism: Eating foods which are incompatible, lack of physical exercise in general, doing exercise particularly after eating fatty foods , incorrect use of purgatives, causes improper digestion. The half digested food called Ama associates itself with Vata and moves about. It fills the seats of kapha, and blocks the transport channels of the body. This blocking of channels produces weakness of the heart, which is the seat of the disease. This results in loss of strength, feeling of heaviness, stiffness of the body , and small and big joints alike. Indigestion/dyspepsia: Taking excess of water, taking small/large quantities of food at odd times, suppression of the natural functions of the body, loss of sleep at night and sleeping during the daytime, causes gastric fire (Jatharagni) responsible for the digestion and the absorption of nutritious substances weak. Skin problems: Are often due to imbalances in Pitta dosha & rakta dhatu. This is caused by excessive exposure to sunlight, taking foods which are pungent, hot and alkaline.

Pharmacology: The materia medica of the Ayurveda, composed of the five basic elements, has been categorized according to the derivatives of these elements. They include: taste (rasa), potency (virya), taste of the digestion product (vipaka), properties (guna), specific properties (prabhava) and action (karman).Taste (rasa) is six fold: sweet (madhura), sour (amla), salty (lavana), sharp (tikta), bitter (katu) and astringent (kasaya). Each taste is composed of two of the five elements. The condition of the food substances after digestion is also expressed in terms of taste (vipaka), however it can only be sweet, sour or sharp.The properties (guna), are grouped in 10 pairs, each one complementary to the other: heavy and light, cold and hot, fat and dry, slow and sharp, stable and labile, soft and hard, clear and slimy, smooth and raw, fine and massive and viscous and liquid.The potency (virya) of a drug is defined as its capability to express its property. Sometimes, potency is grouped in the same way as the property, but for practical reasons, it is usually expressed in terms of hot (ushna) and cold (shita).The specific property (prabhava) distinguishes two drugs that have the

same taste, taste after digestion and potency. This might be due to the composition of the drug or the location in the body where the drug acts.Finally the action (karman) of a drug on the body is expressed in terms of the three doshas. A drug can increase or decrease the vata dosha, the pitta dosha and the kapha dosha. The drugs used in Ayurveda are made by several processes from vegetable and mineral raw materials. Mostly plant alkaloids are the active ingredients. Obviously barring some chemical changes it is mostly natural deviates. We hope that you will continue to explore Ayurveda to enhance your health and to gain further insights into this miracle we call life.

Physiology – study of the functioning of living organisms and the organs and parts of living Organisms.'Human Physiology', or the study of functional aspects of human body, is designated by the term 'Sarira Vicaya' in Ayurvedic literature. The word 'Vicaya' means the special or detailed knowledge. Detailed knowledge of normal human body i.e., 'Sarira', is considered helpful in understanding the factors influencing the health. Though most of the basic concepts of human physiology explained in Ayurveda are strikingly similar to the concepts of modern physiology, some concepts like 'Atma', 'Manas' and 'Prakriti' are unique to Ayurveda. Understanding of Physiology in Ayurveda should start with the understanding of innumerable minute individual living units called 'Œarira Paramanus' or 'Anu Srotamsi'. These units are now known as cells. A group of such functionally and structurally similar units is called a 'Dhatu'. These 'Dhatus' are almost equivalent to the tissues. Seven such 'Dhatus' have been enumerated. Similarly, the individual systems in the body have been designated by the term 'Sthula Srotamsi' and thirteen such 'Srotamsi' have been described by Caraka. 'Annavaha Stotas', for example, stands equivalent to the digestive system and 'Rasavaha Srotas' to the cardio vascular system. Apart from these, the functioning of individual systems has also been described in a considerably detailed manner. Cardiovascular system as a closed circuit, role of liver in the functioning of hemopoietic system, functional significance of brain in the neural mechanisms, basics of digestion and metabolism and basics of immunity - are some such topics worth mentioning. Theory of 'Tridosa' is another important theory of physiology. This represents the various reciprocally functioning homeostatic mechanisms at various levels of organization. The state of equilibrium among these 'Dosas' is responsible for maintenance of health. Three 'Dosas' – i.e., 'Vata', 'Pitta' and 'Kapha' in general, represent neural, endocrine and immune mechanisms respectively and form the basis of neuro- immuno-endocrinology.

Toxicology study of the effects of chemicals on living organisms.Agada tantra or toxicology is a branch of Ashtang Ayurveda, which includes the science of poisons. The tradition of Agada Tantra practice is very ancient. It originated from the school of toxicology, which was founded and run by Kashyapa, also known as Vriddhakashyapa, the great saint and medical practioner. The students of the Kashyapa School of toxicology later became royal vaidyas (doctors) in various kingdoms and were meant to protect the members of the royal families from being poisoned. They were at times also used to administer poison to their king's enemies. Even now the traditional practice of toxicology is done by different families of Vishavaidyas (poison doctors) who claim to be specialists in toxicology in various parts of Indian subcontinent.It is evident that elimination of toxins and poisons from the system is a must for a healthy life. The natural efforts of the body to excrete toxins through routes of elimination such as urine, Faeces, sweat etc should be complimented by the use of right food at the right time. Any blockade or insufficiency of the excretory

apparatus and process builds up toxins in the body and gives rise to diseases.

Anatomy- Anatomical knowledge in ancient India was derived principally from animal sacrifice, Chance Observations of improperly buried human bodies, and examinations of patients made by doctors during treatment. The Vedic philosophies form the basis of the Ayurvedic tradition, which is considered to be one of the oldest known systems of medicine.Two sets of texts form the foundation of Ayurvedic medicine, the Susruta Samhita and the Charaka Samhita. The Susruta Samhita provided important surgical and anatomical information of the understanding of anatomy by Indians in the 6th century. Areas such as Greece, Mesopotamia, Egypt and China have shaped the study of medicine and human anatomy. As one of the oldest civilizations, India is rich in such history and tradition, which includes significant contributions to our understanding of human morphology.

CONCLUSION-

The remarkable developments in bio-medical and material sciences in recent decades provide great opportunities to understand Ayurvedic principles. As reflected in several recent studies, a variety of experimental model systems are available and are amenable for examining the molecular, cellular and physiological effects of the various therapies and formulations used in Ayurvedic practices (and other traditional medical systems). Future studies will require participation of

i) the actual practitioners,

ii) linguists with a good understanding of Sanskrit and other languages in which classical texts exist, and

iii) experimental scientists with expertise in fields like plant taxonomy and physiology, human physiology, cell and molecular biology, chemistry, material sciences etc.

Experimental studies to understand the cellular and molecular effects of various formulations/ processes need to be carried out in multiple model systems (normal as well as different human disease models) for sound validation.It is highly desirable that systematic experimental studies be undertaken to find out the significance of the prescribed variations in the Anupana to the main herbal and/or organo-metallic formulation. Effects of different Pancakarma practices need to be understood. Likewise, influences of seasonal and/or geographic variations on medicinal properties of different herbal preparations also need to be understood scientificaly. Application of tools of cell and molecular biology is essential to understand biology of Ayurveda. However, a significant difference in the conceptual approach of Ayurveda and molecular biology needs to be understood and appreciated. The common molecular biological approach is typically reductionist which aims to understand the action/ role of one molecule at a time.

Basic sciences “as the platform for knowledge-based development”. So the judicious conglomeration of Basic Sciences is absolutely necessary in the present century in order to authentically testify and prove the efficacy of Ayurveda, the age old life sciences of India. Such a move will definitely increase the universal acceptance of Ayurveda as a scientific medical science rather than spiritual. So we all should sincerely join hands together to achieve the goal.

परिषद् समाचार

वाराणसी में कौशल वर्धन एवं व्यक्तित्व विकास पर एक माह के प्रशिक्षण कार्यक्रम का आयोजन

दिनांक 2 जनवरी 2016 से 31 जनवरी 2016 तक विश्व आयुर्वेद परिषद् तथा सोवारिग्पा विभाग, केन्द्रीय तिब्बती अध्ययन विश्वविद्यालय के संयुक्त तत्वावधान में औषध निर्माण खण्ड के तकनीशियनों एवं कर्मचारियों के लिए कौशल वर्धन एवं व्यक्तित्व विकास पर एक मासिक प्रशिक्षण कार्यक्रम का आयोजन किया गया है। इस कार्यक्रम का मुख्य उद्देश्य कर्मचारियों के लिए औषध निर्माण से सम्बन्धित नवीन उन्नतियों, विभिन्न योजनाओं, चुनौतियों तथा नियमावलियों से अवगत कराना रहा जिसके माध्यम से इन कर्मचारियों का औषध निर्माण क्षेत्र के साथ–साथ व्यक्तिगत विकास भी हो सके। इस प्रशिक्षण कार्यक्रम के अन्तर्गत आयुर्वेद तथा सोवारिग्पा के विभिन्न विद्वानों के अतिथि व्याख्यानों द्वारा औषध निर्माण तथा इससे सम्बन्धित क्षेत्रों के विभिन्न आयामों और विषयों पर चर्चा कि गयी तथा कर्मचारियों का ज्ञानवर्धन किया गया। इन व्याख्यानों के अलावा आभ्यासिक एवं व्यावहारिक पक्ष के सुद्धढ़ता हेतु कर्मचारियों को विभिन्न भैषज्योद्यानों, औषध निर्माणशालाओं तथा औद्योगिक संस्थानों का भ्रमण तथा निरीक्षण करवाया गया। इन कर्मचारियों को विभिन्न संस्थानों के सदस्य तथा विशेषज्ञों से भी संवाद का अवसर उपलब्ध करवाया जा रहा है।

इस कार्यक्रम के आयोजन समिति के संरक्षक प्रो0 लोबसांग तेनजिंग, संकाय प्रमुख, सोवारिग्पा संकाय, केन्द्रीय तिब्बती अध्ययन विश्वविद्यालय, वाराणसी, आयोजन अध्यक्ष डॉ0 के. के. द्विवेदी, आयोजन उपाध्यक्ष डॉ0 डुमडुल डोरजी, डॉ0 ओ0पी0 सिंह, डॉ0 राजीव शुक्ला, आयोजन सचिव डॉ0 अंजना द्विवेदी, विभागाध्यक्ष रसशास्त्र एवं भैषज्यकल्पना, राजकीय आयुर्वेद महाविद्यालय, वाराणसी, आयोजन उपसचिव, डॉ0 रमेश गुप्ता, डॉ0 अजय पाण्डेय, डॉ0 विजय कुमार राय, डॉ0 मनीष मिश्रा तथा डॉ0 अरूण कुमार राय, आयोजन सहसचिव डॉ0 राघवेन्द्र पाण्डेय, डॉ पियूष त्रिपाठी, डॉ0 आशुतोष पाठक, डॉ विनम्र शर्मा, डॉ0 मुरलीधर पालीवाल एवं डॉ0 परवेज अहमद अंसारी रहें।

बिहार में दो दिवसीय राष्ट्रीय सम्भाषा एवं पुरस्कार वितरण समारोह का आयोजन

विश्व आयुर्वेद परिषद् के बिहार इकाई के द्वितीय वार्षिक सम्मेलन (दिनांक मार्गशीर्ष शुक्ल 9 एवं 10, 2062 तद्नुसार, 19 एवं 20 दिसम्बर 2015) के अवसर पर पाटलिपुत्र राष्ट्रीय सम्भाषा तथा पं0 दुर्गा प्रसाद शर्मा स्मृति अखिल भारतीय आयुर्वेद स्नातक स्तर छात्र निबन्ध प्रतियोगिता–2014 का पुरस्कार वितरण समारोह, महाराणा प्रताप भवन, पटना में आयोजित किया गया था।

संभाषा रसशास्त्र पर केन्द्रित थी। निम्नांकित चार महत्वपूर्ण बिन्दुओं– (1) आधुनिक मापदण्डों के अनुसार रसौषधि निर्माण प्रक्रिया (2) रसौषधि मात्रा से सम्बन्धित चिकित्सा तथा प्रायोगिक परीक्षण (3) पारद रक्षा–आयुर्वेद रक्षा (4) रसौषधियों का प्रयोग निरापद है, के वैज्ञानिक प्रस्तुतिकरण पर दो दिवसीय संभाषा आयुर्वेद के विद्वानों की उपस्थिति में सम्पन्न हुआ।

सर्वप्रथम दिनांक 19/12/2015 को धन्वन्तरि स्तवन एवं दीप प्रज्जवलित कर पद्यश्री डॉ0 ओमप्रकाश उपाध्याय, कुलपति, संत रविदास आयुर्वेद विश्वविद्यालय, होशियारपुर, पंजाब द्वारा कार्यक्रम का शुभारंभ किया

गया। उक्त अवसर पर विश्व आयुर्वेद परिषद् के राष्ट्रीय अध्यक्ष डॉ0 ब्रजेन्द्र मोहन गुप्त (भोपाल), प्रख्यात रसशास्त्रीय डॉ0 (प्रो0) सी0बी0 झा (वाराणसी), डॉ0 (प्रो0) रामेश्वर पाण्डेय (नागपुर), डॉ0 कमलेश कुमार द्विवेदी (वाराणसी), डॉ0 (प्रो0) बृजबिहारी उपाध्याय (प्रान्त अध्यक्ष बिहार), बिहार सहित देश के अन्य राज्यों के 150 आयुर्वेद विद्वान उपस्थित थे। कार्यक्रम प्रायोजक श्री प्रमोद शर्मा की भी गरिमामयी उपस्थिति थी। पद्मश्री डॉ0 उपाध्याय ने आयुर्वेद के शाश्वत मूल्यों पर प्रकाश डालते हुए यह सिद्ध किया कि आयुर्वेद निरापद चिकित्सा पद्धति है। केवल रोग ही नहीं रोग के अधिष्ठान मानव शरीर के दैहिक, दैविक तथा भौतिक ताप त्रय के शमन कर धर्मार्थ काममोक्षाणां की सिद्धि केवल आयुर्वेद से ही संभव है।

उक्त सत्र का विषय प्रवेश प्रान्त अध्यक्ष डॉ0 (प्रो0) बृजबिहारी उपाध्याय, संचालन डॉ0 विजय शंकर दूबे प्रान्त उपाध्यक्ष तथा धन्यवाद ज्ञापन कार्याध्यक्ष डॉ0 उमाशंकर चतुर्वेदी ने किया। उद्घाटन सत्र के पश्चात् चार वैज्ञानिक सत्रों में (प्रो0) सी0बी0 झा (वाराणसी), डॉ0 ब्रजेन्द्र मोहन गुप्त, (भोपाल), डॉ0 सिद्धिनन्दन मिश्र (वाराणसी) ने व्याख्यानों के माध्यम से जनहित में सिद्ध किया कि रसौषधियों का प्रयोग मानव शरीर के लिए निरापद है। आधुनिक चिकित्सा वैज्ञानियों के इस भ्रामक तथ्यों को भी विद्वानों ने निर्मूल किया कि रसौषधियों के प्रयोग से वृक्क कार्य बाधित हो जाता है। रसौषधि निर्माण प्रक्रिया में खासकर भस्म निर्माण की सूक्ष्मातिसूक्ष्म स्थिति का उल्लेख करते हुए इसे हानि रहित सिद्ध किया। इसके अतिरिक्त अमृततुल्य पारद की रक्षा से आयुर्वेद रक्षा सम्भव है। चूँकि इसके बिना देह सिद्ध तथा लौह सिद्धि संभव नहीं, यह भी प्रतिपादित किया गया।

उक्त सत्रों में अन्य वक्ता के रूप में डॉ0 रोहित रंजन, डॉ0 उपासना, डॉ0 पवन शर्मा, (उपाध्यक्ष, हिमानी फार्मास्यूटिकल्स), डॉ0 सुजीत कुमार चौबे, डॉ0 शालिनी जायसवाल, डॉ0 नागेन्द्र पाण्डेय तथा डॉ0 दीप्ती ने विद्वतापूर्ण शोध–प्रबन्ध प्रस्तुत किया। डॉ0 देवव्रत नारायण सिंह, डॉ0 देवानन्द प्रताप सिंह, डॉ0 श्याम सुन्दर गुप्ता, डॉ0 के0 के0 द्विवेदी (वाराणसी), डॉ0 विनोद पाठक (बेगूसराय), डॉ0 (श्रीमती) उमा सिन्हा, पूर्व निर्देशक देशी चिकित्सा, बिहार तथा डॉ0 शिव मंगल मिश्र (पूर्व उपनिदेशक, आयुष, बिहार) ने किया।

उक्त सत्रों का संचालन डॉ0 रोहित रंजन, डॉ0 सुजीत कुमार चौबे, डॉ नीतु सिंह तथा डॉ0 उपासना ने की। वहीं चारों सत्रों का धन्यवाद ज्ञापन क्रमशः डॉ0 विजय प्रकाश पाठक, डॉ0 बसन्त कुमार ठाकुर, डॉ0 उमेश चन्द्र सिन्हा तथा डॉ0 (श्रीमती) उषा मिश्र ने किया।

प्रान्तीय कार्यकारिणी की बैठक राष्ट्रीय संरक्षक डॉ0 (प्रो0) सत्येन्द्र प्रसाद मिश्र, कुलपति, उत्तराखण्ड आयुर्वेद विश्वविद्यालय, देहरादून तथा प्रो0 बी0 एम0 गुप्ता, राष्ट्रीय अध्यक्ष की उपस्थिति में सम्पन्न हुआ। उक्त बैठक में कार्य विस्तार, सदस्य संख्या वृद्धि, व्यक्तित्व विकास शिविर लगाने का निर्णय लिया गया।

प्रथम दिवस रात्रि में ही डॉ0 ओमप्रकाश नारायण, डॉ0 उमा पाण्डेय, डॉ0 सुधा मिश्र तथा डॉ नितु सिंह के नेतृत्व में आकर्षक सांस्कृतिक कार्यक्रम प्रस्तुत किया गया, जिसमें राजकीय आयुर्वेद कॉलेज पटना के छात्र–छात्राओं ने भी अपनी भूमिका निभाई।

दूसरे दिन अपराह्न 4 बजे पं0 दुर्गा प्रसाद शर्मा स्मृति अखिल भारतीय आयुर्वेद स्नातक स्तर निबन्ध प्रतियोगिता के सफल प्रतिभागियों को पुरस्कार प्रदान किया गया, जिनका विवरण निम्नांकित है–

प्रथम पुरस्कार एवं स्वर्ण पदक – सुश्री पुण्या ए0 गौतम, स्वर्ण पदक एवं राशि 5000, एस0डी0एम0 कालेज ऑफ आयुर्वेद हासन, कर्नाटक; द्वितीय पुरस्कार, रजत पदक एवं राशि 3000 – श्री पवन कुमार, राजकीय आयुर्वेद कॉलेज, पटना; तृतीय पुरस्कार कांस्य पदक एवं राशि 2000 – सुश्री हर्षिता के0 एस0, एस0डी0एम0 कालेज ऑफ आयुर्वेद हासन, कर्नाटक ने प्राप्त किया। इनके अतिरिक्त निम्नांकित पाँच

छात्र–छात्राओं– श्री चैतन्य एस0 बदानी, हासन, सुश्री आकांक्षा पाण्डेय एवं सुश्री प्रतिमा लोखण्डे, शासकीय स्वशासी धन्वन्तरि आयुर्वेद कॉलेज उज्जैन तथा सुश्री राम्याश्री नागेन्द्र, हासन को प्रोत्साहन पुरस्कार प्रदान किया गया।

पुरस्कार वितरण के अवसर पर राष्ट्रीय संरक्षक डॉ0 सत्येन्द्र प्रसाद मिश्र (कुलपति आयुर्वेद विश्व विद्यालय, उत्तराखण्ड) ने आयुर्वेद छात्रों में नये अनुसंधानात्मक अध्ययन एवं उपयोगी नवीन खोजों की ओर प्रवृत्त होने के लिए प्रोत्साहित किया। साथ ही यह भी कहा कि विश्व आयुर्वेद परिषद् आयुर्वेद के सम्पूर्ण विकास की ओर प्रवृत्त है। केवल इसी संगठन ने अपना प्रथम लक्ष्य छात्रों को बनाया है। चूँकि छात्र ही हमारे विकास पथ के सफल एवं योग्य साधक होंगे। विश्व आयुर्वेद परिषद्, बिहार के महासचिव डॉ0 शिवादित्य ठाकुर ने बिहार में संगठन के बढ़ते कदम का उल्लेख करते हुए इस कार्यक्रम की सफलता हेतु समर्पित कार्यकत्ताओं को 'देव दुर्लभ टोली' सम्बोधित करते हुए सराहना की।

इस अवसर पर बिहार इकाई ने एक स्मारिका का भी लोकार्पण किया। स्मारिका प्रकाशन के संपादक डॉ0 विजय प्रकाश पाठक एवं डॉ बसन्त कुमार ठाकुर की भूमिका अत्यन्त प्रशंसनीय रही। निम्नाकित के नवीन दायित्वों की घोषणा की गयी। 1. डॉ0 विजय प्रकाश पाठक (प्रांत प्रकाशन प्रमुख) 2. डॉ0 (श्रीमती) उमा पाण्डेय (प्रांत महिला प्रमुख) 3. डॉ0 (श्रीमती) गिन्नी जायसवाल (प्रांत पंचकर्म प्रमुख) तथा डॉ0 सचिदानन्द पटेल, पूर्वी चम्पारण, मोतीहारी (जिला अध्यक्ष)। पुरस्कार वितरण, सम्मान इत्यादि कार्यक्रमों को सफल बनाने में प्रांत कोषाध्यक्ष डॉ0 किरण शुक्ला, डॉ0 किरण वर्मा तथा डॉ0 मंजू की सक्रियता प्रशंसनीय रही।

कार्यक्रम के प्रायोजक श्री प्रमोद शर्मा, निदेशक, श्री बैद्यनाथ आयुर्वेद भवन पटना (जिनके पिता जी की स्मृति में निबन्ध प्रतियोगिता है) ने आयुर्वेद विकास के लिए अपनी प्रतिबद्धता व्यक्त करते हुए इस कार्यक्रम को नियमित रूप से चलाने का दृढ़ निश्चय भी प्रकट किया। कार्यक्रम की सफलता में पिपल फार्मास्यूटिकल्स, इमामी, हिमालय एवं गुफिक फार्मास्यूटिकल्स का सहयोग भी सराहनीय रहा।

बरेली में एक दिवसीय राष्ट्रीय संगोष्ठी का आयोजन

विश्व आयुर्वेद परिषद् बरेली के तत्वावधान में क्षारसूत्र एवं गुद रोग में इसकी उपादेयता पर एक दिवसीय संगोष्ठी का आयोजन दिनांक 13/12/2015 को किया गया। इस अवसर पर देश के विभिन्न विद्वानों ने व्याख्यान प्रस्तुत कर जन मानस का ज्ञान वर्धन किया। जिनमें प्रो0 एम0 साहू (वाराणसी), डॉ0 हेमन्त कुमार (जयपुर) डॉ0 शिवजी गुप्ता (वाराणसी), डॉ0 लालता प्रसाद (बरेली), डॉ0 अनिल यादव (आगरा) प्रमुख रहें।

इस कार्यक्रम के व्यवस्थापक डॉ0 एच0 एस0 राय, सचिव डॉ0 राजीव सक्सेना, आयोजन सचिव डॉ0 विशाल अग्रवाल तथा संयोजक श्रीकांत अग्रवाल रहें।

शोक समाचार

दिनांक 3 जनवरी 2016 को विश्व आयुर्वेद परिषद् के राष्ट्रीय अध्यक्ष डॉ0 बी. एम. गुप्ता जी के पिताजी श्रीराम किशोर जी गुप्ता, एडवोकेट का देहावसान हो गया। विश्व आयुर्वेद परिषद् परिवार दुख की इस घड़ी में शोकाकुल परिवार को संवेदना व्यक्त करते हुए दिवंगत आत्मा की शांति हेतु प्रार्थना करता है।

Instructions for Authors

The Journal of Vishwa Ayurveda Parishad (JVAP) is the official journal of Vishwa Ayurveda Parishad. The journal accepts original work in the field of Ayurveda and related topics. Now the journal is available online at www.vishwaayurveda.org.

Only original contributions in various areas of study related to Ayurveda such as literary, fundamental drug research, review articles, clinical research and book review etc. are accepted.

The manuscripts should be typed in MS Word format double space, character Kruti Dev 010 for Hindi & Times New Roman for English on one side of paper with pages numbered consecutively. Typing sheet should be of A4 size and have a margin of 2 cm (all side). The paper should be sent to the editor by speed post on the below address - Author can send one copy of paper by e-mail on vapjournal@rediffmail.com, dwivedikk@rediffmail.com. Each article should preferably be divided into following broad sections - (i) Abstract, (ii) Key words (maximum 5), (iii) Introduction, (iv) Methods and Materials, (v) Result, (vi) Discussion, (vii) Conclusion, (viii) Acknowledgement and References (including Electronic Sources, Web site etc).

The article should be of minimum 800 words and maximum 2000 words (for article) and 3000 words (for literary research).

The authors are advised to give their names, in the form in which they want them to appear in print just after the title. The authors must write their full name, designation, official address, permanent address with pin code, phone/mobile number and e-mail address in last of paper.

The medium of article is English, Sanskrit or Hindi. All pages (except the title page) should be numbered consecutively in Arabic numerals (such as 2, 3, 4,…….) at the centre top of each page. Received articles will be evaluated by three referees before publication.

The name of the authors mentioned in references or bibliography are to be put in following way surname then first and second name. It should be in an alphabetical order. Maximum two names will be accepted in one article as contributor. Illustrations, photographs, tables, maps, graphs, should be given only when they are necessary. They should be numbered in Arabic numerals. Tables must be typed on separate sheets. Graphs (MS-EXCEL format), Photographs (JPEG or GIF Format with high resolution) The contributors are requested to make use of Diacritical marks while preparing the manuscript of their research articles particularly in transliterating Sanskrit/Hindi words in English language.

Covering Letter: The covering letter should be addressed to "The Chief Editor- Journal of Vishwa Ayurveda Parishad" mentioning the details about the submission of paper viz. Title of the manuscript, names of author(s), address & E. mail add. of corresponding author and Signed by all contributors.

Undertaking by Authors & Copy right Transfer: These documents format will be supplied by editorial side to the corresponding author after the decision of acceptance of the paper. Information regarding the acceptance of the paper will be mailed to the corresponding author as soon as possible.

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Chief Editor

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Vishwa Ayurved Parishad
VAPNC-2016
(27-28 February, 2016)
Dayanand Ayurvedic College, Jalandhar (Punjab)

ABOUT US:

Vishwa Ayurved Parishad came into existence in 1997 at Varanasi by eminent scholars and social workers to re-establish the glory of Ayurveda in the present era and to facilitate the acceptance and recognition for Ayurveda as a complete health system adoptable in all countries across the Globe.

VAP is a collective platform of such co-workers, where all its members are eager to contribute their knowledge and activity for the betterment of ayurveda. Actually VAP is devoted for an enriched healthy nation and world.

Main objective of the VAP is to create appropriate platforms for growth of Ayurveda and develop co-ordination among different individuals and institutes who are working in the field of Ayurveda for the betterment of this unique health care system.

Main activities of VAP include:

- Standardization of the traditional knowledge of healing on scientific parameters.
- Publishing Journals and other related literature.
- Organizing Seminars and Workshops.
- Motivating Union and State Governments to Adopt favourable view for overall development of Ayurveda.
- Provides Platform to all stake holders of Ayurveda for Education & Research, professional skill development and policy making for the overall development of Ayurveda.

Keeping above tasks in view one more such step is in the form of National conference & seminar on "Recent Advances And Skill Development In Ayurveda" that is being organized by VAP on 27-28 Feb 2016 at Dayanand Ayurvedic College, Jalandhar (Punjab).

ABOUT DAYANAND AYURVEDIC COLLEGE JALANDAR

Dayanand Ayurvedic college, Jalandhar (Punjab) is established in 1898 at Lahore and governed and managed by DAV Colleges Managing Committee & Trust, Chitra Gupta Road, New Delhi, which is founded & registered under societies act at Lahore in June 1886.

After Partition in 1947 it was re-established at Amritsar, but on account of insufficient space their, it was shifted to Jalandhar in 1953, College has produced more than 8000 graduates so far who are serving the patients in urban and well as rural areas and occupying very high and respectable positions in India and Abroad.

Dayanand Ayurvedic College Jalandhar affiliated to Guru Ravi Das Ayurved University Punjab at Hoshiarpur.

ABOUT JALANDHAR

Jalandhar is oldest city in Punjab, and also one of the oldest in the country, Jalandhar has seen rapid urbanization and developed into a highly industrialised centre and known for its world famous sports industries. Jalandhar was the capital of Punjab from India's independence (1947) until Chandigarh was built in 1953. Situated on the Grand Trunk Road, it is a major rail and road junction, and is 144 km northwest of the state capital, Chandigarh. The city was known as Jullundur in British India.

TRANSPORT

By air: The nearest airport is Sri Guru Ram Dass Jee International Airport at Amritsar, about 75 km (47 mi) northwest of Jalandhar.

By rail: Jalandhar City and Jalandhar cantonment railway station is well connected to other parts of country through rail network. Jalandhar is very well connected to capital Delhi Jammu and Amritsar by daily trains like Shatabdi Express, Intercity Express and other mail/superfast express.

By road: Jalandhar is on the National highway No.1 (G.T. Road) connecting Calcutta to Amritsar through Delhi. AC bus services available from Delhi (360 kms about).

Places of Interest in Jalandhar include:

- Devi Talab Mandir
- Pushpa's Gujral Science City, Kapurthal (12 kms. about)
- Niku Park, Model Town
- Wonder Land

NEARBY PLACES TO VISIT:

Amritsar.

- Golden temple
- Jalianwala bagh
- Wagha border
- Durgiana Temple

PROGRAMME DETAILS

27th FEB. 2016 (only for Invited Delegates for National Conference)
Registration : 9 A.M

VENUE:
Devi Talab Mandir

28TH FEB 2016
(National Seminar on Recent Advances And Skill Development In Ayurveda)

Eligibility:
•Paper presentation: Ayurvedic Fraternity
•Poster presentation: Under graduate

Venue: DAVIET, Auditorium
Dayanand Ayurvedic College,
Mahatma Hans Raj Marg, G.T. Road,
Jalandhar (Punjab)

Registration	9.00 a.m
Inaugural session	(10.30 a.m-11.30 a.m)
Scientific session	(11.45 p.m - 1.30 p.m)
Expert view session	(3 p.m - 4.30 p.m)

Refreshment will be provided after inaugural and expert view session while lunch will be served after scientific session.

REGISTRATION FEE

Delegates may participate in the seminar by paying following delegation fee till 25th Jan. 2016

General Delegates :	Rs. 1000/-
PG/UG Scholars:	Rs. 500/-
3. Delegate Life Member:	Rs. 500/-

Mode of payment

- Bank draft in favour of VISHWA AYURVED PARISHAD, payable at Punjab national bank, new grain market, jalandhar city.
- Cash deposit in Bank account no. 0720000210002 6789 of Punjab national bank, new grain market, jalandhar city. IFSC CODE: PUNB0072000, MICR Code 144024101 8.

How to enroll: Send registration form duly filled with payment details by e-mail. Email id: vapnc2016@gmail.com

FOR FURTHER ENQUIRES AND DETAILS CONTACT: 9465466589, 8054224016

VAPNC-2016

(27-28 February 2016)
Dayanand Ayurvedic College, Jalandhar (Pb.)

REGISTRATION FORM

(Please complete and return this form along with the payment slip)

First Name

Middle Name | Sur Name

Date of Birth | Sex: Male ☐ Female ☐

Qualification | Designation

Designation in Organization

Member type: Patron ☐ Life ☐ Institutional member ☐ Student ☐

Nature of Participation: NC delegate ☐ Seminar delegate ☐
Paper Presenter ☐ Poster Presenter ☐

Institutional Address (Official):

Mobile ..... Tele. .....

Fax..... E-mail .....

Residential Address:

Mobile ..... Tele. .....

Fax..... E-mail .....

Accompanying Persons Details: .....

Accommodation Required: Yes ☐ No ☐
Single Room ☐ Double Room ☐ A/c ☐ Non A/c ☐

Bank Draft in favour of **"VISHWA AYURVED PARISHAD"** Payable at Punjab National Bank, New Grain Market, Jalandhar.
Cash Deposit in **Bank A/c No. 0720000210002 6789** Punjab National Bank, New Grain Market, Jalandhar. MICR Code- 144024101 8 IFSC-Code PUNB0072000

Particulars of Payment:

Bank

Draft No./TIN No.: | Date:

Date: .....

Signature