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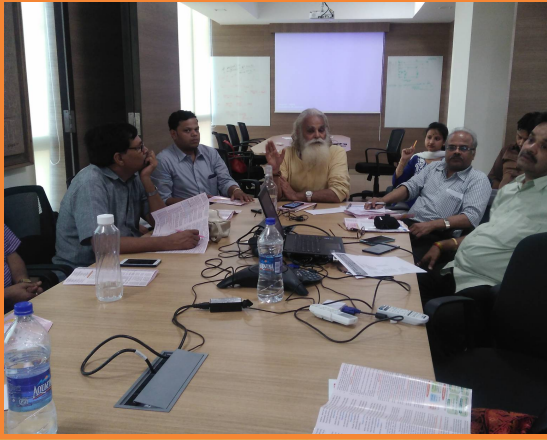


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A Non-Government Voluntary Organization Dedicated for Re-establishment of Ayurveda to it's Past Glory

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BHAI UDDHAVDAS MEHTA MEMORIAL

ALL INDIA AYURVEDA PG STUDENTS ESSAY COMPETITION-2017

Dear Students,

Vaidya Uddhavdas Mehta was born on 9th August, 1911 in Bhopal in a reputed family. After completing the Degree in Sanskrit and Ayurveda from Kashi, he started his clinical practice. Pandit Madan Mohan Malviya ji was his idol. He devoted his life for Hindi, Hindu and Hindustan. Although, he was engaged as an Ayurvedic practitioner and treating the poor community free of cost but given more priority to social services. His struggle against the terror and exploitation against the Nawabi regime of Bhopal State gave consolation to Hindu population. As a mark of respect he became popular by the name of Bhai ji.

He started his public life in 1926. Bhai ji gave memorandum to Nawab of Bhopal in 1930 on the behalf of Hindu conference. In 1934, he started one weekly Hindi magazine Praja Pukar. In 1937 Bhaiji was arrested for leading first freedom movement and imprisoned for 6 months. After release from Jail, he started helping for Hyderabad Satyagraha. He became Sanghchalak in Bhopal in 1940. Again, he was arrested in 1944 for addressing a rally. People became violent when he was arrested in 1949 while leading Vileenikaran movement.

Basically, he was a physician and a social worker but due to existing situation of Bhopal state he was compelled to lead the work of Hindu Mahasabha. Later he joined Jansangh by the request of Late Kusabhau Thakre & Late Pt. Deendayal Upadhyay. Although, he joined politics but he could not leave his active social services. He established Vishramghat trust, Balniketan Anathalaya, Mandir kamaati trust, Durgamandir of Peerghat and others. He attempted Hindu society, which was divided in several parts. He had established an excellent coordination between profession, social service and politics. He lead different issues such as drought in Bengal, China war in 1962, price hike in 1973, emergency in 1975 and other social issues. These were the qualities and reason of Bhai ji ruled over the heart of people. Even today, he is remembered with full respect and devotion for his excellent personality and contribution.

In auspicious memory of such an idol person, **VISHWA AYURVEDA PARISHAD & BHAI UDDHAVDAS MEHTA SMRITI NYAS** is jointly going to organize an essay competition 2017 among Postgraduate students of Ayurvedic colleges of India like previous years.

Conventional system of medicine is the medicine of today's world, which is developing very fast. While Ayurveda is already, a fully developed science of its own kind from time immemorial and has stood test of time. This is happen due to vast conceptual background and framework of Ayurveda. Ayurveda adopts its own function-oriented approach through well developed alternative theories of **Panchamahabhut, Tridosha, Dhatu, Agni, Ama, Ojas, Srotas, Sara, Prakriti etc.** which cannot be fully explained in terms of conventional anatomy and physiology. However, these theories can be justified by utilizing the different modalities of Basic sciences such as biphysics, biochemistry, biostatistics, information technologies, medical chemistry, zoology etc.

In recent year, Ayurveda has become popular across the globe. Lot of scientific work is being carried out on Ayurvedic concepts, drugs and therapies to evolve newer remedial measures to serve mankind in a better way but it could not impart any major breakthrough in the development of Ayurveda. However, if the Ayurvedic concepts are not properly understood and interpreted in terms of globally accepted language, the tremendous efforts in research would go meaningless and futile. The traditional believer believes that Ayurveda is eternally perfect science beyond time & space and there is no need to utilize basic sciences for its research and development. Another group believes that such types of misconception create big harm to this great science. Present status of utilization of basic sciences in the field of Ayurveda is not being satisfactory. Hence, it is strongly needed to utilize tools and techniques of basic sciences in the new millennium for re-establishing the concepts of Ayurveda in current perspectives in front of global community and to develop newer methodologies of teaching, research and drug development to strengthen the science of Ayurveda for newer generation.

This essay competition invites the young Ayurvedic PG Scholars to come out with their views about the judicious use of basic sciences for the development of concepts, drugs and newer researches in the field of Ayurveda. Entries are invited to submit an essay on topic **"Standardization of the Specific Word "Panchaavayava (Pratigya, Hetu, Udaharana, Upanaya, Nigamana) come in Ayurvedic Literature; In the Perspective of Research"**. Vishwa Ayurved Parishad is firmly determined to welcome and appreciate the views in form of essay in **"Bhai Uddhavdas Mehta Memorial All India Ayurveda PG Students Essay Competition-2017"**.



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उत्तराखण्ड में आयोजित आयुर्वेद कौशलम् कार्यक्रम के छायाचित्र



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

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- ♦ प्रो० योगेश चन्द्र मिश्र
(राष्ट्रीय संगठन सचिव)

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सम्पादक मण्डल के सभी सदस्य मानद एवं अवैतनिक हैं। पत्रिका के लेखों में व्यक्ति विचार लेखकों के हैं। सम्पादक एवं प्रकाशक का उससे सहमत होना आवश्यक नहीं है। आपके सुझावों का सदैव स्वागत है।

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अतिथि सम्पादकीय Ayurveda at Cross Road (Part II)

Syllabus and curriculum are the backbone of academic course. If we look into Ayurvedic course curriculum, Dr Raghunandan Sharma as President - CCIM made outstanding contribution by initiating process for framing and restructuring the syllabus for under graduate and post graduate courses of Ayurveda. Organization of syllabus Workshop in Bangalore at His Holiness Shri Shri Ravishankar ji's spiritual premises had been an unforgettable rather always memorable event. Dr Ved Prakash Tyagi during his Presidency had completed this task in meaningful & purposeful manner after detailed critical analysis and getting feedback & inputs from a team of subject experts. Dr Vanitha Muralikumar, President - CCIM has taken every care for time to time updates & modification where ever found necessary. With active support of then Union Health Minister Dr Gulam Nabi Azad, a trained allopathic doctor, the then Officiating President of CCIM Dr Rashidulla Khan had been instrumental to conduct few meetings for project of bridge course to resolve the issue of allowing allopathic practices to certain extent by ISM practitioners. Few Ayurveda friendly experts of modern medicine were identified to include in the committee to finalize the course content which was mainly dealing with the pharmacology of certain life saving and emergency medicines. Dr Manoj Nesari, Adviser Ayurveda, Govt. of India played an important role in developing course content. However nothing concrete came out and during gossips people used to talk that there is a lot of resistance from our counter parts lobby who don't want to see that allopathic practice is allowed to those who are not graduate of modern medicine, or in other words they considered that proposed bridge course will be a back door entry.



Some of think tanks of Ayurveda were quick to give their Chakrapani commentary on circulating draft of NCISM bill 2017 saying that Sec.16 (3) makes the provision to set up bridge courses to help to practice interpathy. But it is their own interpretation what they have circulated in social media. However the draft of NCISM bill in present form has no clear-cut provision to accommodate view of ISM practitioners to allow them use of allopathic medicine to certain extent in acute condition and emergency in larger public interest. This issue still remains debatable in light of health symbiosis. Sword (तलवार) for aggression and Shield (दाल) for defense both are necessary to win a fight. Hence both the systems of medicine are complementary & supplementary to each other in many clinical conditions.

Present draft of bill 2017 contain many good points. Admission through National Eligibility cum Entrance Test (NEET) to under graduate course is a praiseworthy step. Similarly for post graduate courses admission through merit secured in NLEISM and selection of college by student as per their rating will certainly help the students. It will minimize the chances of admission through 'Munnabhai Mode' as has recently been exposed in one of the Ayurveda University of the country where 31 so called fake admissions were exposed. Lot of facts appeared in social and printed media. Their admissions were cancelled. And after few months all of them are taken back to college subject to certain conditions. Both the decisions of university can't be justified to say correct. Only time will tell that either of the two which one was wrong. If this is happening in a Govt. institution then what to say about non Govt. institutions. Modi's Swachha Bharat Abhiyan is not limited to cleaning of garbage only. It included academic, administrative, financial cleaning as well. Ensuring scholars who have knowledge of the system are given licence to practice is a step in right direction. Periodic assessment of academic institutions in crystal clear manner, revamping of Education and constitution of Advisory Council through nomination instead of existing CCIM election will certainly remove prevailing corrupt practices based on money and muscle power which has polluted the total system. A Mushroom growth of AYUSH colleges without proper infrastructure, lacking of qualified regular full time faculty, corrupt practices prevailing in the system pertaining to opening of a new College or continuing the recognition of existing college right from NOC issued by University/state, CCIM inspection, finally the permission granted under political pressure to any institution having no credibility has greatly harmed the essence of this ancient hidden treasure of Ayurveda and compromised the future career of young scholars. Unless cancer of corruption is eradicated neither the existing CCIM supervision nor the Niti Ayog sponsored National Commission for Indian Systems of Medicine Bill 2017 will serve any purpose. Hence, the policy makers should be honest while framing the guidelines in the present draft of Bill 2017 to preserve the essence of Ancient Indian Wisdom and protect the genuine interests of ISM practitioners in the larger public interest in global health scenario to pave the way ultimately to evolve a national system of medicine to make the ailing society healthy and happy.

- Prof. Hari Mohan Chandola

Formerly Director-Principal, C.B.P.A.C.S., Govt. of Delhi



DOSHADI INVOLVEMENT MODULE IN PRAMEHA- A NOVEL CLINICAL STUDY

- Shweta Dewan*, *B. C Arya**, Amit Nakanekar***, Baldev Kumar****
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ABSTRACT:

The syndrome of diabetes mellitus is largely covered under the broad heading of Prameha. Ayurvedic System of Medicine clearly defines this disease and its line of treatment. The apt diagnosis in apt time saves the patient from going on to progressive stages of prameha. The diagnostic methods used for prameha patients in present research projects needs a newer outlook as the sole criteria for is raised plasma glucose level. Urine analysis which is the paramount important diagnostic technique as per Ayurveda classics is missing in most researches. There appears to be a need of standardised assessment module to diagnose prameha and then the type of prameha in any patient. This can be figured probably by the assessing the particular symptoms described in different types of prameha and different types of dushayas (vitiated elements) involved in the pathogenesis of the disease and relate which dosha is involved in the disease, this method can help the future researches in the similar field and the dushya involved can be assessed by the same Dhatu dushti lakshana. Also the tail bindu mutra pariksha can be helpful in determining the dosha involved, thus making it easy to predict the prognosis of the disease. Thus there should be some assessment tools to validate

the affliction of particular dosha in prameha. The present study deals with the similar endeavour.

One of the objectives of the study was to prepare an assessment manual to find out the gravity of involvement of Dosha, dushya in each type of prameha to predict its sadhyata/asadhyata (prognosis) effectively. Out of the meta analysis from all the research work done on prameha in National Institute of Ayurveda, there arises an utmost need to make an assessment module for the different type of prameha described in classics according to the Dosha predominance. There are two benefits: The first one is that prameha patient can be differentiated according to Dosha involvement and thus prognosis can be made accordingly. The second one is that customized approach of management can be done in each prameha patient and the results of treatment can be enhanced manifold times. Following is the noble endeavour to achieve this objective of the study.

Materials and Methods

The symptoms of all the three Doshas vata, pitta, kapha were compiled from bhartrayi. The Dhatu dushti and srotodushti symptoms were compiled from charaka samhita from desired chapters. The duplicate symptoms were removed and final list was prepared. Out of the list there

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were 29 vata vriddhi symptoms, 9 vata kshaya symptoms, 14 pitta vriddhi symptoms, 11 pitta kshaya symptoms, 16 kapha vriddhi and kshaya symptoms each, 17 rasa Dhatu dushti symptoms, 21 rakta Dhatu dushti symptoms, 10 mansaa Dhatu dushti symptoms, 8 meda Dhatu dusti symptoms, 9 asthi Dhatu dusti symptoms, 6 majja Dhatu dusti symptoms, 8 shukra Dhatu dushti symptoms, 6 pranavaha srotodusti symptoms, 4 annavaha srotodusti symptoms, 6 udakavaha srotodusti symptoms, 17 rasavaha srotodusti symptoms, 21 raktavaha srotodusti symptoms, 10 mansaavaha srotodusti symptoms, 8

medavaha srotodusti symptoms, 9 asthivaha srotodusti symptoms, 6 majjavaha srotodusti symptoms, 8 shukravaha srotodusti symptoms, 7 mutravaha srotodusti symptoms, 8 purishvaha srotodusti symptoms, 6 svedavaha srotodusti symptoms. (chart attached)

All the premonitory symptoms, and complications of prameha were compiled and listed out of bhartrayi. Each symptom was checked for Dosha, Dhatu and Srotas involvement according to description in the classics. A tentative formula was made for each symptom denoting numerical and alphabets.

Table No- 1 : Symbols Designated to each Dosha, Dhatu and Srotas

V	Vata	5	Asthi Dhatu	E	Raktavaha Srotas	L	Purishvaha Srotas
P	Pitta	6	Majja Dhatu	F	Mansaavaha Srotas	M	Svedavaha Srotas
K	Kapha	7	Shukra Dhatu	G	Medavaha Srotas	Superscript	Vriddhi w.sr Dosha
1	Rasa Dhatu	A	Pranavaha Srotas	H	Asthivaha Srotas	Subscript	Kshaya w.s.r Dosha
2	Rakta Dhatu	B	Annavaha Srotas	I	Majjavaha Srotas	Superscript	Frequency w.s.r Dhatu and Srotas
3	Mansaa Dhatu	C	Udakavaha Srotas	J	Shuktavaha Srotas		
4	Meda Dhatu	D	Rasavaha Srotas	K	Mutravaha Srotas		



To better understand the formula an example has been assumed: A subject tested and checked with the symptoms of prameha, after the calculation the formula comes out to be like V3P2K31344D5G4. This means that 3 vriddhi symptoms were present out of 29 symptoms and hence score 3 is given. 1 point for presence of each symptom and 0 for absence of each symptom. Pitta kshaya is 2 symptoms out of 11 symptoms, Kapha vriddhi is 3 symptoms out of 16 symptoms, Rasa Dhatu dushti is 3 out of 17 symptoms, meda Dhatu dushti is 4 out of 8 symptoms, Rasavaha and medavaha Srotas are involved 4 and 5 times respectively. To obtain the total score for each patient, every Dosha, Dhatu and Srotas dusti symptoms were added and calculated out of 290. In this example, the total score for this subject is (3+2+3+3+4+5+4).

To further test the assumed formula and its significance in nonprameha and prameha patients, 100 subjects were chosen for the present study. The diagnostic criteria for Prameha were the same as followed in maximum studies done in National Institute of Ayurveda. Specific diagnostic criteria according to classics like mutra pariksha etc. were not applied. The research questions behind this revelation were:

1. Whether diagnosed Diabetes Mellitus Type 2 patients have any relation or association with Prameha disease described in Ayurveda?
2. Should we understand both the words in terms of each other?
3. Whether the modern diagnostic criteria for prameha patients, which are adopted by many research studies at NIA is precise enough?

4. Whether the classical methods like mutra pariksha should be made mandatory in every research design on the disease for future studies?

Inclusion Criteria:

- ♦ Patients of either sex between 20 to 60 yrs of age.
- ♦ Patients with newly diagnosed diabetes mellitus type 2 up to 1 year.
- ♦ Fasting blood sugar less than 100 mg/dL for nonprameha subjects and more than 126 mg/dL for prameha subjects on two separate occasions.
- ♦ Postprandial blood sugar level less than 140mg/dL for nonprameha subjects and more than 200mg/dL for prameha subjects.

Exclusion criteria:

- ♦ Hypersensitivity, Patients receiving MAOIs, anorexia nervosa, History of Coronary artery disease, CHF, arrhythmias, stroke, cardiac disorders, pregnancy, DM type 2, older than 5yrs, Other types of Diabetes except type 2.

Using a stratified sampling method a survey was conducted among 100 subjects as non prameha and prameha (50 each) according to the inclusion criteria and allocated in two Groups as A and B in this study to test the level of Dosha, Dhatu, Srotas dushti by application of the formula. Whether the above three are related with changes in Fasting and Post Prandial blood sugar level, whether there is a difference in the level of Dosha, Dhatu and Srotas dusti in prameha and nonprameha subjects?

Study Design

Type: Survey

Groups: 2 (A and B)



Sample size: 100

Group A (Non Prameha, NP) subjects: 50 in number

Group B (Prameha, P) subjects: 50 in number

Statistical analysis:

Group comparisons were done by using Graph Pad software version 2.2 and Mann

Whitney non parametric comparison test was done to analyse the results. Spearman non parametric correlation coefficient test was used to study the correlation of diabetic variables (FBS, PPBS) with Ayurvedic total score obtained.

Table No- 2 Comparative Results Of Dosha, Dhatu, Srotas In Nonprameha And Prameha Subjects

S. No.	Parameters	Test (Non parametric)	P value	S. E	Remarks
1.	<i>Vata vriddhi</i>	Mann Whitney Test	>0.9999	Group A 0.1732	N.S
				Group B 0.2250	
2.	<i>Vata Kshaya</i>	Mann Whitney Test	0.8867	Group A 0.1790	N.S
				Group B 0.1370	
3.	<i>Pitta Vriddhi</i>	Mann Whitney Test	0.5792	Group A 0.1977	N.S
				Group B 0.2052	
4.	<i>Pitta Kshaya</i>	Mann Whitney Test	0.2968	Group A 0.1696	N.S
				Group B 0.1400	
5.	<i>Kapha Vriddhi</i>	Mann Whitney Test	0.1812	Group A 0.2180	N.S
				Group B 0.2020	
6.	<i>Kapha Kshaya</i>	Mann Whitney Test	0.8565	Group A 0.1057	N.S
				Group B 0.08359	
7.	<i>Rasa Dhatu</i>	Mann Whitney Test	0.0419	Group A 0.2665	S
				Group B 0.2590	



8.	<i>Rakta Dhatu</i>	Mann Whitney Test	0.0374	Group A 0.2040	S
				Group B 0.1767	
9.	<i>Mansaa Dhatu</i>	Mann Whitney Test	0.0849	Group A 2747.0	N.S
				Group B 2303.0	
10.	<i>Meda Dhatu</i>	Mann Whitney Test	0.0849	Group A 0.2345	N.S
				Group B 0.2623	
11.	<i>Asthi Dhatu</i>	Mann Whitney Test	0.82890	Group A 0.08207	N.S
				Group B 0.08101	
12.	<i>Majja Dhatu</i>	Mann Whitney Test	0.3002	Group A 0.04642	N.S
				Group B 0.03393	
13.	<i>Shukra Dhatu</i>	Mann Whitney Test		Non Applicable	N.S
14.	<i>Pranavaha Srotas</i>	Mann Whitney Test		Group A	N.S
				Group B	
15.	<i>Annvaha Srotas</i>	Mann Whitney Test		Group A	N.S
				Group B	
16.	<i>Udakavaha Srotas</i>	Mann Whitney Test		Group A	N.S
				Group B	
17.	<i>Rasavaha Srotas</i>	Mann Whitney Test	0.0419	Group A 0.2665	S
				Group B 0.2590	
18.	<i>Raktavaha Srotas</i>	Mann Whitney Test	0.0374	Group A 0.2040	S
				Group B 0.1767	
19.	<i>Mansaavaha Srotas</i>	Mann Whitney Test	0.0849	Group A 2747.0	N.S
				Group B 2303.0	



20.	<i>Medavaha Srotas</i>	Mann Whitney Test	0.0849	Group A 0.2345	N.S
				Group B 0.2623	
21.	<i>Asthivaha Srotas</i>	Mann Whitney Test	0.82890	Group A 0.08207	N.S
				Group B 0.08101	
22.	<i>Majjavaha Srotas</i>	Mann Whitney Test	0.3002	Group A 0.04642	N.S
				Group B 0.03393	
23.	<i>Shukravaha Srotas</i>	Mann Whitney Test		Non Applicable	
24.	<i>Mutravaha Srotas</i>	Mann Whitney Test	<0.0001	Group A 0.09232	E.S
				Group B 0.1632	
25.	<i>Purishvaha Srotas</i>	Mann Whitney Test	0.1869	Group A 0.03393	N.S
				Group B 0.04957	
26.	<i>Svedavaha Srotas</i>	Mann Whitney Test	0.6565	Group A 0.1036	N.S
				Group B 0.1078	

Table No- 3 Relation of Total score with Fasting Blood Sugar

Spearman Rank Co relation	Calculation
Number of points	100
Spearman r (corrected for ties)	0.4280
95% confidence interval	0.2473 to 0.5800
P value	<0.0001
Remarks	Extremely significant

The above table shows there is a strong association between total score of *nonprameha* and *prameha* subjects with postprandial blood sugar. The spearman coefficient r is 0.3356. The 95% confidence interval are between 0.1432 to 0.5035. The p value is <0.0006, which is extremely significant. This is suggestive of changes in *Dosha*, *Dhatu*, *Srotas* in the body of the subjects are related to postprandial blood sugar level changes.



Table No- 4 Relation of Total score with Post Prandial Blood Sugar

Spearman Rank Co relation	Calculation
Number of points	100
Spearman r (corrected for ties)	0.3356
95% confidence interval	0.1432 to 0.5035
P value	0.0006
Remarks	Extremely significant

The above table shows there is a strong association between total score of nonprameha and prameha subjects with postprandial blood sugar. The spearman coefficient r is 0.3356. The 95% confidence interval are between 0.1432 to 0.5035. The p value is <0.0006, which is extremely significant. This is suggestive of changes in Dosha, Dhatu, Srotas in the body of the subjects are related to postprandial blood sugar level changes.

Table No- 5 Relation of Total score with Glycosylated Haemoglobin

Spearman Rank Co relation	Calculation
Number of points	100
Spearman r (corrected for ties)	0.4175
95% confidence interval	0.2353 to 0.5714
P value	<0.0001
Remarks	Extremely significant

The above table shows there is a strong association between total score of nonprameha and prameha subjects with Glycosylated Haemoglobin blood sugar. The spearman coefficient r is 0.4175. The 95% confidence interval are between 0.2353 to 0.5714. The p value is <0.0001, which is extremely significant. This is suggestive of changes in Dosha, Dhatu, Srotas in the body of the subjects are related to Glycosylated Haemoglobin blood sugar level changes.

Table No 6 Relation of Total score with Dosha, Dhatu and Srotas

S. No.	Parameters	Spearman r (corrected for ties)	Number of points	95% confidence interval	P value	Remarks
1.	<i>Vata vriddhi</i>	0.2696	100	0.07137 to 0.4473	0.0067	S
2.	<i>Vata Kshaya</i>	-0.06375	100	-0.2625 to 0.1402	0.5286	N.S
3.	<i>Pitta Vriddhi</i>	0.5027	100	0.3345 to 0.6398	<0.0001	E.S



4.	<i>Pitta Kshaya</i>	0.2814	100	0.08405 0.4575	to	0.0046	V.S	
5.	<i>Kapha Vriddhi</i>	0.1057	100	0.9851 0.3014	to	0.02952	S	
6.	<i>Kapha Kshaya</i>	0.06172	100	-0.1422 0.2606	to	0.5418	N.S	
7.	<i>Rasa Dhatu</i>	0.6947	100	0.5730 0.7864	to	<0.0001	E.S	
8.	<i>Rakta Dhatu</i>	0.5446	100	0.3849 0.6727	to	<0.0001	E.S	
9.	<i>Mansaa Dhatu</i>	0.3962	100	0.2109 0.5539	to	<0.0001	E.S	
10.	<i>Meda Dhatu</i>	0.5926	100	0.4436 0.7097	to	<0.0001	E.S	
11.	<i>Asthi Dhatu</i>	-0.2085	100	-0.3941 0.006710	to -	0.02	S	
12.	<i>Majja Dhatu</i>	-0.3139	100	-0.4853 0.1194	to -	<0.0001	E.S	
13.	<i>Shukra Dhatu</i>	Test not applicable due to invalid floating point operation					100	
14.	<i>Pranavaha Srotas</i>	-0.1850	100	-0.3732 0.01777	to	0.0654	N.S	
15.	<i>Annvaha Srotas</i>	0.1259	100	-0.07816 0.3199	to	0.2118	N.S	
16.	<i>Udakavaha Srotas</i>	0.3817	100	0.1946 0.5420	to	<0.0001	E.S	
17.	<i>Rasavaha Srotas</i>	0.6947	100	0.5730 0.7864	to	<0.0001	E.S	
18.	<i>Raktavaha Srotas</i>	0.5446	100	0.3849 0.6727	to	<0.0001	E.S	
19.	<i>Mansaavaha Srotas</i>	0.3962	100	0.2109 0.5539	to	<0.0001	E.S	
20.	<i>Medavaha Srotas</i>	0.5926	100	0.4436 0.7097	to	<0.0001	E.S	
21.	<i>Asthivaha Srotas</i>	-0.2085	100	-0.3941 0.006710	to -	0.02	S	



22.	Majjavaha Srotas	-0.3139	100	-0.4853 to -0.1194	<0.0001	E.S
23.	<i>Shukravaha Srotas</i>	Test not applicable due to invalid floating point operation				
24.	Mutravaha Srotas	0.2410	100	0.04086 to 0.4225	0.0157	S
25.	Purishvaha Srotas	0.2787	100	0.08111 to 0.4551	0.0050	V.S
26.	<i>Svedavaha Srotas</i>	0.1084	100	-0.09583 to 0.3038	0.2831	N.S

* Significant: S $p < 0.01$; Very significant: V.S $p < 0.001$; Extremely significant: E.S $p < 0.0001$

The above table shows the spearman correlation between Dosha, Dhatu, Srotas changes with the total score. Vata Vriddhi, Kapha Vriddhi, Change of Dosha in Asthi Dhatu and Srotas and mutravaha Srotas are significant. The changes in vata kshaya, kapha kshaya, Pranavaha Srotas, Svedavaha Srotas are not significant. The rest of the parameters are extremely significant. Spearman's correlation determines the strength and direction of the monotonic relationship between total score of the subjects with each parameter assessed. (Dosha, Dhatu, Srotas)

With reference to Table no- 2, it can be inferred that there is statistical difference in the changes of rasa, rakta and mutra between the nonprameha and prameha patients. All the three play a very important role in the pathogenesis of prameha as described in classics. Prameha is a disease produced by disturbed metabolism in the body that is according to Ayurveda principles the breakdown of food ingested and the proper nourishment of body tissues or Dhatu is disturbed. Also the primary dosha involved in the pathogenesis that is kapha is vitiated especially the drava or liquidity attribute of the dosha is involved. Also these doshas are provided

nourishment from the kitta part or the refuse part of the food ingested. The food after digestion takes two forms the prasada part or the essence and the kitta part or the refuse part. Out of these two the former provides nourishment to the rasa, rakta and the preceding dhatus and the latter provides nourishment to sweat, urine, stool, doshas, excreta of ear, eye, nose, mouth, hair follicles as well as the genital organs, hair of the head, beard, small hair of the body and nails. By virtue of the nourishment, the waste products and dhatus maintain their quality according to the size and age of the body. When the prasada bhag or the essence part of food and mala bhag or the refuse part of the food after digestion remains in their quantity they maintain the normalcy of dhatus. In prameha there is disturbance in the aahar paaka vidhi or this physiological process of digestion of food. Due to kaphaja hetu (causes) there is disturbed transformation and distribution of prasada bhag and kitta bhag of food ingested as it is kaphaja in nature. Due to samanaya principle, it increases the kapha dosha in the body, sweta, sheeta, murta, picchila, acha, snigdha, guru, madhura, sandra, prasada, manda gunas are vitiated. Due to increased kapha dosha one



can infer that the mala bhag of the food ingested after digestion; is produced in more amount than prasada bhaga. Thus a vicious circle is formed between aaharaja and viharaja kaphaja nidana taken and the disturbed digestion of the food. This is one cycle that causes the bahu drava sleshma dosha vishesha in the body. The second cycle is more complex and bigger which travels through all the dhatus and takes away the AMP (asthayi, margaka, poshaka) part of the every preceding dhatu. The prasada bhag of the food is activated by dhatvagni like rasagni in case of rasa dhatu and forms two parts. One nourishes the rasa dhatu itself and the updhatu of rasa. It is also called the sthayi part or sthanastha dhatu or poshaya rasa dhatu. The second part is par dhatu poshak part or asthayi rasa sandharmi rakta dhatu part or margaka part as it travels in the channels to support rakta dhatu or poshaka dhatu as it nourishes the rakta dhatu. This is the main culprit behind bahu dravata in the body. In prameha disease this AMP or second part from every dhatu travels through each Dhatu and takes away the asthayi dhatu poshaka ans from every dhatu via understanding the principle of kedari kulya nyaya and ends up accommodating in basti along with urine causing prameha. In the initial stages of prameha there is sanga (blockage) of mutravaha srotas due to excess of kleda, as the disease progress this AMP part from each dhatu flushes the kleda out of the channels and the body and comes into basti. From there is excess of urination suggestive of atipraviti of mutravaha srotas. Looking into the dushyas involved in prameha, the Anjali pramana of every dushya can be counted. The ten dushyas are meda, mansaa, sharira kleda, vasa, majja, lasika, rasa and ojas. Udaka or the aqueous element in

the body is found to have association with urine, blood and other dhatus. It is spread all over the body with its site in the external skin. Inside the skin, it is known as lasika (lymph) which exudes through ulcers, when the becomes hot, it comes out from hair follicles in the form of sweat. Lasika, sweda describe only the different aspects of the same udakadhatu. Udaka is 10 anjali, Rasa is 9 anjali, Rakta is 8 anjali, kapha is 6 anjali, vasa is 3 anjali, medas is 2 anjali, majja is 1 anjali, Shukra is ½ Anjali, oja ½ Anjali. Total 40 anjali of jala predominant dushyas along with kleda are increased in quantity in prameha. The malas including urine 4 anjali, purisha is 7 anjali. Also the factors in the body which are liquid mobile, slow, unctuous, soft and slimy like rasa, rakta, vasa, kapha, pitta, urine and sweat are dominated by jala mahabhuta. From the above description in the light of prameha one can predict the amount of jala mahabhuta increased in quantity in form of bahu dravata. The AMP part of aahar rasa in every Dhatu along with jala mahabhuta dominant factors are responsible for another vicious cycle which takes place in pathogenesis of prameha. Thus significant changes in rasa dhatu, rakta dhatu can be explained by the above explanation. Also rasa Dhatu is responsible for corpulence and leanness of the body. When one constantly takes diet increasing kapha, indulges in eating when the previous meal is undigested, avoids physical exercise and sleeps in the day the ahara rasa being undigested, produces fat which in turn causes obesity. Rasavaha srotas gets vitiated due to excessive intake of heavy, cold and excessively unctuous food and over worry. The same are the etiological factors for the cause of prameha and also of modern Diabetes. The raktavaha srotas are vitiated due to intake of food



and drinks which are irritant, unctuous, hot and liquid and exposure to sun and fire. Now a days people accustomed to eat such types of food articles in form of junk, canned, cold, irritant foods along with drastic changes in temperature surroundings from air conditioners to sunny conditions outside. The significant changes can attribute towards development of Diabetes. Mutra is of paramount importance when it comes with reference to prameha. At a closer look all, the symptoms of different types of prameha are enlisted in form of any changes in the urine of the patient, whether in form of color, consistency, smell, touch, etc. The vitiated doshas, dushya involved intricately in the pathogenesis of prameha marked themselves in the form of alterations in the urine. The seers have opined the same principle with context to gulma where it is clearly indicated that in vataja gulma urine becomes parusa in sparsh and Krishna, arun in colour. In kaphaja gulma the colour of the urine becomes white and in pittaja gulma the colour of the urine becomes harita and haridra. That is why urine is very important factor to diagnose a prameha patient as per Ayurveda texts. Doshas converts and excreted into mutra in prameha. The significant changes in mutravaha srotas can be resultant of the changes in the dosha awstha of the patients. The ambiguity of the doshas indifference is itself questioning as per the statistical tests but clinical differences were observed in the subjects of both the groups. The kapha and meda are also very important in context to prameha but the indifference in both the groups with respect to blood sugar cant be explained. The reason may be small sample size, Jangal desh pradhanya of current study site. This can also be removed by doing multicentre studies involving all three i.e. Jangal, Anup and sadharan desh.

There may be another reason that blood sugar remains in the Ras-Rakta as per Ayurveda and hence conversion or interplay of such mechanisms could not be understandable based on blood sugar or HbA1C alone. This also suggests that there might be some other parameters also which are linked with kapha and meda. It is our need to find them in future.

The spearman association tests (Table No-2) depicts that there is strong correlation between the dosha dhatu srotas dushti changes in context with pitta vriddhi, kapha vriddhi, rasa, rakta, mansaa, meda, asthi, majja dhatu and their respective srotas along with udakavaha, mutravaha, purishvaha srotas. Rasa, rakta, Pitta and kapha all are predominant of jala mahabhuta and can be presumed to cause the changes in the values in both the groups. The indifferent changes in the two groups with regards to asthi, majja, shukra etc when it comes to statistical difference can point out to the fact the changes are miniscule enough and not large to be detected by the Mann Whitney comparison tests.

Let us ponder over the research questions we dealt with in the beginning of this chapter. The first question was whether diagnosed Diabetes Mellitus Type 2 patients have any relation or association with Prameha disease described in Ayurveda. The answer to this question is yes, as per the data collected from this study, there is statistical significance between rasa dhatu, rakta dhatu and mutravaha srotas (Table No. 2). All have an important role to play in pathogenesis of prameha discussed in above paragraphs. More over from (Table No. 3, 4, 5) the total Doshadi score of the subjects have statistically significance with the parametric data



that i.e the diagnostic tests done in contemporary science for the diagnosis of Diabetes Type2. This shows that there is non parametric correlation between prameha (in ayurveda) with DM type 2.

The second question was should we understand both the words in terms of each other? The answer to this question can be partially yes. Both are relative to each other but cannot be used in place of each other. This is a very important key point to comprehend from the above study. With reference to the patient no. 83, the total score is 62, FBS is 198, PPBS 319, HbA1c is 9.5. The score higher the score the higher is the parametric data. But in case of patient no. 58 and patient no. 73, both have total doshadi score as 22 but there is marked difference in parametric data. In the former case it is symmetrical with the parametric data but in the latter case it is un symmetrical. It can be indicative of the biological variations that were found in the subjects due to small sample size. This can be rule out by taking a larger sample size. False assumption that this formula should be the sole criteria to find out the level of doshadi dushti in the subjects and diagnose prameha patients is discouraged absolutely.

The third question was whether the modern diagnostic criteria for prameha patients, which are adopted by many research studies at NIA is precise enough. With reference to previous research studies and many other have adopted the modern diagnostic criteria for prameha patients as Fasting blood sugar, Post prandial blood sugar, Glycosylated haemoglobin without acknowledging the use of mutra pariksha as an ayurveda diagnostic tool in the studies. With the above data taken into account one can infer that

there is an utmost need of Ayurvedic diagnostic tools to be used in the prameha studies. So to rule out this ambiguity between the data found in above patients referred, it is proposed to go for classical Ayurvedic investigative tools described in prameha as mutra pariksha. This again certifies the importance of this tool in the research studies on Diabetes Mellitus in future projects at National Institute of Ayurveda.

The fourth question was whether the classical methods like mutra pariksha should be made mandatory in every research design on the disease for future studies? The answer to this question is yes. It is imperative to say that one cannot use the terms diabetes and prameha in place of each other and so is the diagnostic criteria or tools included in the studies cant be taken granted for the research work done on prameha. One has to develop a SOP(Standard of Procedure) for conducting mutra pariksha in coming future for the better understanding of the disease as per Ayurvedic principles are concerned.

CONCLUSION:

Diabetes Mellitus and Prameha terms are relative to each other and should not be used in place of each other. There is correlation between doshadi total score found in the subjects with parametric data i.e Fast blood sugar. Post prandial blood sugar and glycosylated Haemoglobin (the golden standard of tests used to diagnose Diabetes Mellitus as per contemporary science). There is utmost need to include mutra parisksha as per Ayurveda diagnostic techniques to diagnose a prameha patient. It is recommended to make it mandatory for future studies especially done on this disease.



LIMITATIONS AND FUTURE SCOPE

For a more broader aspect of the level of Doshadi assessment Dhatu kshaya and vriddhi lakshans should be included.

Mala play a very important role in prameha. Similarly their vriddhi kshaya symptoms should also be included in the study.

The sample size should be large enough to rule out the biological variations.

A comparative study between prameha patients diagnosed as per Ayurveda principles and diagnosed Diabetes Mellitus patients (as per modern science) should be done to further reevaluate both the diseases.

Ayurveda Diagnostic tools should be standardised for the studies done in prameha.

References :

1. ADA Screening guidelines
2. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Sutra Sthana (28:4), pg. 175, Chaukhambha Surbharati Prakashan, Varanasi, (2005)
3. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Sharira Sthana (7:15), pg. 339, Chaukhambha Surbharati Prakashan, Varanasi, (2005)
4. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Sutra Sthana (28:4), pg. 175, Chaukhambha Surbharati Prakashan, Varanasi, (2005)
5. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Sharira Sthana (7:15), pg. 339, Chaukhambha Surbharati Prakashan, Varanasi, (2005) Chakrapani
6. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Sutra Sthana (28:4), pg. 175, Chaukhambha Surbharati Prakashan, Varanasi, (2005)
7. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Sharira Sthana (7:16), pg. 339, Chaukhambha Surbharati Prakashan, Varanasi, (2005)
8. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Sutra Sthana (28:4), pg. 175, Chaukhambha Surbharati Prakashan, Varanasi, (2005)
9. Sushruta: Sushrut Samhita, with commentary of dalhana, Edited by Vaidya Jadavaji Trikamaji Acharya, chaukhambha orientalia, Varanasi. 8th edition. sutrasthan (15:32), pg. 73 (2005)
10. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Vimana Sthana (5:13), pg. 251, Chaukhambha Surbharati Prakashan, Varanasi, (2005)
11. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Sutra Sthana (28:4), pg. 175, Chaukhambha Surbharati Prakashan, Varanasi, (2005)
12. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Nidana Sthana (4:5), pg. 212, Chaukhambha Surbharati Prakashan, Varanasi, (2005)
13. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Sutra Sthana (28:4), pg. 175, Chaukhambha Surbharati Prakashan, Varanasi, (2005)
14. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Vimana Sthana (5:14), pg. 251, Chaukhambha Surbharati Prakashan, Varanasi, (2005)
15. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Sutra Sthana (28:4), pg. 175, Chaukhambha Surbharati Prakashan, Varanasi, (2005)

शेष पेज नं 36 पर



AN ANALYTICAL STUDY OF EMETIC DRUG MADANPHALA (CATUNAREGAM SPINOSA) IN REFERENCE OF DIFFERENT TEXTS AND LABORATORY FINDINGS

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INTRODUCTION :

Madanphala is a very important medicinal herb used for different therapeutic purpose and mainly for Vamana karma. The plant Madanaphala is a small thorny tree. It occurs throughout the India upto 4000 ft. Altitude. It is found in foothills of Himalaya from Jammu to Sikkim, it is seen in Gujarat, Tamilnadu, Bengal and South Maharashtra. Rind and fruit have useful emetic diaphoretic and antispasmodic properties.

Etymology : Literary Madanaphala means fruit inducing emesis. In English, Randia = In memory of Issac Rand, botanist of Chelsea, London; dumetorum = of thorny bushes, of hedges- madanphala has many thorns.¹

DESCRIPTION OF MADANPHALA IN SAMHITAS & TEXTS

1.Charaka Samhita (1000 B.C- 4 cent. AD):

It is the oldest treatise among all the Ayurvedic Samhita Granthas. It was composed by Maharishi Agnivesha (1000 B.C.), Reducted by Acharya Charaka (200 B.C.) and reconstructed by Acharya Dridhabala (4th Cent A.D.) The drug Madanaphala has been mentioned in Vamaka dravya², Asthapanopag Mahakashaya³, Phalini dravya⁴, dravya of Asthapan Vasti⁵. It is mentioned to use seed

powder of Madanaphala (Madanphala Pippili Churna) for Vamana Karma. In Agrya Dravyas, it is indicated as best for Vamana Karma, Asthaphana vasti and Anuvastana vasti⁶. For the therapeutic purposes, Charaka has mentioned Madanaphala in compound formulations which have been indicated for the treatment of various ailments.

2.Sushrut Samhita (1000 BC- 5th century AD):

In Sushrut samhita, the drug is mentioned under Aaraghadhaadi Gana⁷, Muskaadi Gana⁸ and Udarv doshaaher Dravya⁹. It is indicated as best for Vamana Karma. The dose of Flower of Madanphala (In the form of powder) is 1 Prakunch (1Pala = 4 Tola)¹⁰ and Madanphala pippili Churna is Anternakhmusti Pramana¹¹. The formulations and indications of this drug described in Treatise in respect of various disorders i.e.,prameha, shleepada, galganda,ashmari, gulma,arsha, krimi, unmada, apasmara, vatrakta, raktapitta and different kaphaja and vataja disorders.

3.Ashtanga Hridaya: (7th cent. AD):

This samhita was composed by Acharya Vagbhata. In Ashtang Hridaya, the drug Madanaphala is mentioned in Aaraghadigana under the name of Phala¹². It is indicated as best for Vamana Karma¹³. The formulations and indications of this compendium are described in

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reference of different kaphaja, pittaja and vataja disorders.

4. Chakradutta (11th Century A.D.):

It is an oldest treatise which contains a lot of siddha yoga for the cure of diseases. The formulations and indications of this drug are indicated in raktapitta, kaphaja visarpa, artavasrava in yoni vyapada.

5. Yoga ratnakara (17th Century A.D.):

The Chikitsa grantha Yoga Ratnakara was composed by Vaidya Shri Laxmipati Ayurvedacharya. The formulations and indications of this treatise are used form Kaphaj Chardi Vataj, pittaj, kaphaj and Ajeerna, Udavertta Pada-dari chikitsa Dantnadi Chikitsa, Sudaruna sannipata

6. Bhaishajya ratnawali (18th Century A.D.):

This important Chikitsa grantha was composed by Shri Govind Das ji. In this treatise, the drug Madanaphala has been mainly used in compound formulations. The formulations and indications of this treatise are used in Madattaya Chikitsa and Unmada.

Properties -

Rasa : Madhura, Tikta

Guna : Laghu, Ruksa

Virya : Usna

Vipaka : Katu

Karma : Vamana, Lekhana

EXPLANATION OF SOME SYNONYMS²⁷

मदनः – मदयति रोमहर्षग्लानिश्रृचजनयतीति, मदी हर्षग्लेपन्योः ।

During the process it produces horripilation and malaise.

कफवर्धन – कफं वर्धते छिन्तीति, वर्धच्छेदने ।

गालः—गालयति स्रावयति कफमिति, गल स्रवणे ।

गालव— इत्यस्यापि स एवार्थः ।

Eliminates kapha.

करहाटः –करं हाटयति व्यथति, कण्टकित्वात् ।

Madana is a thorny tree.

गोलफलः— गोलाकारफलत्वात् ।

Fruits are round.

घण्टालः—घण्टावत् फलमस्य ।

Hanging like bell.

धाराफलः— धारवत् लमस्य ।

It has streaks on outer surface.

पिण्डीतकः – पिण्डाकारं फलं बीजास्यफलः

—प्रषस्तफलत्वात् फलस्यैवौशधे प्रयोगः ।

Fruits are round. Within which seeds are arranged in mass.

बस्तिरोधनः – बस्तिमन्तः स्थापयतीति, बस्तिकर्माणि प्रयुक्तत्वात् ।

Fruits enters into formulation of enema.

मत्स्यान्तकफलः— मत्स्यन्तयति फलमस्य, मत्स्यमारक इत्यर्थः ।

It is also used as fish poison

मरुवकः – शुष्कप्रदेशे प्रायो जातत्वात् ।

Growing in dry region.

राठः— रठयते स्तूयते इतिः रठ परिभाषणे ।

वामनः – वामयतीति, वमने प्रयुक्तत्वात् ।

विनाशनः – विषं नाशयतीति ।

It is also anti poisonous

विशपुष्पकः – विषाक्तं पुष्पमस्य ।

Flowers are toxic.

विशपुष्पकः— विषाक्तं पुष्पमस्य ।

Madana is a thorny tree

शल्यकः –शलयति आशु गच्छतिस्वकर्म कुरुते इति ।

कण्टकित्वाच्च, 'शल गतौ' ।

Thus alleviating respiratory disorders.

श्वसनः— वातभूयिष्ठप्रदेशे जातः अथवा श्वासं निर्दुष्टं करोतीति कफच्छेदनात् ।



Classification of Madanaphala in different Ayurveda texts

Samhita	Gana / Varga	According to karma
Charaka Samhita	Asthapanopaga, Anuvasanopaga, Phalini virechana	Vamana
Sushruta Samhita	Aragvadhaadi, Mushkakadi,	Urdhwabhagahara
Ashtanga sangraha	Aragvadhaadi, Tiktakandha	Vamanopayogi
Ashtanga hridaya	Aragvadhaadi	Vamanakarak, Niruhan
Bhavaprakasha nighantu	Haritakyadi varga	
Nighantu Adarsha	Manjishthadi varga	
Kaiyadeva nighantu	Oshadhi varga	
Dhanwantari nighantu	Guduchyadi varga	
Raj nighantu	Shalmalyadi varga	

LABORATORY STUDY OF FOUR SAMPLES OF DRUG

To evaluate the active components and originality of Madanaphala four samples of fruit of the drug were collected from four different area. These samples were given to the laboratory of National Institute of Ayurveda Jaipur for examination of the drug.

Sample 1: Haridwar,

Sample 2: Dehradun ,

Sample 3: Delhi ,

Sample 4: Jaipur .

Following tests were performed on these samples

- ♦ Macroscopic
- ♦ Microscopy
- ♦ Moisture content
- ♦ pH
- ♦ Alcohol Extractive Value

- ♦ Aqueous Extractive Value
- ♦ Petroleum Ether Extractive Value
- ♦ Total Ash
- ♦ Acid Insoluble Ash
- ♦ Water Soluble Ash
- ♦ Qualitative analysis of Phyto-chemicals
- ♦ TLC
- ♦ Aflatoxin
- ♦ Saponin determination

Macroscopic:-

According to macroscopic observation sample S1, S2, S3, and S4 have same visualize features.

Microscopy

Leaf :

Upper Epidermis (UP): Single Layered, polygonal, straight, anticlinal walls, few cells contain mucilage.



Mesophyl (Mes): Single layered, elongated, Compactly arranged, narrow, thin walled parenchyma continued over midrib region.

Spongy Parenchyma (SP): thin walled loosely arranged, large intracellular spaces.

Vascular bundle (VB): Xylem: Lignified cells, present at ventral surface.

Phloem: Non lignified cells present at dorsal surface.

Powder Microscopy- Powder Microscopy- Dry powder sample S1, S2, S3 and S4 have Tanins, Cellulose, Mucilage, Nuclei Cell are Present.

Phytochemical Analysis

Carbohydrate, Alkaloids, Amino acids, Proteins, Saponin, Phenolic compound, Steroids, Tannin are present in S1, S2, S3 and S4 Samples.

Physio- Chemical Analysis

Moisture content is a water holding capacity of sample, higher moisture content in sample show that it may decrease stability. Moisture present in test samples are 8.45%, 4.34%, 5.6%, 5.34%.

pH is a method of quantity analysis of acidic and basic nature of drug. pH of samples are 8.1, 6.7, 6.4, 6.6, 6.7. its Acidic in nature.

Extractive Value show soluble content present in sample. Water soluble content present in our samples are 24.5%, 23.51%, 20.58%, 20.63%. Alcohol soluble Content present 17.89%, 18.54%, 15.78%, 15.34% Ether soluble or Fixed oil present in samples are 5.46%, 5.31%, 3.67%, 3.71%.

Total Ash is a quantity analysis technique for determine Siliceous Material and Inorganic Substance in sample. Acid Insoluble Ash show Siliceous Material and Heavy Metals. Water

Soluble Ash shows Quantity of water Inorganic Substance. Samples have Total Ash 1.52%, 1.83%, 3.19%, 3.67% Acid Insoluble Ash 0.21%, 0.52%, 1.75%, 1.42% and Water Soluble Ash 1.76%, 0.45%, 1.12%, 1.32%.

Phytochemical Analysis

Chromatography

Thin layer Chromatography is a tool for separation and identification of chemical constituent. In sample S1, S2, S3 and S4 have separate 7 chemical constituents and these chemical constituents are similar Rf value 0.34, 0.56, 0.65, 0.69, 0.75, 0.77, 0.85. Similar Rf value show similar chemical constituents.

Aflatoxins

As per Ayurvedic pharmacopoeia of India and WHO guidelines Aflatoxins are very dangerous to the human body. Accurate analysis is required for the determination of residuals or lower level detection of Aflatoxins.

Identification of all four Aflatoxins can be easily performed by corresponding standards and this confirms the presence and absence of Aflatoxin contamination in the raw material and finish products.

Our Samples (S1 and S2) have free from contamination of Aflatoxin (B1, B2, G1, G2) and Samples (S3 and S3) have contamination of Aflatoxin (B1, G2).

Saponin

The fruit of Madanaphala contain saponin at concentration S1 (13.43% w/w), S2 (11.87 %w/w), S3 (7.89% w/w), S4 (8.89 %w/w)

CONCLUSION

Madanaphala (Catunaregam spinosa) has been placed in almost all Samhitas and imported Ayurvedic texts as a multipally effective and differently used drug in various disorders. The



importances of Madanaphala is witnessed obviously by considering it as best among Vamana, Asthapana and Anuvashana dravya by ancient scholars. It was observed by reviewing different Ayurvedic texts that Madanaphala is indicated internally as well as externally in disorders associated to different systems i.e., Jwara, Grahani, Udarroga, Arsh, Krimi-roga, Prameha, Sexual disorders, Khalitaya, and skin disorders etc. Laboratory tests suggest that although all four samples of drug was same physically but microscopic and chemical analysis have proved the sample-1 superior, which was collected from Haridwar region.

REFERENCES:

1. The Ayurvedic Pharmacopoeia of India vol-1
2. Charak Samhita-Vidyotini tika edited by Kasinath Sastri & Gorakhnath Chaturvedi Chaukhamba Bharti Academy, Varanasi Edition reprinted 2009 Ch.Su.2/1-8
3. Ibid- 2 Ch-Su4/25
4. Ibid-2 Ch-Su1/81
5. Ibid-2 Ch-Su2/11-12
6. Ibid-2 Ch-Su25/40
7. Sushruta Samhita Edited with Ayurveda Tatta-Sandipika Hindi Commentary by KavirajAmbikadutta Shastri, Chaukhamba Sanskrit Sansthan reprinted 2008 Su.Su38/6
8. Ibid-7 Su.Su38/20
9. Ibid-7 Su.Su39/3
10. Ibid-7 Su.Su43/3
11. Ibid-7 Su.Su44/6
12. Astangahridayam of Vagbhata edited with Vidyotini Hindi Commentary By Kaviraja Atrideva Gupta Chaukhamba Prakashan Varanasi reprinted 2009 A.H.Su.15/18).
13. Ibid- 12 A.H.Ka 1/1
14. Ibid-2 Ch-ka- 1/27
15. Ibid-7
16. Ibid-12
17. Sodhala Nighantuh commentator Prof. (Dr) Gyanendra Pandey Editor-Prof R.R Dwivedi Publisher Chaukhamba Krishnadas Academy,Varanasi Edition-frist 2009
18. Astang Nighantuh
19. Dhanvantari Nighantuh Edited by Prof Priya vratt Sharma Translated by Dr. Guru Prasad Sharma Chaukhamba Orientalia, Varanasi Reprint Edition-2012
20. Maha Aoushad Nighantuh
21. Gunaratnmala of Sri Bhavmishra edited with Prakasa Vyakhya by Dr.Kailash Pati Pandey and Dr.Anugrah Narain Singh Forwarded by Prof. P.V. Sharma Chaukhambha Sanskrit Bhawan Varanasi Edition-First- 2006
22. MadanaPal Nighantuh Hindi Commentary by Pt. Hariprasad Tripathi Publisher Chaukhambha Krishandas Academy, Varanasi Edition- first-2009
23. Kaidev Nighantuh
24. Bhavaprakasa Nighantu - Haritkyadi Verga
25. Raj Nighantuh
26. Priya Nighantuh –
27. Namarupagyanam by P.V. Sharma Characterization of medicinal Plants based etymological derivation of nanes and synonyms Chaukhambha Visvabharati Varanasi reprint- 2011



KUSHMANDA FRUIT (BENINCASA HISPIDA/CERIFERA) - A NECTAR IN SUMMER SEASON

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ABSTRACT:

The Sanskrit word kusmanda literally means that, fruit, which does not contain heat at all. It has various synonyms in ancient Ayurvedic scriptures, delineating its peculiarities, like sthiraphala – the fruit lasts for longer duration, puspaphala – which blooms and bears fruits at the same time, pitapuspa- has yellow flowers. It is mentioned in various Ayurvedic Samhitas that Kusmanda has asmarighna, Mutrala, Dahashaamak, Medhya etc properties.

Kushmanda has several therapeutic properties, It has low calories making it a suitable edible item for obese and diabetic people. It has cooling effect and works as a laxative. Also useful in flushing out toxins from the body, increases the urine output and is beneficial in reducing inflammation. It has relieving properties make it one of the most commonly used herbal remedy for various problems arising in summer season.

Key words: Kushmanda, Ayurvedic samhitas, Laxative, Inflammation.

INTRODUCTION:

“Kushmanda” is a The winter melon, also called white gourd, ash gourd, fuzzy gourd, belong to the family Cucurbitaceae & It is the only member of the genus Benincasa. The fruit is fuzzy when young. The immature fruit has thick white

flesh that is sweet when eaten. By maturity, the fruit loses its hairs and develops a waxy coating, giving rise to the name wax gourd, and providing a long shelf life.

The fruits of this plant are traditionally used as a laxative, diuretic, tonic, aphrodisiac, cardiogenic, urinary calculi, blood diseases, insanity, and also in cases of jaundice, dyspepsia, fever, and menstrual disorders. It is the main ingredient in Kusumanda rasayanam as rejuvenating agent against the treatment of nervous disorders. All most all parts of (leaves, flower, fruit and seeds) it have been used, either as food or as medicine. The young shoots, leaves and flowers can be used as vegetable. Fruits of this plant are widely used for cooking in India, Pakistan and China. Many delectable dishes like peta, (a sweet dish), soups and curries are prepared by this fruit. The immature as well as mature, large size fruits are often cooked as vegetable.

English: Ash Gourd, White Gourd, Wax Gourd, White Pumpkin.

Hindi: Petha, Raksaa, Bhatuaa

Synonyms: Kuushmaanda, Kuushmaandika, Pushpaphala, Bruhatphala, Valliphala, Sthirphala etc.

Habitat: The plant is cultivated throughout India in plains and hills, now a day much cultivated in Uttar Pradesh, Punjab, Rajasthan and Bihar.

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Taxonomical description:1

Benincasa hispida (Thumb.) Cogn. is a climber, stem softly hairy, diffuse with bifid tendrils. Leaves cordate, reniform-orbicular, more or less deeply 5-lobed, upper surface scabrous, lower shortly hispid, margin sinuate, dentate; nerves hirsute at lower surfaces. Tendrils slender; 2 fid. Flowers large yellow; axillary, unisexual; Peduncles hirsute, male 6-15 cm long, Female 2-4 cm long. Probracts foliaceous; opposite the tendril, ovate, Calyx tube (male) campanulate, lobes 5, leaf-like, serrate. Petal 5, nearly separate, obovate. Stamens 3, inserted near the mouth of the tube, anthers exsert, free, 1-one celled, two-2 celled, cells sigmoid. Female calyx and corolla as in the male. Ovary oblong, densely hairy; inferior style thick with three flexuous stigma; ovules numerous. Fruits spherical, large, fleshy, hairy when young, waxy bloom when mature; Seeds are many compressed ovoid, smooth, yellowish white, distinctly marginate.

Rasa : Madhura

Guna : Laghu , Snigdha

Virya : Sheeta

Vipaka : Madhura

Dosha Effect: Vaata-pittahara

Dhatus : Mamsa, Meda, Rakta, Majja, Shukra

Srotas : Majjavaha, Manovaha, Raktavaha, Rasavaha

Kushmanda is used in Ayurveda for Actions like Anulomana - expels downwards, Balya - strengthening tonic, Brimhana – nourishing, Dahaprashamana - anti-burning, Kasahara - relieves cough, Medhya - brain tonic, Mutrala – diuretic, Nidrajanana – sedative, Raktavardhaka - good in anaemia, Rasayana – rejuvenative, Sandhaniya-asthi dhatu - fracture healing, Sonita

sthapana - rectifies vitiated blood, Sukaravadhka - good for conception, Trishanahara - relieves thirst etc.

Dosage: Dried pieces of the fruit—5-10 g (API Vol. IV.)

Fruit juice—10-20 ml (CCRAS.)

Ayurvedic Preparations:

Kusmanda paka, Kusmanda ghrta, Kusmanda curna, Kalyanaka ghrta, Kusmandavaleha, Kusmanda rasayana, Kusmanda khanda etc.

Fruits nutritional Value: 6

The fruits contain lupeol, beta-sitosterol, their acetates and several amino acids. The fruit juice produces tranquilizing activity and mild CNS depressant effect in mice. About 96% of winter melon is composed of water. It is loaded with various vitamins and minerals that help boost your health and prevent diseases. It is rich in vitamins like vitamin C and B complex vitamins such as niacin, thiamine and riboflavin. This vegetable is also a good source of minerals like iron, potassium, zinc, calcium and magnesium. In addition to these nutrients, winter melon also provides good amounts of protein, carbohydrates and dietary fiber.

Health Benefits of Fruit in Summer: 7

- Winter melon acts as an antacid and helps maintain the correct pH of the body. So if you have acidity problems, make sure to include this vegetable as part of your regular diet.
- Winter melon is widely used in Ayurvedic and Chinese medicine for the treatment for anemia. Fully packed with vitamins and minerals like vitamin C, niacin, thiamine, riboflavin, iron, phosphorus and calcium, this



vegetable helps produce new blood cells and can be used as an effective remedy for treating anemia.

- Winter melon is a natural coagulant, which helps control bleeding. The leaves of this vegetable are sometimes crushed and applied on cuts and bruises to speed up healing. It is also effective in preventing internal bleeding. Consuming ash gourd juice regularly is helpful for conditions like haematuria, piles and bleeding due to ulcers.
- Winter melon shows natural sedative and soothing properties, because of which it is beneficial for maintaining good mental health. Drinking a glass of winter melon gourd juice daily can help reduce stress and helps you stay relaxed. It produces a soothing and calming effect on nerves and brain and so it is used to provide relief from problems related to the nervous system such as anxiety, depression, neurosis, insomnia and paranoia.
- In addition to the various health benefits, winter melon has many cosmetic uses as well. Applying a mixture of ash gourd juice and lemon juice on the skin has been found to be beneficial in getting rid of dark spots on the skin and bring a natural glow and shine to the skin. The juice of winter melon is also very good for your hair. It is considered to be one of the best remedies for preventing dandruff and hair fall. To get rid of dandruff, just apply winter melon juice on the scalp and massage well. After some time wash your hair with a mild shampoo. The seeds and rind of this vegetable are added to coconut oil and the oil is applied on the hair to promote hair growth as well as to eliminate dandruff.

- In addition to being a low calorie food, winter melon also shows diuretic effects that helps reduce weight due to water retention. The high level of fiber in this vegetable satisfies your hunger. This helps in preventing frequent snacking and overeating, thus helping to maintain a healthy weight.

Benincasa Fruits: A natural remedy that you can try at home to get relief from certain ailments:

For Peptic ulcer – Mix together winter melon juice with the same amount of water and drink it every morning on an empty stomach.

For heat boils – Make a paste of chickpea flour with ash gourd juice and apply it on the affected area.

For increasing appetite – Combine together 100 ml of fresh winter melon juice, 5 grams of ghee and 5 grams of honey and drink it at night. If you have a poor appetite, take this drink regularly to increase your appetite.

For fertility – Regular consumption of the winter melon or its juice is helpful in improving fertility as it helps increase the production and motility of sperms.

For improving memory – Grate the flesh of fully ripe winter melon and squeeze it to extract its juice. Add equal quantity of water to this juice and drink it in an empty stomach every day. This drink is considered to be a brain tonic that can help improve memory power.

For constipation – Cut the flesh of matured winter melon into big cubes and boil them in water until the pieces are half cooked. Eating the half cooked vegetable regularly help to alleviate constipation. The water used to boil winter melon can be used as stock to prepare healthy soups.



For cough and cold – Drinking the juice of winter melon daily is a great way to prevent the common cold and cough. It is also an effective remedy for other respiratory problems such as asthma, bronchitis, influenza and sinusitis.

For dandruff – Boil the seeds and skin of winter melon in coconut oil. Applying this oil on the hair and scalp helps encourage hair growth as well as prevent dandruff, itchy scalp and dryness of the scalp.

Benincasa Fruits recipes combats summer:^{8, 9}

Fruits juice:

Ingredients: 4 cups of winter melon/ Ash gourd/petha, 1 lemon, 1/4 teaspoon salt, 1/4 teaspoon pepper, 1 cup water.

In blender or juicer or food processor add peeled chopped winter melon pieces and 1 cup of water. Blend until you get a smooth consistency, Strain the juice to remove big pieces, then add lemon juice, salt and pepper and mix everything well.

Winter Melon Tea:

Ingredients: 1½ kilogram winter melon flesh, cut into 1 inch cubes, 250 gram brown sugar, 50 gram rock sugar.

Preparation: Place winter melon flesh and brown sugar in a pot, mix well. Set aside for about 1 hour until some liquid has formed, Add rock sugar to the pot, and bring to a boil. Cover, reduce heat, and simmer until winter melon is completely transparent, about 2 hours, Turn off heat, strain and press as much liquid through the strainer as you can to get the concentrated winter melon syrup. Store this syrup in a glass jar in the fridge for up to 1 week, to serve, make “tea” with 1 part concentrated winter melon syrup and 3 parts water. Add some ice cubes, and stir everything together, Serve cold.

CONCLUSION:

Kushmanda(Benincasa hispida) fruit is a very potential drug with wide range of medicinal utility as it contains vitamin C and B complexes and a good source of minerals like iron, potassium, zinc, calcium and magnesium etc. In my view this is the fruit which should be consume during Summer to maintain good health.

References:

1. Kirtikar KR & Basu BD, Indian Medicinal Plants Vol-II, 2nd ed. Dehradun: M/s Bishen Singh Mahendra Palsingh; 1975, 1126-8.
2. Anonymous, Dhanvantari nighantuh, translated by Dr.guru Prasad Sharma, chaukhambha orientalia, Varanasi, 4th Edition 2005, P.No.49.
3. Kaiyadeva -Kaiyadeva nighantuh, Edited and Translated by Prof. Priyavrata Sharma, chaukhambha orientalia, Varanasi, 2nd Edition 2006, P.no. 96.
4. Agnivesha, Charaka samhita, ‘Vaidyamanorama’ hindi commentary, chaukhamba Sanskrit pratishthan, Delhi, P.no 400.
5. Chunekar K.C, Bhavprakash nighantu, Choukhamba viswabharti academy, Varanasi, Shaka varga, P.no. 679.
6. C.P. Khare, Indian Medicinal Plants, An Illustrated Dictionary, Springer Science Business Media, LLC.2007; p.no.88
7. <http://www.valuefood.info/2979/winter-melon>.
8. <http://zestysouthindiankitchen.com/2014/08/winter-melon>.
9. <http://dailycookingquest.com/by-cuisine/winter-melon-tea>.



EFFECT OF ASANAS ON MUSCLE POWER IN THE PATIENTS OF POST STROKE HEMIPLEGIA (PAKSHAGHATA)

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INTRODUCTION:

Yoga is the coordination and harmony between mind and body, so that our body responds perfectly to our mental commands, conscious and subconscious. This was very succinctly explained by Swami Sivananda when he said that: “Yoga is integration and harmony between thoughts, words and deeds, or integration between head, heart and hands.” From the harmony of the mental and physical aspects of man (including of course the pranic or bioplasmic body and our emotional nature) are derived other positive virtues as by-products. From these arise many other definitions of yoga.

According to Ayurvedic Classics, Pakshaghata is characterized by loss of function and mobility of half of the body either right or left, pain and disturbed speech. The cause of Pakshaghata is kupita vayu.

According to Acharya Charaka, Pakshavadha and Pakshagraha are considered among the ailments of Madhyama Roga Marga, i.e., Marma Asthi Sandhi Marga. Pakshavadha has been listed under eighty Nanatmaja Vata Vikaras. When the aggravated Vayu paralysing one side of the body – either right or left – causes immobility of that side in association with ruja (pain) and Vaksanga (loss of speech), then the ailment is called Paksha – vadha. Lakshana of Pakshaghata and Ardita can coexist together.

हृत्त्वैकं मारुतः पक्षं दक्षिणं वाममेव वा ॥

कुर्याच्चोनिवृत्तिं हि रुजं वाक्स्तम्भमेव च ।

(च०चि०२८ / ५३)

Whereas Acharya Sushruta describes lakshana of Pakshaghata and lakshana of Ardita as separate entity. When the greatly aggravated matarishva (vata) invades the downward, sideward and upward dhamnis (ligaments or nerves in this context), then it causes loosening of the bindings of the joints and destroys any one half of the body; this, the best physician called Pakshaghata; by this, half of the body becomes incapable of any work (movements/actions) and becomes unconscious (loss of sensation of touch), The person may even lose his life. Half of the body, if destroyed (made inactive and unconscious) by vata alone, it is described as very difficult to cure; if it (vata) is associated with others doshas the disease is curable and that which brings about decrease/ loss of dhatus (tissues) is incurable.

अधोगमाः सतिर्यग्गा धमनीरुर्ध्वदेहगाः ।

यदा प्रकुपितोऽत्यर्थं मातरिद्धा प्रपद्यते ॥

तदाऽन्यतरपक्षस्य सन्धिबन्धान् विमोक्षयन् ।

हन्ति पक्षं तमाहुर्हि पक्षाघातं भिषग्वराः ॥

यस्य कृत्स्नं शरीरार्धकर्मण्यमचेतनम् ।

ततः पतत्यसून् वाऽपि त्यजत्यनिलपीडितः ॥

शुद्धवातहतं पक्षं कृच्छ्रसाध्यतमं विदुः ।

साध्यमन्येन संसृयमसाध्यं क्षयहेतुकम् ।

(सु०नि०१ / ६०-६३)

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According to modern it can be correlated with Hemiplegia. Hemiplegia is not an uncommon medical disorder. The most common cause of hemiplegia is a cerebrovascular accident, also known as a stroke. Strokes can cause a variety of movement disorders, depending on the location and severity of the lesion. Hemiplegia is common when the stroke affects the corticospinal tract. Other causes of hemiplegia include spinal cord injury, specifically Brown-Séguard syndrome, traumatic brain injury, or disease affecting the brain. As a lesion that results in hemiplegia occurs in the brain or spinal cord, hemiplegic muscles display features of the Upper Motor Neuron Syndrome. Features other than weakness include decreased movement control, clonus (a series of involuntary rapid muscle contractions), spasticity, exaggerated deep tendon reflexes and decreased endurance and power.

In the body, the practice of Yogic exercises promotes positive health to prevent debilitating disorders. Acharya Charaka described Yoga i.e. Happiness and miseries are felt due to the contact of soul, the sense organs, mind and the objects of senses. Both these type sensations disappear when the mind is concentrated and contained in the soul and supernatural powers in the mind and body are attained. This state is known as Yoga according to sages well versed in this science.

योगे मोक्षे च सर्वासां वेदनानामवर्तनम्।

मोक्षे निवृत्तिर्निःशेषा योगो मोक्षप्रवर्तकः॥

(च०शा०१/१३७)

Material and methods:

After reviewing the whole literature and with the help of material and method, for clinical study total 120 cases were registered. 120 cases were divided into two groups of 60 cases each. Out

of 120 cases 60 cases from OPD of Neurology, S.S. Hospital, BHU and 60 cases from Department of Rachana Sharira, IMS, BHU. Patients of group A were randomly selected diagnosed cases of Pakshaghata (Post stroke Hemiplegia) and cases of group B were randomly selected healthy individuals. Both groups further divided into two subgroups:

- 1) Group A (Gr-A1-patient control and Gr-A2-patient intervention) and
- 2) Group B (Gr-B1-volunteer control and Gr-B2-volunteer intervention), consisting of 30 in each. In the present study, all the two intervention groups were advised to do the practice a set of selected Ásanas. They are listed below:

1. HASTTOTHAN-ASANA
2. TRIKONA-ASANA
3. UTTHANPADA-ASANA
4. PAVANMUKTA-ASANA
5. BHUJANGA-ASANA
6. SHAVA- ASANA

On the basis of the guidance of Dr. Mangalagowri V. Rao, Assistant Professor, Department of Swasthavrtta and Yoga, Faculty of Ayurveda, IMS, BHU, Varanasi and with reference to the advantages and disadvantages of various Yogic exercises for the patients of Post stroke hemiplegia of age group 15-65 and volunteers of age group 17-30, it was advisable to select the above set of yogic exercises for four months. The observations were analyzed using SPSS software 16.0 and results obtained.

Observation and Results:

After the course of Asana implementation which lasted for 4 months, there was considerable increase in Muscle power. The



effect is presented in the form of observational table and graph below:

Observational Table: Showing the effect in term of Muscle power in Asanas, initially and at

follow ups, in 60 patients of Group-A (group of Pakshaghata patients), further divided into 2 sub-groups, Gr-A1 (Pakshaghata control group) and Gr-A2 (Pakshaghata intervention group):

Group	Grade	Muscle power Number and % of cases			Within the group comparis on Friedma n test
		BT	F1	F2	
Patient control	Not against resistance	2 (6.7%)	8 (26.7%)	12 (40.0%)	χ^2 =15.886 p=0.000
	Power detachable when gravity excluded	19 (63.3%)	16 (53.3%)	13 (43.3%)	
	Flicker	7 (23.3%)	6 (20.0%)	5 (16.7%)	
	Complete paralysis	2 (6.7%)	0 (0.0%)	0 (0.0%)	
Patient interve ntion	Not against resistance	0 (0.0%)	1 (3.3%)	25 (83.3%)	χ^2 =56.482 p=0.000
	Power detachable when gravity excluded	6 (20.0%)	21 (70.0%)	5 (16.7%)	
	Flicker	18 (60.0%)	8 (26.7%)	0 (0.0%)	
	Complete paralysis	6 (20.0%)	0 (0.0%)	0 (0.0%)	
Between group comparison Chi- square		$\chi^2=15.60$ 0 p=0.001	$\chi^2=6.406$ p=0.041	$\chi^2=13.123$ p=0.001	



The above table clearly depicts that the muscle power in control and intervention group increases with each follow up.

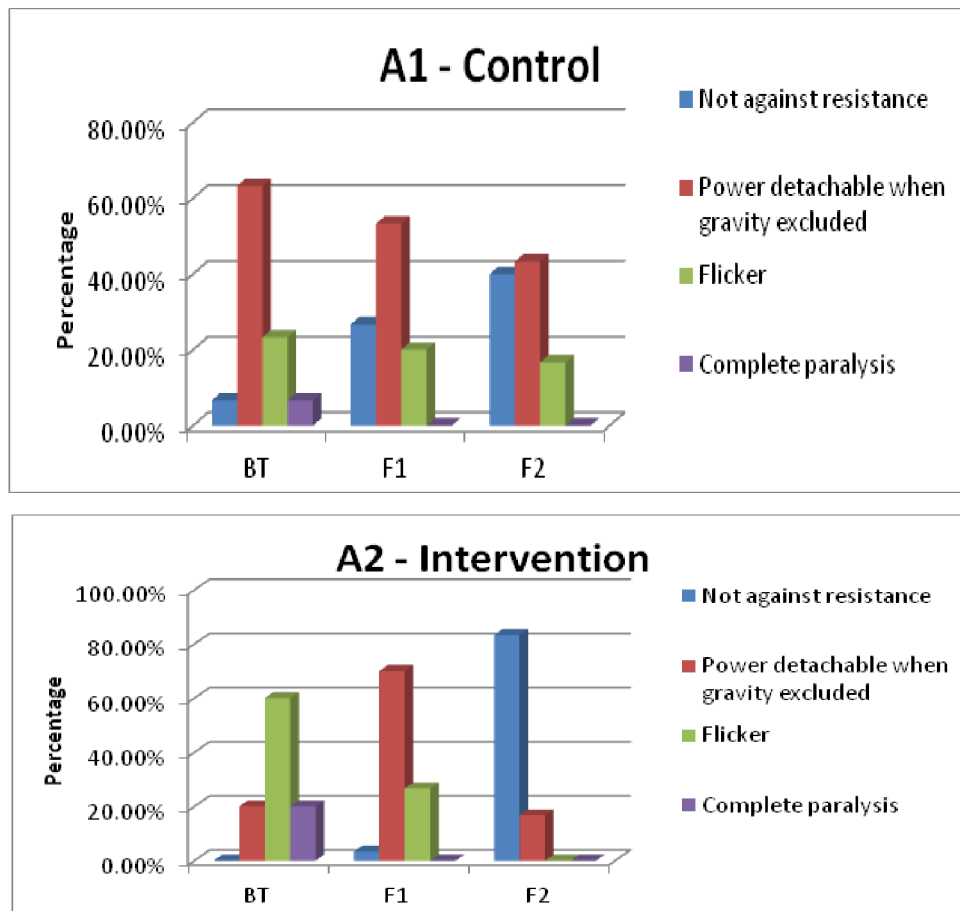
In control group and intervention group, initial numbers of patients who have not muscle power against resistance were 6.7% and 0.0% which becomes 40.0% and 83.3% respectively after 2nd follow up and the patient presenting with the no flicker movement symptom was initially 23.3% and 60.0% which become 16.7% and 0.0% respectively after 2nd follow up.

There is some increase in muscle power in each group. The intra group comparison of

Muscle power was found statistically significant ($p < 0.05$) in each group.

The inter group comparison of Muscle power was found statistically significant ($p < 0.05$) in each group. The increase in Muscle power was more pronounced in the intervention group in comparison to the control group.

Graph: Showing the effect in term of Muscle power in Asanas, initially and at follow ups, in 60 patients of Group-A (group of Pakshaghata patients), further divided into 2 sub-groups, Gr-A1 (Pakshaghata control group) and Gr-A2 (Pakshaghata intervention group):





DISCUSSION-

The multitudes of nerve connections throughout the body are gently stretched, massaged and stimulated while doing Yogic exercises. It is these nerves that connect the different parts and organs of the body with the brain. The nerves are the intermediaries. Even if an organ is in perfect condition it can only function as well as the nerves will allow. If the nerves are unhealthy then the functioning of the associated organs must suffer. If the pipe connecting the water tank to the tap is blocked, then the tap cannot work properly, even though it might be perfectly new. It is the same with the body's nervous system. The nerve fibres determine how well the organs and muscles of the body function. Most modern, sedentary people don't exercise their bodies sufficiently. As a consequence the nerve connections tend to become lazy and atrophy develops. Asanas tones up these nerves and simultaneously awakens the associated brain centres. One feels more alive after a few rounds of this exercise.

Power is defined as the amount of work performed per unit of time. Power is an element of skill-related fitness that is needed to excel in athletic performance. Increased strength does not always translate into increased power. For example, a strong upper body lifts a high amount of weight. However a strong upper body does not always have the ability to throw a shot put very far if enough speed cannot be generated.

The power of a muscle depends on the number and diameter of its fibres. The number may be increased by arranging the fibres obliquely to the line of the tendon and thus packing more but shorter fibres into the same space. Thus bipennate muscles, e.g. dorsal interossei of the hand, have fibres which converge on a central

tendon like barbs of a feather, and multipennate muscles, e.g. deltoid and subscapularis, have a series of such intramuscular tendinous sheets. The obliquity of fibres reduces the power of each but not proportionately to the increase in number of fibres. The diameter and power of individual muscle fibres is increased by exercise because of an increase in the number of contractile elements (myofibrils) in each fibre.

Muscles and skeleton: Yogic exercises all the main muscles and joints in the body. The muscles are contracted and extended and any impure, stagnant blood is redirected back to the lungs and kidneys for purification. It is an excellent method of loosening up the body for asana practice.

Coherent to present study, a research on "Silver Yoga Exercises Improved Physical Fitness of Transitional Frail Elders" is done by Chen K.M. et al. (2010). The purpose of this study was to determine the efficacy of 24 weeks of the senior-tailored silver yoga (SY) exercise program for transitional frail elders. A convenience sample of 69 elders in assisted living facilities were assigned randomly to the SY group (n = 38) or to the control group (n = 31). Intervention was conducted three times per week, 70 minutes 57 per session, for 24 weeks. At the end of the study, the physical fitness indicators of participants in the SY group had improved significantly, and they had better physical fitness than participants in the control group (all p values < .05).

Another study by Reddy (1970) has prepared "A suggested training programme of yogic exercise to prevent low back pain". He had administered the training programme on 24 male students of age group 19-23 of Lakshmbai National Institute of Physical Education, Gwalior.



He had used manual muscle testing technique for testing the degree of muscular weakness. After the experimental group improved, the muscle power and pain was also relieved, where as in the control group students could not improve their muscle power.

CONCLUSION:

In the present paper on the basis of observation and deep discussion, researcher tried to draw conclusion and take out the inference. The Subjective parameter muscle power showed highly Significant in the Pakshaghata intervention Group after follow up in this study. Thus it is fair to conclude that the Yogic Asanas is effective in Pakshaghata. The main purpose of this study is to prevent complications arising due to Paralysis and some of the yogasana therapies by educating the patient and their relatives so the outcome would be beneficial to the patient and the rehabilitation would be still easier without any complications.

It also significantly improves the activities of daily living of patients like Sitting from lying down, Standing from sitting, Walking down stair, Increase in walking capacity and Hand grip power. The associated symptoms like Tiredness, Gaurava, Vivandha, Shotha, Bhrama, Shaitya and Shirashula also shows significant improvement. Looking to the chronicity and deep seated nature of the disease longer duration of therapy may be required to obtain better results. One thing is certain, whatever definition of yoga is chosen, the implications on one's life are vast, for yoga concerns itself with the very core of our lives: body, mind and consciousness.

The above mentioned protocol to manage chronic cases of Pakshaghata is unique. The recovery was promising and worth documenting.

References:

- ♦ Agnivesha, Charaka Samhita, revised by Charaka and Dridhabala with Ayurveda Deepika Commentary of Chakrapanidatta, Vaidya Yadavaji Trikamji Acharya, editor. Varanasi Chaukhamba Orientalia; 2008. p 738, p-14
- ♦ An English translation of The SushruÔa Samhita (based on original Sanskrit text), vol II, edition 4th, 1991, Chowkhamba Sanskrit series office, Varanasi
- ♦ Benedetto M, Innes K, Taylor A, Rodeheaver P, Boxer J, Wright H, Kerrigan D. (2005). Effect of a Gentle Iyengar Yoga Program on Gait in the Elderly: An Exploratory Study. Arch Phys Med Rehabil, 86(9):1830-1837.
- ♦ (Ivanhoe, C. B. and Reistetter, T. A., Spasticity: The misunderstood part of the upper motor neuron syndrome. Am J Phys Med Rehabil, 2004, 83(suppl), S3 S9.)
- ♦ Christensen B, Dyrberg E, Aagaard P, et al. Short-term immobilization and recovery affect skeletal muscle but not collagen tissue turnover in humans. J Appl Physiol. 2008;105(6):1845-51. doi:10.1152/jappphysiol.90445.2008.
- ♦ Dr. Singh R.H. Yoga Evam Yogic Chikitsa, Chaukhamba Sanskrita Pratisthan, Delhi, 1st edition. 1994.
- ♦ Gerard J. Tortora and Sandra Reynold Grabowski, Principles of Anatomy and Physiology, Harper Collins College Publishes, 12th Ed., pp323
- ♦ Iyengar B.K.S., Light on Yoga by Schocken Book, Newyork, 1979.
- ♦ Jones I et al causes and risk factor of paralysis; the new England journal of medicine; volume; 76; page no: 473-478
- ♦ Patanjali Yoga Pradipika by Patanjali, Commentary by Omnath Tirth, 24th reprint, 2004.
- ♦ Swami Muktibodhananda, Hatha Yoga Pradipika (Munger, India: Bihar school of Yoga, 1985), chap. 1, sutra2.



A CONCEPT OF BALAGRAHAS IN PRESENT SCENARIO

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ABSTRACT:

In Ayurveda, different groups of diseases are described such as Jataharini, Balagrahas, Janapadodhwamsa, Matrikaya and Sankrimik rogas. Regarding the Balagrahas it is better to say that Balagrahas are groups of those diseases that attacks on children. In Ayurveda two types of Balagrahas male Balagrahas and female Balagrahas were described by different Acharyas. In present scenario on the basis of etiology, symptoms and management as described in Samhitas the Balagraha can be correlated with infectious diseases.

Key wards: Balagraha, Skandagraha, Convulsion, Microbes, Infection etc.

INTRODUCTION:

The Balagrahas a group of disease are described in detail by Acharyas.

निरुक्ति : ग्रहउपादानेधातुरुग्रहणातिग्रहः ॥
{A. B. Vigyan Balagraha-19}

The etymology of word Graha is to seize or to grasp (grahi). Grahas are invisible & correlate with Microbes, their contact result into sporadic cases of infective natures.

उत्पत्ति: The pauranik swarup of balagraha

“पुरागुहस्यरक्षार्थनिर्मिताः शुलपाणिना ।
मनुष्यविग्रहाः पन्चसप्तस्त्रीग्रहाग्रहाः ॥”
{अ.स.उ.3/2 }

Lord shiva created 12 graha for protection of his son Kartikeya. Out of these, 5 are male and 7 are female graha

Classification of Balagraha: As per different acharyas graha are of two types 1. Male graha, 2. female graha .

Carak Samhita: No description of balagraha, but description of GRAHONMADA

Sushruta Samhita: Described nine grahas

स्कन्दअन्धपुतना स्कन्दापस्मारशीतपुतना
शकुनि षष्ठीपुतना मुखमण्डितिका तद्रेवती पुतना ।
{Su.S.U 27/4}

Astanga Sangraha:

स्कन्दो विशप्खो मेषास्यरु श्वग्रह पितृसंज्ञित
शकुनि पुतना शीतपुतनात्रष्ठीपुतना ॥

मुखमण्डितिका तद्रेवती शुष्करेवती ॥
(A.S.U.3)

Vagbhata added 3 more accounting to 12 in number out of which 5 are said to be male and 7 are female graha.

Madhavnidan, Yog Ratnakar, Bhavprakash: Described as Sushrutacharya.

Kashyap Samhita: 10 Grahas are described.

ग्रहस्तु दश किर्तीताः । स्कन्दस्कन्दापस्मार
मुखमण्डिका रेवती पुतना शुष्करेवती स्कन्दपिता,
पुण्डरिका नैगमेष षष्ठी ॥ {का.सं.सु.७/५६}

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Revati Graha having 20 name of revati are as-

वारुणी माता रेवती शीतवती ब्राम्हणी कण्डू कुमारी बहुपुत्रिकाविरुश्चिका शुष्का रोदनी षष्ठी भुतमाता यमिका लोकमातामही धरणी शरण्या मुखमण्डिका भुतकिर्तीपुतना {Ka. Chi. page 99}

HaritaSamhita: Eight type of Putna Graha

लोहिता शिवाग्रह वायसी उर्ध्वकेशी कुमारी सेना रेवती शकुनि। (HA.S.54/3)

Ravankrut Baltantra: Twelve Balgrahas

नन्दा सुनन्दापुतना कटपुतना शकुनिका शुष्करेवती आर्यका स्वस्तिमातृका नित्रप्रतामातृका पिलीपिच्छिका कामुकामातृका। {Ku. Tan. 21}

Causes of Infliction of Graha:

“धात्रीमात्रोरु प्राक्प्रदिष्टापचाराच्छौच भ्रष्टान्मन् लाचारहीनान्।

त्रस्तान् द्रष्टांस्तजितान् ताडितान् वापुजाहेतोर्हिर्स्युरेतेकुमारान् ।।” {सु.उ.27/4}

Social Cause: Not respecting priests, saints, teachers and guests, Not following customs & traditions.

Personal causes: Related to dhatri: Improper diet and conduct of mataa / dhatri, Gross neglect of hygiene. Non -religious traditions and cheating others.

Related to child: Fluctuation of fear & joy in excess (ati- bhaya & harsha)

Grahas causes: The colonies of Grahas are innumerable which wander around the world in various shapes to attach people for trifold purpose

“हिंसारत्यर्चनाकांक्षाग्रहग्रहणकारणम् ।।”
{अ.ह.उ. 3/32}

- ♦ To victimise ,To get worshipped, To combat the sexual urges

Pathogenesis (Samprapti):

“दर्पणादीनयथाछायायाशीतोष्णप्राणिनोयथा ।
स्वभर्णीभास्करस्योस्यार्याथादेहीनदेहधृक् ।।
विशन्तिचदृश्यतेग्रहारू तत्तत्शारीरीणाम् ।।”
{सु.उ.27/8}

A Grahas enters in body invisibly similar to that of Mirror image, Heat generation, Refraction of rays in lens, Soul entering in body.

“अविशन्तश्चलक्ष्यन्तेकेवलशास्त्रचक्षुषा ।।”
{अ.स.उ.3/35}

Grahas are visible only to divine vision. Their leaders and servants constituting colonies are innumerable.

General clinical features of grahavesa:

गुह्यानगत विज्ञानमनवस्था असहिष्णुता ।
क्रियावा अमानुषी यस्मिन् सग्रहरू परिकीर्त्यते ।।
{ सु.उ.60/4}

Such grahas seeking sexual passion and worship produce symptoms like extra-ordinary or supernatural power in wisdom, speech, activities, strength and ego.

Prodromal Symptoms:

“तेषाग्रहिष्यतारुपम्प्रततरोदनम्ज्वरः ।।”
{अ.स.उ.3/5}

Grahas with evil desire produce the following features prodromal symptoms : weeping (continuous crying) & fever.

Clinical Features:

“सामान्यरुपमुत्रासजृम्भाभ्रुकुपदीनता ।
फेनस्त्रावोर्ध्वत्रष्टोष्ठदन्तदंशप्रजागरः ।।



रोदनंकुजनंस्तन्यविद्वेषरु स्वरवै.तम् ।

नखैरक्स्मात्परितरु स्वधात्यूगविलेखनम् ॥
{अ.सं.उ.3 / 5}

Fainting with upward looks, foamy salivation, teeth & lip-biting, moving eye brows, scratching the body suddenly by nails, altered voice and fear, General weeping, insomnia, moaning, reluctance to breast feed, vomiting, yawning, apathy, fish odour emitting from the body.

Male Grahas: Skanda Graha

“तत्रेकनयनस्राविशिरोविक्षीपतेमुद्गुरु ।

हस्तैकपक्षरुस्तब्धांगसस्वेदोनतकन्धर ॥

दन्तखादीस्तनद्वेषीत्यस्यत्रोदितीविस्वरम् ।

वक्तोवमनलालांभृश्मुर्ध्वनिरीक्षते ।

वसास्त्रगन्धिरुद्विग्नोबद्धमुष्टिशच्छिसुः ॥
{ अ.सं.उ.3 / 15,17 }

Symptom resemble with poliomyelitis:

Udvigna(restlessness) Baddhamusti (spastic fist), stabdhagah (spastic organs), and dantakhadi (teeth biting), Nimilitaksa(closure of the eyes-drowsiness), gatrasyakampanam (tremors or convulsions), shirovikshipatemuhuhu (frequent head shaking). Vamanlala (salivary emission-due to the pooling of secretions at pharynx on it paralysis); hence stanyadvesham (reluctant to breast), urdhwamniriksate (massive upward looks), kshataja -sagandhikai (blood odoured. body); vasa gandhihi (fat adored) (due to subcutaneous haemorrhage-vascular fragility)

Symptoms resemble with facial paralysis:

Vakrasya (deviation of mouth), hatachalataeka- paksma (drooping or blinking of eye lid-unilateral), akshishotha (edematous eye,

-due to irritation), ekanayanasravi (watering of eye -unilateral) -shows symptoms like Facial paralysis.

स्कन्दार्तस्तेनवैकल्यमरणंवाभवेदध्रुवम् ॥
{अ.सं.उ.3 / 15, 17}

Either death or grievous hurt/handicapped. On the basis of symptoms of Skandagraham, it can be correlated with poliomyelitis

Male Graha: Skandapasmar Graha

संज्ञानाशोमुहुः केशलुश्चनकन्धरानति ।

विनम्यजृम्भमाणस्यशक्रन्मुत्रप्रवर्तनम् ।

फेनोद्वमनमुर्ध्वक्षाहस्तभ्रुपादनर्तनम् ।

स्तनस्वजिह्वासंशंसंरम्भज्वरजागराः ॥

पुयशोणितगन्धश्चस्कन्दापस्मारलक्षणम् ॥

{अ.सं.उ.3 / 11}

This disease may be compared as that of EPILEPSY-CONVULSIONS to as arranged here under. Jwara (fever), jagara (sleeplessness), ati-rodana (excessive weeping).

AURA: sarnrarnbha (confusion), urdhweksha (upward looks -staring), vinamya -jrumbamnasya (yawning)

Nature of Episode: Nasta-sanja, sa-sanjanamuhurmuhuhu (recurrent loss of consciousness or alternate existence of consciousness and unconsciousness), hasta bhrupādanartanam (dancing postures of limbs and eye brows, ie. tonic and clonic phases of convulsions)

Associated Features: Fenasrjati (foamy salivation), vin-mutrasrajati (passage of stools and urine- incontinence), stanaswajihwa sandansh. ie. (tongue bite and breast bite on feeding),



kesaluncanam (pricking of scalp hair), kandharanati (drooped shoulders - transient paralysis), puyashonitagandhasca (peutrifiedodour due to stagnated faeces, urine and saliva and blood if injured/?metabolic alteration)

Male Graha: Naigmesh Graha

“आध्मानपाणिपादस्यस्पन्दनंफेननिर्वमिरु ।

तृणमुष्टिबन्धातिसारस्वरदैन्यविवर्णताः ॥

कुजनंछदीरु कासदिध्मानप्रजागराः ।

ओष्ठदंशाससंङ्कोचस्तम्भस्ताभन्धताः ॥

उर्ध्वनिरीक्ष्यहसनमध्येविनमनंज्वरः ।

मुर्च्छेकनेत्रशोफश्चनैगमेषग्रहातिः ॥

{अ.सं.उ.3 / 12}

Clinical features:

a) Jwara (fever), chardi (vomitting) [Sushruta described froathy vomiting- fenamvamati], atisaara (diarrhoea), kasa (cough), swaradainya (pitiabale voice), jagar (insomnia), adhamānam (flatulence), kujanam (groaning or moaning), udvegasahitarodanam (weeping with tension and moaning), (thirst), hasanam (laughing)

b) Urdhvanireekshya (upward looking), madhyevinamyate (stooping in the middle), angasankochastambha (bodily parts remain flexed and spastic, convulsions of limbs ie. generalized), eka-netrashopha (unilateral oedematous eye; if protrusion-Suspect cavernous sinus thrombosis), nissanjobhavati (unconsciousness), vasagandham (emits fleshy smell)

Comments : Much of this clinical picture simulates that of Meningitis.

Male Graha: Shvagraha:

कम्पोहृषितरोमत्वंस्वेदश्चक्षुनिर्मिलनम ।

बहिरायामनंजिह्वादंशोन्तरु कण्ठकुजनम ।

धावनंविट्सगन्धत्वंक्रोशनंचश्ववच्छुनि ॥

{अ.सं.उ.3 / 13}

Jihwadansha (tongue bite), a kanthkujan (mild moaning or groaning), bahirayama (bent backwards-opisthotonus), dhavanam (running restlessly), kroshan 'swa' vat (barking like dog), vitsagandhatva (foetid. odour from the body).

Comments: Spasms of different groups of muscles may occur in conditions like tetany and tetanus; but the conspicuous and specific feature of child barking like a dog refers to the disease RABIES.

Male Graha: Pitru Graha

“रोमहर्षोमुहुस्त्रासः सहसारोदनंज्वरः ।

कासातिसारवमथुजृम्भातृच्छ्वगन्धिताः ६

अङ्गोष्वाक्षोपविक्षोपशोषस्तम्भविवर्णताः ।

मुष्टिबन्धः स्त्रुतिश्चाक्ष्णोबलिस्यस्युः पितृग्रहे ॥”

{अ.सं.उ.3 / 14}

Clinical Features:

- fever, cough, constant weeping, erectile bodily hair , watering of eyes
- diarrhoea, vomiting and frequently getting teirified.
- yawning, thirst, altered bodily colour and emaciation
- spastic and rigid fist, generalized convulsions and emits the smell of dead body.



Prognosis:

Fatal outcome: Continuous discharge from nose, watering of eyes, ulcer on tongue, grunting respiration, progressive emaciation, discoloration of skin, bleeding from all orifices, inability to speak, burning sensation, playing with own stool and urine, fainting on and off, stiffness, injuring self or other indicate fatal outcome.

Cured with difficulty: Wearing fragrant flowers, talking to ladies and young girl in lonely place, happy mood such person may get cured with difficulty ,

Good prognosis: Frightened and worried look, dryness of mouth, throat and lips, crying excessively, refusal to take feed, touching face off and on, indicate good chance of recovery.

General management of infliction of grahas:

i) General Principles:

- a) Personal hygiene is stressed a lot by way of anointment, bath and fumigation; isolation and environmental disinfection are required.
- b) Health of dhatri and attendants should be maintained.
- c) Personal hygiene of the attending physician is essential.
- ii) Religious measures like japa ,bali, homa, Havan, are advised. Flames from out of the fire wood within the premises should be maintained constantly.
- iii) Ghritas besides other drugs are advocated liberally for oral consumption like astamangala-ghruta,
- iv) The anti-toxic effects of sarvagandha-dravyas should be made and to be use in different ways.

v) Symptomatic treatment against the associated disorders is indicated keeping in view of age of the child and Ayurvedic principles.

Common drugs:

- i) Topical wash (parisheka): decoction made of Agnimantha, varuna, haridra, chitraka; putika, rohisa, paribhadra and kubairaka etc.
- ii) Anointing(abhyainga): taila made of priyangu, locana, tagara, jatamamsi, sariba, madhuka, ela and bhunimba etc.
- iii) Decoction for oral consumption (kwatha-pana): Nimb,Gambhari ,madhuka, kuluttha, yava, laghu panchamula.
- iv) Powder (churna) (oral): kharjura, mustaka, narikeia, inrdvika, madhuka, etc.
- v) Fumigation (dhupana): sarpa-kubusa, grdhra-inala. gajanakha, ostra-roma etc.
- vii) Oliation & bath (bali & snana): tila, tandula, mudga, mamsa, matsya etc.

CONCLUSION:

Grahas are invisible and can be correlate with microbes. Most of authorities feel that affection by graham is a result of bad deed of past life of same individual. The colonies of grahas are innumerable which wander around the world in various shape to attack people for trifold purpose as to victimize, to get worshiped, to combat sexual urge. Grahas entered in body of child invisibly. Under grahabadha 3 different type of disorder may included,

1. Affection by supernatural power, like i.e. ghost,witches. In this manifestation of involvement of CNS, like tremor,



unconscious and twitching associated with psychological symptoms like fear and laughing without reason.

2. Infectious diseases involving CNS which in modern medicine termed as meningitis, encephalitis may be included in Ayurveda under Graha diseases
3. Psychiatric diseases particularly involving disorder of personality.i.e. Devagraha, Gandharva graham, Daitya graham etc.

References:

1. Astanga Samgraha of Vagbhata, Translated by Prof. K.R.Srikantha Murty,Chaukhamba Orientalia,Varanasi:2009
2. Kashyap Samhita by Satyapal Bhisagacharya, Chaukhamba Sanskrit Sansthan Varanasi:2008
3. Carak Samhita Vol-2 by Dr R.K. Sharma, Bhagwan Dash, Chaukhamba Sanskrit Searies Office,Varanasi:2007
4. Sushruta Samhita by Prof .P.V.Sharma Chaukhamba Orientalia Varanasi :2009.
5. Yogaratnakar by Vaidya Shri Lakshmipati Shastri Chaukhamba Prakashan:2010
6. Kaumarbhriyam by Dr.V.L.N.Sastry Foreword by Prof.(Km) Premvati Tewari, Chaukhamba OrientaliaVaranasi :2006
7. Bala Veda by DR.V.B.Athvale Chaukhamba Sanskrit Pratisthan, Delhi:2000
8. Abhinav Balswasthya Chikitsa Vigyan by Prof D N Mishr , published by Chaukhamba Sanskrit Pratisthan, Delhi-07
9. Harit Samhita Editor & Translator Vaidya Jaymini Pandey, Chaukhamba Visvabharati, Varanasi:2010
16. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Chikitsa Sthana (6:11), pg. 445, Chaukhambha Surbharati Prakashan, Varanasi, (2005)
17. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Sutra Sthana (28:4), pg. 175, Chaukhambha Surbharati Prakashan, Varanasi, (2005)
18. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Nidana Sthana (3:7), pg. 209, Chaukhambha Surbharati Prakashan, Varanasi, (2005)
19. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Sutra Sthana (28:4), pg. 175, Chaukhambha Surbharati Prakashan, Varanasi, (2005)
20. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Nidana Sthana (3:9-11), pg. 210, Chaukhambha Surbharati Prakashan, Varanasi, (2005)
21. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Sutra Sthana (28:4), pg. 175, Chaukhambha Surbharati Prakashan, Varanasi, (2005)
22. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Nidana Sthana (4:9), pg. 213, Chaukhambha Surbharati Prakashan, Varanasi, (2005)
23. Agnivesha, Charaka Samhita, Ayurveda-Dipika commentary by Chakrapanidutta, revised ed., Sutra Sthana (28:4), pg. 175, Chaukhambha Surbharati Prakashan, Varanasi, (2005)
24. Nayak, B. K. (2010). Understanding the relevance of sample size calculation. Indian Journal of Ophthalmology, 58(6), 469-470. <http://doi.org/10.4103/0301-4738.71673>



ROLE OF RASAYAN AS A PREVENTIVE AND CURATIVE HEALTH TOOL IN NON-COMMUNICABLE DISEASES

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ABSTRACT:

People are at greater risk to chronic diseases of various kinds due to changing lifestyle and behavioural pattern. These chronic diseases of lifestyle or lifestyle disorders are internationally known as Non-communicable diseases (NCD's). The incidence of lifestyle diseases like Hypertension, Diabetes mellitus, dyslipidaemia and overweight /obesity associated with cardiovascular diseases is high or on the rise. Thus Non-communicable diseases are increasing and threatening new challenges. Ayurveda emphasizes on the maintenance of health as well as prevention of diseases. There are many interventions described in Ayurveda for the purpose of health promotion and curing diseases. These interventions can also be applied against NCD's. Rasayana therapy is one of the main tool for prevention and cure of Non-communicable diseases. The present study is undertaken for the role of Rasayana as a preventive and curative health tool in Non-communicable diseases.

Key Words: Rasayana, Non-communicable diseases, Preventive & Curative.

INTRODUCTION

These chronic diseases of lifestyle or lifestyle disorders are internationally known as Non-

communicable diseases (NCD's). A lifestyle is the pattern of living that we follow – how we work, what and when we eat, how and when we sleep, how much physical activity we do and whether we smoke or consume alcohol. A disease is a pathological condition that affects an organism, and is often associated with specific symptoms and signs. Long standing or chronic diseases such as hypertension, diabetes and obesity may not have symptoms or signs, but are known to cause serious complications if untreated in the long term.

Diseases are of several types i.e. genetic, cancers etc., but the most common types of diseases are:

1. Communicable or Infectious diseases: develop due to spread of infections.
2. Non-communicable or Lifestyle diseases: Some diseases do not spread from one person to another through touch, air, food, water or sexual contacts. These diseases may develop in a person due to faulty eating and living habits. These diseases are called life style diseases.

Lifestyle diseases (also sometimes called diseases of longevity or diseases of civilization) are diseases that appear to increase in frequency as countries become more industrialized and

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people live longer. Lifestyle or non-communicable diseases (NCD) are chronic (long term) in nature and cause dysfunction in the body and impair the quality of life. They may also lead to death. These diseases usually develop relatively over long periods. In the beginning there may not be any symptoms but after the disease sets in there may be a long period of impaired health. This leads to reduction in productivity and development of the country. As these are chronic conditions they are a financial burden for lifetime. Therefore, there is an increasing concern these days about non-communicable diseases that can be easily prevented but not cured.

Some of the most common non-communicable or lifestyle diseases include: Atherosclerosis, Obesity, Type 2 diabetes, GERD & Hiatus Hernia, Hypertension, Dyspepsia (Indigestion), Constipation, Heart disease, Some types of cancers, Metabolic syndrome, Fatty Liver, Liver cirrhosis, Chronic renal failure, Asthma, Arthritis, Chronic obstructive pulmonary diseases, Osteoporosis, Stroke, Depression, Alzheimer's disease etc.

Prevalence of Non-Communicable Diseases

Lifestyle diseases are now the leading cause of death around the world with developing countries hit hardest, according to a new report from the World Health Organization (WHO). Non-Communicable diseases are often associated with older age groups, but recent evidence shows that more than 9 million of all deaths attributed to NCDs and occur before the age of 60. Of these "premature" deaths, 90% occurred in low and middle-income countries like India. The WHO has estimated that by 2020, two-thirds of the global burden of diseases will

be attributable to chronic non-communicable diseases, most of them strongly associated with life style.

Factors Responsible For Non-Communicable Diseases

Diet and lifestyle are major factors thought to influence susceptibility to many diseases. Drug abuse, tobacco smoking, and alcohol drinking, as well as a lack of exercise may also increase the risk of developing certain diseases, especially later in life.

Rasayana

The term Rasayana used in Ayurveda, denotes a specific meaning. It consists of two words:

1. RASA: The word Rasa is formed from रस गतौ धातु 'दक अच् प्रत्यय
2. AYANA: The word Ayana is made from "इण गतौ धातु" which has different meanings: Jnana (Knowledge), Gamana (Way, Progression), Prapti (Attainment).

लाभोपायो हि शस्तानाम् रसादीनां रसायनम्।
(च.चिकित्सा 1/1/8)

Acharaya Charaka has described Rasayana as the means of obtaining the best qualities of Rasadi Dhatus (tissue elements). Various tissues of body get nourished from Ahara Rasa, so best quality of Rasa leads to the formation of best qualities of other Dhatus. Thus Rasayana is that process by which all the body tissues are nourished. Consequently, Rasayana helps in regeneration, revival and revitalization of all body tissues/ Dhatus.

According to mode of administration Rasayana is of two types:



1. Kuti Praveshika Rasayana (Indoor regimen).
2. Vatatapika Rasayana (Outdoor regimen).

In short Rasayana gives Long life, delays ageing and death, increase intelligence, memory and luster, excellence in the body tissues, Increases the immunity, removes diseases, gaining “Moksha” (Final Entity) and “Divya Lakshana.

Rasayana Therapy As A Preventive And Curative Aspect In Non-Communicable Diseases

Ayurveda is the “Science of Life” and Ayurveda focuses on achieving the objective of promotion of health, prevention and management of disease for a healthy and happy life in the ailing society. The main factors contributing to Non-communicable diseases include bad food habits, physical inactivity, wrong body posture, disturbed biological clock and also addictions such as drug abuse, tobacco smoking, alcohol drinking. Ayurvedic intervention is targeted towards complete physical, psychological and spiritual wellbeing, which makes it a wonderful option in treating the NCD’s.

The principles for Management of Non-communicable diseases which are very important to maintain a healthy and happy psychological perspective include: Dinacharya (the do’s and don’ts of the day), Ritucharya (seasonal regimen), Panchakarma (five detoxification and bio-purification therapy), Rasayana (rejuvenation) therapy, The Sadvritta (ideal routines), Achar Rasayana (code of conduct). The present study reveals the role of Rasayana therapy as a preventive and curative aspect in Non-communicable diseases.

Preventive Rasyana For Non-Communicable Diseases

- Follow the rule of Dinacharya, Ratricharya & Ritucharya.
- Do Sanshodhana at proper time and way.
- Use of Ajasrika Rasayana like milk, ghee etc. as daily routine.
- Follow the rule of Achara Rasayana in the routine life style.
- Follow the rule of seasonal and climatic adaptability (Satmya).
- Follow the rule of Kutipraveshika and Vatatapika Rasayana.
- Choosing of Rasayana drugs according to mental and body constitutions (Prakriti)

Curative Rasyana For Non-Communicable Diseases

The best Rasayana drug is the common Gooseberry or Amla. The Therapeutic efficacy of various Herbal drugs in treating the Non-communicable disorders are detailed below:

- Obesity and Dyslipidemia – Guggulu, Lasuna, Vrikshmla and Kulatha.
- Prediabetic and Diabetics – Meshasringi, Ekanayaka, Amalaki, Haridra, Jambu, Khadira, Kathaka and Shilajita.
- Cardiac ailments – Arjuna, Pushkaramula, Lasuna, Dasamoola and Vidari.
- Sleep disorders & Stress - Aswagandha, Jatamansi, Somalatha and Sarpagandha.
- Bone and Joint disorders – Vajravalli, Guggulu, Ashtavarga, Lasuna & Masha.



- Uterine Disorders - Non Hormonal drugs like Asnoka, Lodhra, Kumari, Jeeraka, Sathavari and Tila.
 - Auto Immune Diseases – Guduchi, Bhunimba, Nimba, Haridra, Ashtavarga and Sathavari.
 - Disorders of GIT (which results from unsuitable dietary regimen) - Shatphala, Hingu, Jeeraka, Panchalavana, Dadima and Triphala.
 - Disorders of Respiratory tract – Vasa, Kanaka, Dasamula, Trikatu, Amruta, Ela, Thaleesa and Lavanga.
 - Neurological disorders – Bala, Vacha, Jatamansi, Kapikachhu, Aswagandha, Rudraksha, Somalatha, Brahmi and Sarpagandha.
2. Vaidya Yadavji Trikamji Acharya, Charaka Samhita of Agnivesa Elaborated by Charaka and Dridhbala with the Ayurved Dipika Commentary by Chakrapani, edition 2014, Varanasi, Chaukhambha Surbharti Prakashan.
 3. P.V. Sharma, Susruta Samhita, reprint 2005, Varanasi, Chaukhambha Visvabharati, 2005.
 4. Definition of non-communicable diseases from Wikipedia.
 5. Ashtanga Hridayam edited with Nirmala Hindi Commentary by Dr. Bramhanand Tripathi, Reprint – 2007, published by Choukhambha Sanskrit Pratisthana, Delhi.
 6. Elements of Rasayana Therapy in Ayurveda by Prof. Ajay Kumar Sharma Published by Sri Satguru Publication, Delhi 1st Edition 2005.
 7. Concepts of Rasayana, Vol – 13, By Dr. Mukund Sabnis, Published by Chowkambha Amarabharti Prakashana, Varanasi 1st Edition, 2009.
 8. Dravyaguna Vijnana, Vol – 2, by Prof. P.V. Sharma, Published by Chaukhamba Bharti Academy, Varanasi, Reprint – 2005.

CONCLUSION

People are at greater risk to chronic diseases of various kinds due to changing lifestyle and behavioural pattern. The incidence of lifestyle diseases like Hypertension, Diabetes mellitus, Dyslipidaemia and Overweight /Obesity associated with cardiovascular diseases is high or on the rise. Thus Non-communicable diseases are increasing and threatening new challenges. Ayurvedic intervention is targeted towards complete physical, psychological and spiritual wellbeing, which makes it a wonderful option in treating the NCD's. Rasayana therapy is one of the main tool for prevention and cure of Non-communicable diseases.

Bibliography

1. Harish Chandra Singh Kushwaha, Charaka Samhita – second part, Reprint 2012, Varanasi, Chaukhambha Orientalia.



AIR POLLUTION: MODERN & AYURVEDIC VIEW

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ABSTRACT:

Air pollution is a significant risk factor for a number of pollution-related diseases and health conditions including respiratory infections, heart disease, COPD, stroke and lung cancer. The health effects caused by air pollution may include difficulty in breathing, wheezing, coughing, asthma and worsening of existing respiratory and cardiac conditions. The world's worst short-term civilian pollution crisis was the 1984 Bhopal Disaster in India. Leaked industrial vapours from the Union Carbide factory, belonging to Union Carbide, Inc., U.S.A. (later bought by Dow Chemical Company), killed at least 3787 people and injured from 150,000 to 600,000. During ancient times, atmosphere poisoning was done as a military operation to harm the enemy by fumigation of toxic substances. To detect and remove the presence of poison in the air, sushruta mention various measures.

Key words : Air pollution, Vishaja vayu, Vaayu vishaghna yoga

DEFINITION

Air pollution is the introduction of harmful substances including particulates and biological molecules into Earth's atmosphere. It may cause diseases, allergies or death in humans; it may also cause harm to other living organisms such as animals and food crops, and may damage the natural or built environment. Human activity

and natural processes can both generate air pollution. Pollutants in the air aren't always visible and come from many different sources.

Historical disasters

The world's worst short-term civilian pollution crisis was the 1984 Bhopal Disaster in India. Leaked industrial vapours from the Union Carbide factory, belonging to Union Carbide, Inc., U.S.A. (later bought by Dow Chemical Company), killed at least 3787 people and injured from 150,000 to 600,000. The United Kingdom suffered its worst air pollution event when the December 4 Great Smog of 1952 formed over London. In six days more than 4,000 died and more recent estimates put the figure at nearer 12,000. An accidental leak of anthrax spores from a biological warfare laboratory in the former USSR in 1979 near Sverdlovsk is believed to have caused at least 64 deaths. The worst single incident of air pollution to occur in the US occurred in Donora, Pennsylvania in late October, 1948, when 20 people died and over 7,000 were injured.

Top ten gases in air pollution

Any gas could qualify as pollution if it reached a high enough concentration to do harm. In practice, about ten different substances cause most concern:

1. Sulfur dioxide: by Coal, petroleum, and other fuels.

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2. Carbon monoxide: when fuels have too little oxygen to burn completely.
3. Carbon dioxide: by breathe out and plants.
4. Nitrogen oxides: by result of combustion.
5. Volatile organic compounds (VOCs): by evaporation.
6. Particulates: by sooty deposits in air pollution.
7. Ozone: Also called trioxygen.
8. Chlorofluorocarbons (CFCs): widely used in refrigerators and aerosol.
9. Unburned hydrocarbons: Petroleum and other fuels.
10. Lead and heavy metals: Lead and other toxic “heavy metals.”

What are the causes of air pollution?

1. Traffic
2. Smog
3. Power plants
4. Industrial plants and factories
5. Other causes of air pollution

There are now practical alternatives to the three principal causes of air pollution.

- ♦ Combustion of fossil fuels for space heating can be replaced by using ground source heat pumps and seasonal thermal energy storage.
- ♦ Electric power generation from burning fossil fuels can be replaced by power generation from nuclear and renewables.
- ♦ Motor vehicles driven by fossil fuels, a key factor in urban air pollution, can be replaced by electric vehicles.

What effects does air pollution have?

Air pollution can harm the health of people and animals, damage crops or stop them growing properly, and make our world unpleasant and unattractive in a variety of other ways.

Human health

According to the World Health Organization (WHO), air pollution is one of the world’s biggest killers: it causes around three million people to die prematurely each year.

Health effects

Air pollution is a significant risk factor for a number of pollution-related diseases and health conditions including respiratory infections, heart disease, COPD, stroke and lung cancer. The health effects caused by air pollution may include difficulty in breathing, wheezing, coughing, asthma and worsening of existing respiratory and cardiac conditions.

Mortality

The World Health Organization estimated in 2014 that every year air pollution causes the premature death of some 7 million people worldwide. India has the highest death rate due to air pollution. India also has more deaths from asthma than any other nation according to the World Health Organization.

Cardiovascular disease

A 2007 review of evidence found ambient air pollution exposure is a risk factor correlating with increased total mortality from cardiovascular events (range: 12% to 14% per 10 microg/m³ increase).

Lung disease

Chronic obstructive pulmonary disease (COPD) includes diseases such as chronic bronchitis and emphysema.

Research has demonstrated increased risk of developing asthma and COPD from increased exposure to traffic-related air pollution. Additionally, air pollution has been associated with increased hospitalization and mortality from asthma and COPD.



Cancer

A review of evidence regarding whether ambient air pollution exposure is a risk factor for cancer in 2007 found solid data to conclude that long-term exposure to PM2.5 (fine particulates) increases the overall risk of non-accidental mortality by 6% per a 10 microg/m³ increase.

Children

In the United States, despite the passage of the Clean Air Act in 1970, in 2002 at least 146 million Americans were living in non-attainment areas—regions in which the concentration of certain air pollutants exceeded federal standards.

“Clean” areas

Even in the areas with relatively low levels of air pollution, public health effects can be significant and costly, since a large number of people breathe in such pollutants.

Central nervous system

Data is accumulating that air pollution exposure also affects the central nervous system.

In a June 2014 study conducted by researchers at the University of Rochester Medical Center, published in the journal *Environmental Health Perspectives*, it was discovered that early exposure to air pollution causes the same damaging changes in the brain as autism and schizophrenia.

Ayurvedic view:

- ♦ During ancient times, atmosphere poisoning was done as a military operation to harm the enemy by fumigation of toxic substances. To detect the presence of poison in the air, sushruta mention various measures.

♦ Effects of vishaja vayu:

*Dhooma anile vaa vishamprayukte khaga
shramarta prapatanti bhrou l*

*Kasa pratishyaya shirorujasch bhavanti treevah
nayanamayascha ll (S.K.3/16)*

- ♦ If the enemy uses poisonous fumes on air, the birds or flying creatures get fatigued and fall on the ground.
- ♦ Animals & people get
 - a) Nasal discharge
 - b) Cough
 - c) Headache
 - d) Various eye disorders.

- ♦ Vaayu vishaghna yoga (Air pollution Antidote) :

*Laaksha haridra ativisha abhayabda harenu
kailadala vakra kushtham l*

*priyangukam chaapyanale nidhaya
dhoomanilou chaapi vishodhayeta ll*

(S.K.3/17)

- ♦ Sushruta also describes the remedy for the poisoned air. The fine powder of the following drugs when used to fumigate the air is said to clear the atmosphere & relieve the toxic effects of poison.

DISCUSSION:

Actually air pollution is a big problem so we can manage it by two way – Modern & Ayurvedic. In compare to Modern science, Ayurvedic method is very cheap and feasible because which drugs are useful for air pollution like Lakshaa, Haridra etc. are cheap and easily available. Actually all Ayurvedic drugs have Vishaghna property that's why it purify the Air pollution. Still now this is the question mark that how Ayurvedic drugs can purify the air pollution. So it's our duty to do research in this topic by p.g.scholar and researchers because scientific validation is compulsory in present era.



S.N.	Ayu. Name	General name
1.	Lakshaa	Shellac
2.	Haridra	Curcuma longa
3.	Ativisha	Aconitum heterophyllum
4.	Abhaya	Terminalia chebula
5.	Musta	Cyperus rotundus
6.	Harenuka	Vitex negundo
7.	Ella	Elettaria cardamomum
8.	Tamalapatra	Cinnamomum tamala
9.	Vakra	Valeriana officinalis
10.	Kustha	Saussurea lappa
11.	Priyangu	Callicarpus macrophylla

CONCLUSION:

In present era, Air pollution is common and serious problem due to sources vehicles etc. So try to avoid causative factors of Air pollution. Alternative way is use of Solar energy etc. in vehicles and other gadgets. In ancient time, we can see the practical method of Ayurvedic way for air purification. So now-a-days we can apply the Ayurvedic way.

References

1. https://en.wikipedia.org/wiki/Air_pollution date - 25.02.2017
2. <http://www.explainthatstuff.com/air-pollution-introduction.html>
3. https://en.wikipedia.org/wiki/Air_pollution
4. Sushruta samhita



युवा मामले एवं खेल मंत्रालय भारत सरकार द्वारा आयोजित "युवा आदान-प्रदान कार्यक्रम" में आयुर्वेद संकाय, चिकित्सा विज्ञान संस्थान, काशी हिन्दू विश्वविद्यालय से मृत्युंजय द्विवेदी का चयन किया गया है। सरकार द्वारा आयोजित इस कार्यक्रम में चयनित होने वाले मृत्युंजय विश्व आयुर्वेद परिषद्, काशी हिन्दू विश्वविद्यालय की छात्र इकाई के कार्यकारिणी समिति के सदस्य तथा बी.ए.एम.एस. तृतीय वर्ष के छात्र हैं। उनका कहना है कि इस महत्वपूर्ण अवसर के मिलने से विदेशों में भारतीय मूल्यों एवं चिकित्सा पद्धति- आयुर्वेद से सम्बंधित सूचनाएं और प्रतिक्रियाएँ एक नयी सोच को जन्म देने में अहम् भूमिका अदा करेंगी। विश्व आयुर्वेद परिषद् परिवार की ओर से उनकी इस उपलब्धि के लिए हार्दिक बधाई।



STUDY OF SHARIRA PRAMANA FOUND IN GRAHYA SUTRAS AND AYURVEDA CLASSICS

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Aim: It is aimed to study in detail about the variables in sharira pramanas expressed in ancient texts. Since Ayurveda is considered to be the upaveda for Atharvana veda, the sister concerned treatises like Agama literature (under Kalpa, apart of Veda) throw a light on this topic. As Ayurveda is the science deal with sharira of human being, it is more appropriate to compare the subject dealt in other ancient texts with that of Ayurveda.

INTRODUCTION:

Vedas having six parts and one among them is Kalpa, that which deal with 4 sections, namely srouta, smarta, sulba and dharma sutras. The present study focuses over the part of smarta sutra called Grhya sutra, where in pramanas are described in detail, which is on par with Ayurveda knowledge.

METHOD OF STUDY:

The pramanas explained in (smarta) Grhya sutras (along with commentaries) are evaluated and compared with the classical texts of Ayurveda. The variability is thoroughly discussed and the conclusion is arrived. It is noted that the pramanas are in “angula”, “anjali” and “prastha” etc., as found in Ayurveda classics. The study is taken up to the vertical measurements as on today as per “Anatomy”. It is to note that the study has been started with “Vaikhanasa Grhyasutras” as it is told first among the grhyasutras.

Pramanas given in Grhya sutras (Vaikhanasa grhyasutra)

- All the living beings are measured about 96 aEgulâ with their Eguli (living beings are humans)
- There are 363 bones in the human body.
- Head contains 40 bones.
- Neck region – 50 bones
- shoulders and Hands – 50 bones
- Chest region – 5+5 bones
- Abdomen region – 30 bones
- Anterior pelvis (testicular region) – 20 bones
- There are 3+3 sevanyâ
- In penis, only one and 3 in thigh region
- 50+50 in two knees
- 5+5 in the calf areas
- 10+10 in two feet and 5+5 fingers
- 50 in the back of the pelvis
- Joints and snâyû are in number 9,000
- There are 72,000 nâdî.
- There are 200 Snâyû marma.
- There are 3, 50, 00,107 romachidra.
- There are swvedovahasrotas in number 60,70,000
- There are peûi in number 500.
- There are joints in number 200.

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- There are 9 out pass (apertures).
- Blood is in 10 añjalî.
- There are 8 añjalî of mala.
- There are 7 añjalî of mûtra.
- There are 6 añjalî of pitta.
- There are 5 añjalî of sleshma.
- There are 4 añjalî of vasâ.
- There are 3 añjalî of medas.
- There are 2 añjalî of majjâ.
- There is 1 añjalî of úiromajjâ.

- There is $\frac{1}{2}$ Añjalî of œukra.
- $\frac{1}{2}$ Añjalî of œukra is ojah.
- Or, there is or, there is $\frac{1}{2}$ *prasrthi* of ojah.

Pramanas

According to the classics, the patient should also be examined with the pramana or measurement of his bodily organs. Thus it is determined by measuring the height, length and breadth of organs by taking the finger breadth of the individuals as the unit of measurement.

Organs	Height	Length	Breadth	Circumference
Feet	4	14	6	-
Jangha		18		16
Knee		4		16
Thigh		18		30
Testicles		6		8
Phallus		6		5
Vagina				12
Waist			16	
Abdomen		12	10	
Parswa		12	10	
Nipples				2
Back	18			
Neck	4			24
Face	12			24
Mouth			5	
Head	16			32
Entire body	84		84	



Measurement not specified as length, breadth/ or circumference:

Other parts are

Forehead – 4

Nose – 4

Distance between eyes – 4

Chin – 4

Lip – 4

Ear – 4

Distance between nipples – 12

Hrudaya – 2

Shoulder – 18

Shoulder blade – 6

Arms – 16

Forearms – 15

Hands – 20

Axillae – 8

Thus, the measurement of individual organ of body is described. A body possessed of organs with proper measurements is endowed with longevity, strength, ojas, happiness, power, wealth and virtues. If the measurement is either low or high, the individual possesses qualities contrary to what has been mentioned above.

The measurement of organs are the most standard ones, but the circumference of organs like calf region varies. Therefore, the circumference of the middle part of such organs is furnished. The height of the head is 16 angulas. It should be measured from the point where the neck begins in the back side.

Total measurement is 84 angulas or 3 and a ½ hastas. If the height of all the organs described is taken together, it exceeds 84 angulas. This is because of the position of the height of one organ sometimes submerges into the height of another organ.

Three and a half hasta (arm length) in one's own arm is the height of the body suitable for a happy life.

[eg., 1 hasta = 45 cm, 3 and a half hasta = 157 cm. 157 cm is the average height of an adult].

This measurement does not apply to those who belong to Ashta nindita purusha such as aloma, atiloma, atisthula, atikrisha, atikrishna, and atigoura Height varies depending on many factors such as sex, habitat, race, heredity, etc.,

Anjali pramana

Substances of the body which can be measured by volume taking 'anjali' (space created by joining both the hands in the form of a cup as a unit are now being described. The measurement described here pertain to the ideal standard, these standards can undergo variation in the form of decrease or increase in a normal individual and this can be ascertained by inference.



Substance	Measurement (Anjali)
उदकम्(water)	10
रसः(rasa)	9
रक्तम्(blood)	8
पुरीषः(faeces)	7
कफः(kapha)	6
पित्तम्(pitta)	5
मूत्रम्(urine)	4
वसा(fat)	3
मेदः(adipose)	2
मज्जा(marrow)	1
मस्तिष्कः(c.s.fluid)	½
शुक्र(semen)	½
ओजः(in visible vitality)	½

In order to understand knowledge of life, we will describe the pramana of the body and its part

Antaradhi (trunk), sakthi (legs), bahu (arms) and siras – these are the angas (major parts). Again, the parts in each of these are the pratyangas.

In terms of one's own angula, the big toe and second toe are two angula (3.6 cm) each in length, the third, fourth and fifth toes by one fifth angula each in their succeeding order; the forefoot and sole each are four angula in length and five angula in breadth. The foot is fourteen

angula in length. The middle part of the foot, heel, calf and knee are fourteen angulas in circumference; calf is eighteen angulas in length. Above the knee, it is thirty-two in length, there together are fifty angulas, the thigh is equal to the calf in length. Testes (scrotum), chin, teeth, area of nostrils (alae nari), bare of the ear, eyebrow and space between two eyes are two angula in length. Penis, cavity of the mouth, nose, ears, forehead, height of the neck and space between the pupils is four angulas each. Width of the vagina, space between the penis and umbilicus, between umbilicus and heart, between



neck and two breasts, width of the mouth, thickness of the wrist and forearm – each is twelve angula. Circumference at indrabastimarma, distance between shoulders and elbow points is sixteen angula. Hand is twenty angula in length.

The length of two shoulders is thirty-two angulas. The circumference of the thigh is thirty two angula. The space between the wrist and elbow is sixteen angula in breadth the space between the bare of thumb and the index finger is five angula in length, and space between the orifice of the ear and outer canthus and the length of the middle finger each is five angulas. The length of the index fingers is five and a half

angula. The length of the little finger and thumb is three and a half angula. Breadth of the face and circumference of the neck is twenty four angula. The area of the nose is one and one third angula. Taraka (cornea) is one third of the eye. Drushti (pupil) is one ninth part of taraka the distance between the line of the hair (in the region of the temples) and the top of the head. Above the avarta (cricoid cartilage) in the neck is ten angula. The distance between the two ears from their back is fourteen angula. Pelvis of the woman is of the same size and width as the chest of man – 12 angula, breadth of the chest of the woman is 18 angula. Breadth of the waist of a man is of the same measurement. The length of the body of man is 120 angula.

Anguli pramanas according to Susruta samhita

SI no.	ORGAN	ANGULA
1	Padangushta (Big toe)	Length -2
2	Pradesini (Index toe)	Length-2
3	Madhyama (middle toe)	Length-1.6
4	Anamika (ring toe)	Length-1.28
5	Kanishthika (Little toe)	Length-1.02
6	Prapada (Dorsum of foot)	Length-4 Breadth-5
7	Pada talam (sole of foot)	Length-4 Breadth-5
8	Paarshini (Heel)	Length-5 Breadth-4
9	Pada (Foot)	Length-14
10	Pada,Gulpha,Jangha,Janu-madhaya (Middle of foot,Ankle,Shank &Knee)	Circumference-14
11	Jangha (shank)	Length-18
12	Janoparishta (above knee) Shank+Knee+Above Knee	Length-32 Length-50
13	Ouru(Thigh)	Length-18 Circumference-32
14	Vrshana(Testis)	Length-2
15	Chibuka(Chin)	Length-2



16	Dasana(Tooth)	Length-2
17	Nasa-puta-bhaga(Nostril)	Length-2
18	Karna-moola(Root of ear)	Length-2
19	Bhru (Eye brow)	Length-2
20	Nayananthara (Distance between eyes)	Length-2
21	Mehana (penis)	Length-4
22	Vadanantara (Buccal cavity)	Internal diameter-4
23	Nasa (Nose)	Length-4 Breadth-1.33
24	Karna (Ear)	Length-4
25	Lalata (Forehead)	Height-4
26	Greeva(Neck)	Height-4 Circumference-24
27	Drushyantara(Inter papillary distance)	Distance-4
28	Bhaga-vistharam (Perinium)	Breadth-12
29	Mehana-nabhi-antaram(distance between penis and umbilicus)	Length-12
30	Nabhi-Amasay-antara (distance between umbilicus and epigastrium)	Length-12
31	Hridaya-Greevantaram (distance between epigastrium and neck)	Length-12
32	Stanantaram (distance between nipples)	Distance-12
33	Mukha (Face)	Vertical length-12 Circumference-24
34	Manibandha (Wrist)	Circumference-12
35	Prakoshtam (Fore arm)	Circumference-12
36	Indra vasthi(Middle of shank)	Circumference-16
37	Amaskoota-Koorpara-antara(Distance between acromion and olecranon- upper arm)	Distance-16
38	Hasta(Hand-from tip of middle finger to elbow)	Length-24
39	Bhuja (arm)	Length-32
40	Manibandha-Koorpara-antara (distance between wrist & elbow)	Length-16
41	Pani talam (palm)	Length-6 Breadth-4
42	Angushta-moola-pradesini-antaram (distance between root of thumb and index finger)	Distance-5
43	Apaanga-Sravana-antram (distance between the lateral canthus and ear)	Distance-5
44	Madhyamaangule (middle finger)	Length-5
45	Pradesini (Index finger)	Length-5.5
46	Anaamika (Ring finger)	Length-5.5
47	Kanishatika (Little finger)	Length-3.5
48	Angushta (Thumb)	Length-3.5



49	Netra (Eye-palpalbral fissure)	Horizontal-2
50	Taraka (Corneal area- 1/3 rd of eye)	Diameter-0.67
51	Drshiti (pupil-1/9 th of cornea)	Diameter(variable)-0.07
52	Kesanta-mastaka antam (Vertex to temporal hair line)	Distance-11
53	Avatu-Kesanta-Mastakantam (Vertex to occipital hairline)	Distance-10
54	Karna-avatu-antaram (Ear to ear via occiput)	Distance-14
55	Stree-sroni(Female pelvis)	Breadth-18
56	Uras (Chest)	Breadth-18
57	Purusha-sroni(Male hip)	Breadth-18
	Total length of the body	120

Anguli pramanas according to Charaka samhita

SI No	ORGAN	ANGULA
01	Paada(foot)	Length-14 Breadth-6 Thickness-4
02	Jangha (shank)	Length-18 Circumference-16
03	Jaanu (knee)	Length-4 Circumference-16
04	Ooru (thigh)	Length-18 Circumference-30
05	Vrshana-kosa (scrotum)	Length-6 Circumference-8
06	Sephah (penis)	Length-6 Circumference-5
07	Bhagah (perineum)	Circumference-12
08	Katee (hip)	Breadth-16
09	Udara (abdomen)	Breadth-10 Length-12
10	Paarsva (flank)	Breadth-10 Length-12
11	Stanantaram (nipple to nipple)	Distance-12
12	Stanaparyantam (areola)	Diameter-2
13	Urah (thorax)	Breadth-24 Thickness-12
14	Hrudaya (epigastrium)	Height-2
15	Skhandhah (shoulder)	Length-8
16	Amsa (scapular region=shoulder to neck)	Distance-6
17	Prabaahu (upper arm)	Length-16
18	Prapaani(Fore arm)	Length-15
19	Paani (hand)	Length-12



20	Axilla (kaksha)	Diameter-8
21	Trikam (sacral area)	Height-12
22	Prshtam(back)	Height-18
23	Sirodhara (neck)	Height-4 Circumference-22
24	Aananam(face)	Length-12 Circumference-24
25	Aasyam (mouth)	Diameter-5
26	Chibuka (chin)	Breadth-4
27	Oshtam (lip)	End to end-4
28	Akshi- madhyam(eye to eye)	Distance-4
29	Naasika (nose)	Length-4
30	Lalatam (fore head)	Vertical length-4
31	Sirah(head)	Height-16 Circumference-18

Discussion

Pramana in this context refers to measurement. It is observed that the measurement of body organs goes with volumetric and anthropometric expression as it is applicable. Ayurveda texts have such descriptions very elaborately as per the context. Agama literature is much more earlier than the Ayurveda literature which has thrown a considerable light on life science subjects including life style for human race. There are certain differences found in the measurements of body parts expressed by classics of Ayurveda and Grahya sutras.

pramana [Body parts measurements]

Sl.no.	Body part	Agama (grihyasutra)	Ayurveda
1.	Body length	96 anguli	120 anguli
2.	Pitta	6 anjali	5 anjali
3.	Sleshma	5 anjali	6 anjali
4.	Rakta	10 anjali	8 anjali
5.	Vasa	4 anjali	3 anjali
6.	Majja	2 anjali	1 anjali
7.	Medas	3 anjali	2 anjali
8.	Mutra	7 anjali	4 anjali
9.	Sukra	½ anjali	½ anjali
10.	Total bones	363	300



11.	Total nadis	72000/301000	72000
12.	Total marmas	200	107
13.	Peshis	500	500
14.	Joints	200	210
15.	Roma chidras	3,50,00,107	---
16.	Swedavaha shrotas	60,70,000	---
17.	Randhras(bahya)	9	9
18.	Siro majja	1 anjali	---

The above table shows differences in number and measuring length and volumes are to be understood with the applicable time concerned. The total body measurement in Ayurveda 120 angulas, may be with “angushta cheda’ angula, where as Grahya sutras quoted 96 angulas as usual with finger. The number of total bones 363 as per Grahya sutras is considered with cartilages probably, but not a virtual situation. However, Ayurveda has given 300 bones which is not matching with today’s Anatomy. There is no mention of roma chidras and swedavaha srotas in any of the Ayurveda classic as it is found in Grihya sutras.

It is very interesting to see that dhatus have differences in their measurements between Ayurveda and Agama literatures. If Rakta dhatu is considered as blood which is of 5 to 5.5 litres in human body, accepted in Anatomy. Agamas told 10 anjalis and ayurveda told 8 anjalis, roughly come to 4 litres in Ayurveda and 5 litres in Agamas. The number of marmas in Agama is 200, which is varied from number given in Ayurveda i.e 107. The reason could be , identifying minor points at different parts than what it is told in Ayurveda.

Conclusion:

At the outset, the knowledge regarding life sciences, authenticity is bagged by Ayurveda only. However, Grihya sutras hold good in certain aspects, owing to their antiquity with contemporary sciences. The physiological perspectives expressed in Grahya sutras claim equal value with existing medical sciences.

References:

1. Charaka samhita with chakrapani commentary, edited by yadavji trikamji acharya.
2. Susruta samhita with dalhana commentary, edited by yadavji trikamji acharya
3. Ahtanga hridaya with hemadri and arunadatta commentery, edited by y.t.acharya
4. Vaikhanasa smarta sutranukramanika with nrisimha vajapeyee commentary, edited by parthasaradhi bhattacharyulu
5. Ashtadasa sutra sameeksha in telugu, edited by parthasaradhi bhattacharyulu



परिषद् समाचार

आयुर्वेद कौशलम् – 2017

विश्व आयुर्वेद परिषद उत्तराखण्ड के तत्वाधान में आयुर्वेद विद्यार्थियों/चिकित्सकों का सात दिवसीय शिविर दिनांक 6 जून से 12 जून 2017 तक अग्रवाल धर्मशाला देहरादून में आयोजित किया गया। जिसमें देश के 7 प्रान्तों से 17 आयुर्वेदिक कॉलेजों के 146 विद्यार्थियों/चिकित्सकों ने भाग लिया। कौशलम शिविर का उद्घाटन दिनांक 6 जून को मा० युद्धवीर सिंह प्रान्त प्रचारक राष्ट्रीय स्वयं सेवक संघ उत्तराखण्ड मुख्य अतिथि प्रो० सौदान सिंह, कुलपति उत्तराखण्ड आयुर्वेद विश्व विद्यालय सारस्वत अतिथि एवं मुख्य वक्ता प्रो० सुनील जोशी ऋषिकुल परिसर निदेशक एवं डा० प्रेमचन्द्र शास्त्री, राष्ट्रीय सचिव के सानिध्य में हुआ। डा० यतेन्द्र मलिक, अध्यक्ष विश्व आयुर्वेद परिषद में अतिथियों का परिचय एवं स्वागत करते हुये मंच संचालन किया। डा० प्रेमचन्द्र शास्त्री, राष्ट्रीय सचिव ने विश्व आयुर्वेद परिषद के क्रियाकलापों पर विस्तार से चर्चा की।

शिविर के मुख्य संयोजक वैद्य विनिष गुप्ता, वैद्य अनुमेहा जोशी ने अतिथियों एवं प्रतिभागियों को शिविर की रूप रेखा एवं सप्ताह भर के क्रियाकलापों के बारे में जानकारी दी। मा० युद्धवीर सिंह प्रान्त प्रचारक ने अपने बौद्धिक में प्रतिभागियों को समयबद्धता, अनुशासन व सामजस्य की भावना के साथ रहकर शिविर का लाभ उठाना चाहिए ऐसे आयोजन अधिक सार्थक होते हैं। विश्व आयुर्वेद परिषद द्वारा आयोजित शिविर से छात्रों एवं समाज में आयुर्वेद के प्रति आकर्षण एवं विश्वास पैदा किया जा सकेगा।

प्रो० सौदान सिंह कुलपति महोदय ने आयुर्वेद चिकित्सा पद्धति को देश की सम्पत्ति बताया और उत्तराखण्ड जैसे राज्य में जहां जड़ी-बूटी की प्रचुरता है आयुर्वेद के विकास के लिये पर्याप्त अवसर हैं। यह सही है कि देश में एलोपैथी के सापेक्ष आयुर्वेद को कम महत्व दिया गया है लेकिन उत्तराखण्ड में आयुष के पृथक विश्वविद्यालय की स्थापना होना एक सुखद संकेत है। आयुर्वेद जीवन का विज्ञान है और स्वस्थ जीवन के लिये आयुर्वेदीय स्वस्थवृत्त अपनाते हेतु जनसाधारण को प्रेरित किये जाने की आवश्यकता है। आयुष चिकित्सक अपने कार्यों को प्रमाणिकता के साथ प्रस्तुत करें जिससे कि विश्वस्तर पर आयुर्वेद की स्वीकार्यता बढ़ सके। प्रो० सुनील जोशी ने मर्म चिकित्सा पर अपना व्याख्यान प्रदर्शन एवं रोगी पर प्रत्यक्ष रूप से प्रस्तुत किया शरीर के अन्दर 107 ऐसी संवेदनशील बिन्दु हैं जो मर्म की श्रेणी में आते हैं इनकी स्थिति को समझ कर उंगलियों से इन बिन्दुओं को दबाया जाता है। वात एवं स्नायु तंत्र के जटिल रोगों में इस विधि से बहुत लाभ मिलता है।

शिविर में विभिन्न प्रान्तों से आये लगभग 20 विशेषज्ञ चिकित्सकों व पारंपारिक वैद्यों ने अपने-अपने अनुभव से प्रतिभागियों को अवगत कराया श्रीनगर गढवाल से वैद्य सुशान्त मिश्रा ने नाड़ी परीक्षण, वाराणसी के वैद्य वीरेन्द्र वर्मा ने अपने चिकित्सीय अनुभव एवं मूसली कृषिकरण, वैद्य भूपेन्द्रमणि त्रिपाठी ने संहिता-ए क्लिनिकल एपरोच, करनाल से डा० मनोज विरमानी ने पंचकर्म चिकित्सा एवं सोराईसिस रोग चिकित्सा, डा० बलदेव धिमान निदेशक आयुष हरियाण संहिता-अध्ययन, डा० आर० पी० गोस्वामी ने आयुर्वेद में कैंसर चिकित्सा, वैद्य अनुमेहा जोशी ने गुदरोग एवं क्षार सूत्र निर्माण व प्रयोग, देहरादून के रेडियोजालिस्ट डा० आर० के० सिंह ने एक्स-रे रीडिंग सम्बन्धी सामान्य ज्ञान, अहमदाबाद से वैद्य राजेश ठक्कर ने ऐविडेन्स बेस्ड केश प्रेजेन्टेशन एवं बंध्यत्व एवं गर्भ संस्कार पर अपने चिकित्सीय अनुभव प्रदर्शन के माध्यम से सप्रमाण प्रस्तुत किया। उज्जैन से डा० अरोड़ा ने अग्नि कर्म का रोगियों पर प्रत्यक्ष दर्शन एवं अल्सरेटिव कोलाइटिस पर अपना प्रदर्शन, वैद्य रिजु ने अभ्यंग, अक्षिपूरण, कर्णपूरण का प्रत्यक्ष प्रदर्शन, हरिद्वार के डा० दिनेश कुमार ने वास्तु एवं ज्योतिष का चिकित्सा में महत्व, डा० विमल उपाध्याय ने हर्बल कॉस्मैटिक निर्माण का प्रत्यक्ष



प्रदर्शन, सहसपुर के पारंपरिक वैद्य रघुवीर प्रधान ने श्रंगी प्रयोग का रोगियों पर प्रत्यक्ष प्रदर्शन वैद्य रिजु व अनुमेहा जोशी ने जलोका प्रयोग विधि प्रत्यक्ष प्रदर्शन, सामली उत्तरप्रदेश से आये डा० राज तायल ने तमक श्वास में कर्ण भेदन विधि एवं अपने चिकित्सीय अनुभव, गंगानगर से डा० ज्योति वर्मा ने द्रव्यों की शुद्धता की पहचान करने की विधि, डा० सुरेन्द्र चौधरी नोयडा एवं अध्यक्ष विश्व आयुर्वेद परिषद् उत्तर प्रदेश ने लीगल ऐसपैक्टस इन आयुर्वेद पर प्रदर्शन दिया। इसके अतिरिक्त प्रतिभागियों को नित्य प्रातःकालीन योग, प्रणायाम व नस्य कर्म का अभ्यास योगाचार्य श्रीमती पुष्पा गुंसाई ने कराया। इसके बाद वैद्य श्याम तिवारी ने संहिता-पाठन भी प्रतिदिन कराया। दिनांक 12/06/2017 को शिविर का समापन समारोह सम्पन्न हुआ जिसमें डा० एस फारुख प्रबन्ध निदेशक हिमालय ड्रग कम्पनी मुख्य अतिथि, डा० हरिमोहन चन्दोला पूर्व निदेशक, चौ० बी० पी० चरक आयुर्वेद शोध संस्थान नई दिल्ली अध्यक्षता, डा० मायाराम उनियाल पूर्व निदेशक विशिष्ट अतिथि, प्रो० आर० बी० सती गुरुकुल परिसर निदेशक, डा० सुरेन्द्र चौधरी अध्यक्ष विश्व आयुर्वेद परिषद् उत्तरप्रदेश उपस्थित रहें। प्रतिभागियों एवं विशेषज्ञों को अतिथियों द्वारा प्रमाण पत्र एवं अपराजिता का औषधिय पोधा देकर सम्मानित किया गया इससे पूर्व प्रतिभागियों ने अपने शिविर के अनुभव व्यक्त किये एवं प्रायः सभी ने शिविर को अपने लिये उपयोगी बताया और आयुर्वेद के प्रति उनके मन में विश्वास उत्पन्न हुआ। शिविर व्यवस्था में श्री रजनीश गर्ग सी०ए० एवं उनकी टीम का विशेष योगदान रहा।

लक्ष्य –2017 का आयोजन

लक्ष्य-2017 प्री पी जी आयुर्वेद प्रवेश परीक्षा अखिल भारतीय स्तर पर विश्व आयुर्वेद परिषद् इकाई द्वारा 6 जिलों ग्वालियर, रीवा, भोपाल, उज्जैन, इंदौर, जबलपुर में 23 अप्रैल को सभी जिलों में एक साथ आयोजित हुई। जिसमें कुल 286 छात्रों ने भाग लिया। जिसमें से अधिकतम अंक प्राप्त 6 छात्रों को एमिल फार्मा. द्वारा पुरस्कृत किया जायेगा। प्रो. उत्कर्ष कल्याणकर, प्री पी जी आयुर्वेद प्रवेश परीक्षा के आयोजन अध्यक्ष, वैद्य लोकेश, आयोजन सचिव एवं सभी केंद्राध्यक्ष प्रो. अजीत पाल सिंह, प्रो. दिनेश मालवीय, प्रो. व्यास, प्रो. रविप्रकाश सिंह, डॉ. श्री नारायण, डॉ. अश्वनी विद्यार्थी रहें। आयोजन महासचिव डॉ. रवि श्रीवास्तव रहें।

पश्चिम बंगाल की प्रादेशिक कार्यकारिणी की बैठक सम्पन्न

विश्व आयुर्वेद परिषद्, पश्चिम बंगाल की प्रादेशिक कार्यकारिणी की बैठक दिनांक 23/05/2017 को कलकत्ता में सम्पन्न हुई। जिसमें प्रदेश संयोजक- डॉ० पवन कुमार शर्मा, वैद्य एस०पी० शर्मा, अध्यक्ष पश्चिम बंगाल इकाई, प्रियंकार पालिवाल, महामंत्री एवं डॉ० ए० एस० ओझा, कोषाध्यक्ष उपस्थित रहें। डॉ० संजीव सामंथा, डॉ० पी० सी० त्रिपाठी, एवं एस० के० श्रीवास्तव सहित प्रदेश के विभिन्न जिलों से आये सदस्यों ने भाग लिया। बैठक में प्रदेश इकाई द्वारा वार्षिक कार्यों की समीक्षा एवं भविष्य में आयोजित किये जाने वाले कार्यों तथा संगठन के विस्तार पर चर्चा हुई।

वाराणसी में चिकित्सा शिविर का आयोजन

विश्व आयुर्वेद परिषद् वाराणसी इकाई एवं कायचिकित्सा विभाग, काशी हिन्दू विश्वविद्यालय एवं कायचिकित्सा विभाग, राजकीय आयुर्वेद महाविश्वविद्यालय वाराणसी के संयुक्त प्रयास से कंठीपुर ग्राम में दिनांक 7/5/2017 को निःशुल्क स्वास्थ्य परामर्श एवं चिकित्सा शिविर का आयोजन किया गया। शिविर में प्रो० जे०एस० त्रिपाठी, डॉ० राजेन्द्र प्रसाद, डॉ० अजय पाण्डेय, डॉ० के० के० द्विवेदी, डॉ० मनीष मिश्रा, डॉ० अम्बरीश, डॉ० अभिनव, डॉ० सद्वृत्त अम्लानी, डॉ० सनी आदि चिकित्सकों ने अपनी सेवायें दी।



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Rationale and Fundamental thoughts in the form of essay are invited on the given topic i.e.

"Standardization of the Specific Word "Panchaavayava (Pratigya, Hetu, Uдахarana, Upanaya, Nigamana) come in Ayurvedic Literature; In the Perspective of Research"
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Rules and Regulations

- Central committee will honor along with a citation, Gold medal with Rs. 11000/- to best essay, Silver medal with Rs. 7000/- to 1st runner up and Bronze medal with Rs. 5000/- to 2nd runner up candidates.
- All the MD/MS (Ay.) students can participate in the essay competition. Essay should be single sided in computerized typing on A4 size paper, having fonts size 12 with 1.5 spaces in three copies.
- It should be in English, Hindi or Sanskrit having not less than 1500 words or six pages.
- At the last page of essay, participants should clearly mention their full details viz. name, year, and name of college/institute, corresponding address, contact number, email-id, name of motivator and his mobile number.
- Three references under coding will evaluate the essays.
- Decision of committee will be full and final.
- The last date for submitting the essays in **triplicate copies** and also **softcopy through e-mail** up to **30 June 2017** on given corresponding address.
- Essay should be dually attested by Principal/Supervisor/State convener to certify that participant is regular student of the particular institution.
- Awarded essays will be published in Journal of Vishwa Ayurved Parishad, Monthly Publication of National Journal of Holistic Health Management.
- For more details, contact the member of state convener or log on to our website www.vishwaayurveda.org.in.
- The Prize Distribution ceremony will be organized at Bhopal (M.P.)
- Those PG student had gotten any prize/position before organized P.G. Essay Competition. They will only participant as a P.G. Student in coming P.G. Essay Competition.

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