The prestigious 'Life time achievement award'
To Dr. P. H. Kulkarni

Price Rs. 300
Dubai diaries

Dr. Mrs. Indapurkar Kavita Vinayak, MD, PhD (Ayurved)
Editor of Deerghayu International, The peer reviewed Ayurveda /Health journal since 1984, Included in Indian Citation Index
Founder and President R. K. Academy.
Professor & Head Kriya Sharir Vidnyan. Bharati Vidyapeeth Deemed University, College of Ayurved, Pune 43. India.
(9890791688)

Dubai is the largest and most populous city in the United Arab Emirates (UAE). On the southeast coast of the Persian Gulf, it is the capital of the Emirate of Dubai.

The UAE is home to over 200 nationalities. Emiratis constitute roughly 20% of the total population, making UAE home to one of the world's highest percentage of immigrants.

Dubai has one of the best public health systems in the world, offering a high standard of medical care in state-of-the-art facilities. It is run by the Dubai Health Authority (DHA), which oversees both public and private healthcare.

People show interest in Ayurveda and Yoga….I have observed that, new builders in there advertisements add in their amenities, yoga meditation centres on priority basis.
Deerghayu International Council of Editors

1) Dr. Bhalsing Manisha
2) Dr. Bhandare Kishor
3) Dr. Bothare Mudha
4) Dr. Chote Vikas
5) Dr. Daspute Swapnil
6) Dr. Deshmukh Devika (CA, USA)
7) Dr. Deshmukh Ramesh
8) Dr. Deshmukh Shubhada
9) Dr. Ghodke Kaustubh
10) Dr. Ghotekar Munali
11) Dr. Gupta Shivani
12) Vd. Irani Farida (Sydney, Austr.)
13) Dr. Kadampatil Ruturaj
14) Dr. Kale Shashikant
15) Dr. Kamat-Devkare S.
16) Dr. Kamble Pushpalata
17) Dr. Khadilkar Ravindra
18) Dr. Kulkarni Eknath
19) Dr. Kulkarni Yogini
20) Dr. Kurmi Kurush
21) Dr. Lalitha B. R.
22) Dr. Mahajan Madhavi
23) Dr. Mohare Harshad
24) Dr. Muke Abhinandan
25) Dr. Mukherji Pradnya
26) Dr. Phadnis Manoj
27) Dr. Phalle Shaillesh
28) Dr. Pingle Kirti (CA, USA)
29) Dr. Puranik Geeta
30) Dr. Patwardhan Manish
31) Dr. Pawar Chandrakant
32) Dr. Pund Sanjay
33) Dr. Rokade Patil Sagar
34) Dr. Rokade Patil Sanvi
35) Dr. Samant Rani (Melbourne, Austr.)
36) Dr. Sardeshmukh Sukumar
37) Dr. Tagare Maheshwar
38) Dr. Terwadkar Sharduli
39) Dr. Tommasini Lucia (Italy)

Subscription Rates

<table>
<thead>
<tr>
<th></th>
<th>1 Year</th>
<th>Rs. 500/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertisement Tariff</td>
<td>Per Insertion</td>
<td></td>
</tr>
<tr>
<td>Full page B &amp; W</td>
<td>Rs. 2000/-</td>
<td></td>
</tr>
<tr>
<td>Half page B &amp; W</td>
<td>Rs. 1200/-</td>
<td></td>
</tr>
<tr>
<td>Full page 2/3 colour</td>
<td>Rs. 10000/-</td>
<td></td>
</tr>
<tr>
<td>Cover page 4 colour</td>
<td>Rs. 12000/-</td>
<td></td>
</tr>
<tr>
<td>Front Cover</td>
<td>Rs. 15000/-</td>
<td></td>
</tr>
<tr>
<td>Sponsoring one article</td>
<td>Rs. 2000/-</td>
<td></td>
</tr>
</tbody>
</table>

Discount for Annual contract

1) Name of Account: "Deerghayu International"
2) Bank Name & Address: UCO BANK, Kothrud Branch, near Post Office, Pune - 38.
3) Bank Account No. 146902000000611.
4) IFSC (India Financial System Code) of the bank UCBA 0001469.
6) Tel. No. of Bank - 91-20-25380076
Index

<table>
<thead>
<tr>
<th>Review</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Conceptual Insight of Terminology in Rachana Sharir: A Review</td>
<td>3</td>
</tr>
<tr>
<td>Satpal Nirania, Indra Rani</td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td></td>
</tr>
<tr>
<td>2) Effects Of Yoga Therapy On Diabetes Mellitus In Nursing Staff Of S.G.H.</td>
<td>13</td>
</tr>
<tr>
<td>Akut Priyanka V. Sangle S. A., Ambekar M. S.</td>
<td></td>
</tr>
<tr>
<td>3) Purusharthas Past &amp; Present</td>
<td>18</td>
</tr>
<tr>
<td>Lucia Tommasini Giannandrea</td>
<td></td>
</tr>
<tr>
<td>Case Study</td>
<td></td>
</tr>
<tr>
<td>4) Pittaj Daha - A Single Case Study</td>
<td>22</td>
</tr>
<tr>
<td>Yashashri Vitonde, A. K. Burley</td>
<td></td>
</tr>
<tr>
<td>5) Concept of Dosha - apprehension and assessment</td>
<td>27</td>
</tr>
<tr>
<td>Mrs. Indapurkar Kavita</td>
<td></td>
</tr>
</tbody>
</table>
Conceptual Insight of Terminology in Rachana Sharir: A Review

Satpal Niralia, Indra Rani

Satpal Nirania

Indra Rani
Conceptual Insight of Terminology in Rachana Sharir: A Review

Dr. Satpal Nirania¹*, Dr. Indra Rani²,
1. PG Scholar of Dept. of Rachana Sharir, Ch. Brahm Prakash Ayurved Charak Sanathan, Najafgarh, New Delhi-110073. Mail id – satpal2652@gmail.com, 7307757840.
2. PG Scholar of Dept. of Kriya Sharir, Ch. Brahm Prakash Ayurved Charak Sanathan, Najafgarh, New Delhi-110073. Mail id – ayurvedindra@gmail.com Mob. No. 9650399524.

Abstract: Ayurveda is life science, which consequences all the knowledge of body for healthy life. Life is the combination of four entities viz. sharir, indriya, sattva and atma. Acharya Susruta is considered as father of surgery. Acharya Susruta has given careful consideration towards the basic organization of the human body. He ought to be considered as the father of Rachana Sharir. Acharya Charka additionally contemplated the organization of the human body and different organs. Many other acharyas have contributed their opinion regarding organization of body. The knowledge of Rachana Sharir is mandatory for the students for come across the practice of each system of medicine. It is a vibrant focus in pre-clinical studies. So the present paper is aimed to make easy the concepts of Rachana sharir and make easy to understand the views of various ayurvedic texts.

Key words: anatomy, ayurveda, sharir (44).

Introduction:
Ayurveda is life science, which consequences all the knowledge of body for healthy life. Life is the combination of four entities viz. sharir, indriya, sattva and atma[1]. Rachana Sharir (Anatomy) is broadly appreciated as being one of the keystones of Ayurveda. If we go through the Ayurvedic literature, it seems that anatomy is well recognized from acharya Susruta’s time. Acharya Susruta is considered as father of surgery even today, however on the off chance that we experience the Ayurvedic texts, basics of human body structures are correctly depicted so he ought to be considered as the father of Rachana Sharir. Acharya Susruta has given careful consideration towards the basic organization of the human body. This was accentuated to such a degree, to the point that no specialist should begin his carrier in Surgery except if he is very much aware with body structures. Acharya Charka additionally contemplated the organization of the human body and different organs. He additionally portrayed various numbers of muscles, joints and so forth in human body. Many other acharyas have contributed their opinion regarding organization of body. The knowledge of Rachana Sharir is mandatory for the students for come across the practice of each system of medicine. It is a vibrant focus in pre-clinical studies. So the present paper is aimed to make easy the concepts of Rachana sharir and make easy to understand the views of various ayurvedic texts.
Sharir (Body): Body is defined as the seat of consciousness composed by aggregation of the product of the five mahabhutas and carrying of equilibrium maintaining health and imbalance get subjected to disease\(^2\). Acharya Susruta mentioned that when garbha is endowed with hands, feet, tongue, nose, ear, buttocks etc. then it derive the name sharira (the body)\(^3\). These are of two types i.e. Sathul Sharir (Gross Body) is a combination of panchmahabhuta (five external elements) and it provide milieu for consciousness. It is also seat of all diseases and pains. Other one is Sukshma Sharir (Subtle Body), is composed of eighteen elusive substances such as five sense-organs, five karmendriya (motor organs), mahat (intellect), ahamkara (ego), manas (mind) and five tanmatra (subtle elements). Subtle body carries all impression of previous life through mind. Subtle body is a seat of consciousness.

Shadangasharir (Regional anatomy): Acharya Charak and Susruta have divided the human body into six following regions two upper extremities, two lower extremities, head, neck and trunk. Acharya Vagbhatta has also said that head, trunk, two arms and two legs are in brief the six anga (component) of the body\(^4\).

The head is the controller of all our activities and the trunk have an important role in vital functioning such as respiration, digestion, metabolism and excretion. In the form of physical activity and locomotion, the extremities are destined.

Other smaller parts of body are considered as pratyanga which are positioned in the larger angas (parts) which includes umbilicus, nose, chin, ears, eyes, eye-brow, temporal bone, axilla, breasts, testis, knees and fingers. Pratyanga also includes kala (various membranes), liver, spleen, lung, caecum, heart, bones, joints, srotas, sira and dhamani.

Pramana Sharir: Pramana means measure, scale and standard. Angul-pramana is one of the important concepts of ayurveda which is of anatomical significance for determination of ayu (longevity), ojas (immunity) and bala (strength) of an individual. In relation to measure the body entities there are two types of pramana – anjali-pramana and angul-pramana. Anjali-pramana is considered for the measurement of dosha and dhatu while angul-pramana is useful for rule out growth and development of different body parts. Angul-pramana play a major role in determination of life span of a person. It enlightens that individual having appropriate measurement will attain the long life. In ayurved different acharya describe the length and breadth of different anga-pratyanga (body parts) measuring by angula. As length and breadth of fingers of every person differs from each other, that’s why for measuring body parts own angul of individual is taken, considered as swaangul. In modern science pramana-sharir is described under the heading of anthropometry which is useful for assessing height, age, race and nationality of an individual. It deals with the systemic measurement of body size and shape\(^5\).

Twak: Twacha (skin) is one of the five sensory organs. It helps to make a sense of touch and regulate sensation and covers whole body. It has direct relation with manas (mind), considered as cheta-samvayi. During the process of fertilization, union of sperm (shukra)
and ovum (sonita) in uterus (garbhashaya) it undergoes transformation of seven layers of skin in third and fifth month of fetal age. According to modern skin is derived from three diverse components. The dermis on the dorsal aspect of head and trunk arises from dermatomes. The dermis of limb, lateral and ventral aspect of trunk arises from lateral plate of mesoderm. The dermis over most of head and over anterior aspect of neck is derived from neural crest.[6]

**Garbha (Fetus):** During the process fertilization Shukra (semen) and sonita (ovum) combine with atma (soul), prakriti (primary stuff) and vikara (primary evaluates) is known as garbha (embryo).[7]The combination of sperm, ovum and soul when get implanted in the uterus, is known as embryo[8].

**Prana (vital breath):** Agni, soma, vayu, sattva, rajas, tamas, panch-indriya and bhutatma together constitute prana[9]. Damage of any one among them can lead to death definitely.

**Prana-ayatana:** There are only ten seats where vital breath is located such as two temples (sankha), three vital organs (heart, urinary bladder and head), kantha (larynx and tracheal region), rakta (blood), shukra (sperm), ojas (vital essence) and guda (anal region). A physician who has knowledge of these vital seats, sense organs, consciousness and disease, is known as the promoters of vital breath (life).[10]

**Kala (membrane/sheaths):** Kala is a membrane which covers inner side of all dhatu (tissues) and asayas (hollow organs). These are seven in number[11]. It is just as pith which is seen when the wood (stem of tree) is splitted, similarly when dhatu like mamsa (muscle) etc. are splitted, kala become visible. These are distinguished as snayupratichanna (covered/formed from ligaments), jarayusantata (expansion of / continuation of fetal covering) and slesmavastita (coated with kapha).The moisture present in the dhatu (tissues) undergo transformation by the heat of the body and differentiated into structure known as kala (membrane or sheath).[12]The moisture that remain in the dhatu (tissues) gets processed by heat of tissues, differentiated into structure similar the stem of tree and get covered with snayu (tendon like sheath), sleshma (kapha), and jarayu (chorionic membrane). It is called kala, as it is formed from very little quantity of rasa and essence of dhatu (tissues).

**Asthi-Sanghata (Confluence of bones):** Asthi-sanghata are fourteen in number, present in gulpha, janu and vankshan (groin) in both leg and in both arms are manibandha, kurpara and kaksha, one each is at the trika (upper back) and sira (head).[13] Commentator Dalhana has elaborated two structures as trika, although one in pelvis and other in upper back (between both shoulder and neck) considered as one in asthi-sanghata.

**Simanta (Border/binding structures):** Simanta (structure forming the boundary) are also fourteen in numbers, these are counted similar to asthi-sanghata as having confluence of bones, because confluences are bound by these. Asthi-sanghata having such simanta are eighteen according to some other authorities[14].

**Marma (Seat of life):** Marma (Fatal spot) are convergence of muscle, veins, ligaments, bones and joints. In these places prana (life) resides specially by nature, hence when fatal
spots are injured, the produce their respective effects even death\textsuperscript{[15]}. The \textit{marma} (vital spots) are so called because they can cause death. They are the meeting place of muscles, veins, tendon, bones and joints. Any injury or assault to them especially cause danger to life\textsuperscript{[16]}. On assault which can lead to death is called \textit{marma}\textsuperscript{[17]}.

\textbf{Shira (Head)}: It is seat of vital breath of living being, which is located along with all the sense organs. It is superior to all organs is known as head\textsuperscript{[18]}. \textit{Shira} is prime site of \textit{pranavayu}, alochakapitta and tarpakakapha also seat of thirty seven \textit{marma} (vital points). It is stated that man is like tree having his root above and branches below, hence disease which destroy the root should be won over quickly from root.\textsuperscript{[19]} \textit{Shira} is vital organ where all the sense organs resides and \textit{prana} (life activity) is centralized, and chief among all the parts of the body should be protected.

\textbf{Hridya (Heart)}: \textit{Hridya} is understood similar to \textit{pundrika} (lotus bud) is facing downward, it opens when the person is awaken and close when person is into deep sleep. It is a vital organ of body, any injury to it definitely lead to death\textsuperscript{[20]}. It is considered as prime site of \textit{sadhakpitta}, \textit{vyanvayu} and \textit{avlambakakapha}. It is one among \textit{tri-marma} of body.

\textbf{Basti (Urinary Bladder)}: \textit{BastilMutarasaya} is receptacle organ of \textit{mutra} (urine) and an important seat of life. It is situated in the midst of the umbilicus, back, waist, scrotum, rectum, groin and penis. It is a structure having thin covering with one orifice and placed facing downward. \textit{Basti} (bladder), \textit{bastishira} (fundus of bladder), \textit{pourusa} (prostate), \textit{vrisana} (testicles) and \textit{guda} (rectum) are interrelated and situated inside the cavity of the pelvis, pelvic bone and rectum. It is similar to \textit{alabu} (pitcher gourd) in shape and supported by \textit{sira} (veins/blood vessels) and \textit{snayu} (ligaments).\textsuperscript{[21]}

\textbf{Srotas (Channels)}: \textit{Srotas} are channels of circulation or tracts within the body. These are having the tendency of trickling or oozing of secretions so considered as \textit{srotas}. These are pathways (\textit{ayana}) for nutrient products, waste-products and \textit{dosha} during metabolism. \textit{Srotas} are originated from vacant spaces (hollow organs) spread throughout the body and purveys materials are considered as \textit{srotas} (channels). These are apart from \textit{sira} and \textit{dhamn} \textsuperscript{[22]}. \textit{Srotas} are defined as transporting passage of \textit{dhatus}, undergoing transformation \textsuperscript{[23]}. \textit{Srotas} are passage from which \textit{manas} (mind), \textit{prana} (life), \textit{anna} (food), \textit{jala} (water), \textit{dosha}, \textit{dhatu}, \textit{updhatu}, \textit{mala}, \textit{mutra} or \textit{vistha} are transported, are called \textit{srotas}. These are numerous and immeasurable\textsuperscript{[24]}. The basic sites of \textit{srotas} are different with different functions and are fixed as they are carrying the material, their openings are innumerable. The \textit{Srotas} can be correlated with the unicellular structures such as capillaries or alveoli of lungs.

\textbf{Sira (Vein)}: \textit{Sira} are those vessels which tend to take \textit{doshas} (impurities) along with them. \textit{Sira} is considered as \textit{sarnat-sira} i.e. smooth flow. Acharya Susruta has stated \textit{sira} in two context first i.e. \textit{sira} has been used to denote the vessels second in specific sense \textit{sira} means veins. In general, \textit{sira} includes artery, vein, capillary and lymphatic together. These are 700 in number and four types depending upon the site and transport of particular \textit{dosha} such as \textit{vatavahasira}, \textit{pittavahasira}, \textit{kaphavahasira} and \textit{raktavahasira} each is 175 in
numbers. All *sira* are originated from the umbilicus, from where they travel upward, downward and in oblique directions. In the fetal life *sira* are concerned with the nutrition of the fetus through the umbilical cord, thus *acharya Susruta*’s description regarding the origin of *sira* seems to be correct. *Acharya Susruta* has mentioned *siramarma* and also the description of bloodletting and vena section (*sira-vedhan*) which is substitute to various surgical procedures. In various diseases, there is specific anatomical site is mentioned for *sira-vedhan* for particular disease [25].

**Dhamani (Artery)**: *Dhamani* is tubular vessel or canal starting from heart or from the naval to carry *rasadhatu*. *Dhamani* refers to *dhamanad* considered as a tract which produces pulsation. *Acharya Susruta* has mentioned that *dhamani* are different from *sira* by virtue of pulsatile movement. Also *sira* and *dhamani* are the channels other than *srota*. *Dhamani* originate from *nabhi* (umbilicus) and these are twenty four in number dispersing ten upward, ten downward and four obliquely. In Charak *samhita*, Astanga-sangraha and Astanga-hridaya, *nabhi* word has been used in context to fetal life. *Acharya Charak* has also stated that *dhamani* arise from *hridya* and 200 in numbers [26].

**Sevani (Suture/ Raphe)**: *Sevani* (sutures/raphe) are seven in numbers, among them five are in head and one each in tongue and *sephas* (penis). These should be avoided from the use of sharp instruments (surgical operation). [27] Injury to *sevani* (Raphe) give rise to pain [28]. Among seven these are two in *sankha* (temporal region), two in *karkatika*, one is going direct on head one in tongue and one in *sephas* (raphe of scrotum) [29]. *Raphe*: A fibrous band made up of inter-digitating fibers of the tendon or aponeurosis, unlike a ligament, as it is stretchable. *Suture*: These are peculiar to skull and immovable. Depending upon the contour of bony margins, the suture can be plane, squamous serrate etc.

**Kurcha (Brush like Structure)**: *Kurcha* are six in numbers. They are two in hands (one in each), two in feet (one in each foot), one in neck and penis. [30] *Kurcha* are spread like *jala* (net) in body. These are the structures which are made up of muscle, bones, veins and ligaments. Aponeurosis is flattened tendon.

**Jala/Jalak (networks of lymphatic, arteries or nerves)**: There are four *jala*. These are each of *mamsa-jala* (muscle), *sira-jala* (veins), *snayu-jala* (ligaments) and *asthi-jala* (bones) separately. In *manibandha* (wrist) and *gulpha* (ankle) these are present together combine with one another and forming windows (space in between) by their combination. These four kinds of network form *gavaksita* (having window) in entire body [31].

**Kandra (Tendon)**: *Kandra* is considered as thick *snayu* (ligaments) [32]. *Commentator Dalhana* has mentioned *Kandra asmaha-snayu* (big ligament) [33]. *Kandra* and *sira* are nourished by *rakta* (blood) [34]. Tendon are very strong structure assigning a muscle to bone may be a direct one, but quite often the muscle fibers end in cord like structure called tendon. It conveys the pull of muscle to bone.

**Mamsa-rajju (Muscle bands/ropes)**: Larger *mamsa-rajju* (muscular straps) are four in numbers. These are intended for binding the *peshi* (individual muscles) to the bones located
on both side of the vertebral column i.e. two outside and two inside. Mamsa-rajju can be correlated with longissimus spinaalis or iliocostalis.

Rasaynī (Duct): Due to weakness of the rasaynī (ducts/channel of rasa or lymph), the osas do not get accumulated in the upper parts of body, hence in patient of madhumeha (Diabetic mellitus) eruption develop in the lower parts of body.

Snayu (Ligament): Like boat human body is able to carry weight, because the joints are secured tightly by snayu in many ways so that normal movements can occur smoothly preventing abnormal movements. Body entities such as bones, muscles, veins or joint do not lead to death when injured while; snayu may lead to death. Medas nourish the snayu (ligaments) and sandhi (joints). These are of four types sushir (porous), prithul (broad), pratanvarti (stretched) and vritta (circular) and nine hundred in numbers. Ligaments are fibrous band like structure which connects the adjacent bones, forming integral parts of the joints responsible for smooth movement.

Kostha: Trunk is commonly known as the great channel (maha-srotas) in the middle of body extending from above downwards including many ashaya such as amasaya (stomach) and pakwasya (intestine). It is seat of ama (undigested food), agni, pakva (digested food), mutra (urine), rudhir (blood), hridya (heart), unduk (caecum) and phuphus (lungs) are together known as kostha (viscera inside the chest and abdomen).

Aasya: Aasya is hollow organ of the body which contain either dosha (bodily humors), rasa (lymph), dhatu (supportive structures), mala (waste products) or garbha (fetus) within it. Aasya of body are structures like cavities or organs where the vayu has constantly shoot in its embryonic lives. There are eight numbers of aashayas and meant for storage of specific material and have a surrounding outer covering. They are named as vatashaya, pittashaya, shleshmashaya, raktashaya, aamashaya, pakvashaya, mutrashaya and in female the eighth aashaya is garbhashaya. Vatashaya may be considered as colon, pittashaya may be gall-bladder as it stores bile, shleshmashaya may be organs like liver, spleen and heart, aamashaya as stomach, pakvashaya as organs like large and small intestine, mutrashaya to urinary bladder and for garbhashaya, uterus may be considered.

Peshi (Muscle): Peshi is compact form of mamsa dhatu, having muscle fibers are arranged side by side separated with each other. Peshi are lengthy and having fleshy appearance. Acharya Susruta mentioned that vayu (vata) combined with usma (pitta) get processed and creates srotas (channels) entering into the muscle tissue, vayu and pitta divide the muscle into peshi (individual muscle).

Asthī (Bone): Asthī is stubborn constituent which sustain further even after most part of body has been decayed after death. It remains like a last identity of person even after demise.

Sandhi (Joints): Sandhi is stated as asthasmyoga-sthaaana considered as to unite or the meeting point of two or more structures. Asthi-sandhi is considered as only bony joints
under the term sandhīs. Many acharya have mentioned different numbers of sandhi. According to acharya Susruta sandhi are two hundred ten in number. Sandhi are responsible for various movements of the body parts.

**Conclusion:** After such explicit discussion, it can be concluded that in Ayurveda, concept of regional anatomy is assumed as shadanga-sharir. Classification of bones based on shape, size and texture was given firstly in Samhita. The basis of classification and nomenclature of muscles in modern science is similar to the Ayurvedic description of Peshi. The elaborated description of Pramana-sharir in the ancient literature show well established concept of anthropometry in past era. In spite of the fact that Charak-samhita is Kayachikitsa (medicine) predominant, however he has referenced distinctive purpose of Rachana-Sharir than others as Tri-marma-sharir. Susruta-samhita is Shalya (surgery) predominant, consequently referenced Rachana Sharir in detail and has offered significance to MarmaSharir, TwakSharir, PramanaSharir, Shava-chedan Paddhati (dissection), GarbhaPrakaran and so on in detail as Surgery perspective. Acharya Vagbhata has referenced unexpected indicates in comparison to others as Dhāmani Marma and Maha-marma. Acharya Sharangadhara has referenced Yakrit-pleehadhara Kala i.e. different from others. Madhvanidan has acknowledged Rachana Sharir in various vyadhi (diseases). Acharya Bhavaprakash has referenced YoniNadi quite unique from others.

**References:**

44. Rathore et al,Sandhi sharir in ayurveda aspect,World Journal of Pharmaceutical and Medical Research,ISSN 2455-3301.
Effects Of Yoga Therapy On Diabetes Mellitus In Nursing Staff Of S.G.H.

Akut Priyanka V. Sangle S. A., Ambekar M. S.

Sangale S. A.  
Akut Priyanka V.
ABSTRACT:

Objective:
To assess the effect of Yoga therapy in diabetes mellitus among nursing staff working in Sassoon general Hospital Pune

Method:
Cross-sectional study was carried out in 27 diabetic nurses (Average age 49.37 years.) Group was randomized to receive both diabetes treatment and yoga therapy daily for 1 hr for 3 months by qualified Yoga teachers. The primary outcome measure was to observe effect of yoga therapy to control diabetes mellitus.

Results:
Yoga therapy resulted in a statistically significant in controlling blood sugar GHB, F BSL p =< 0.05, PBSL p = < 0.01, cholesterol, LDL, HDL and TG p = < 0.05, systolic and diastolic blood pressure and weight reductions p =< 0.05, W/H ratio < 0.02 parameters. Ophthalmic changes -although there is no regression, deterioration was not observed

Conclusions:
Yoga therapy is an effective therapy in the management of diabetes mellitus. Significantly controls glycemic, lipid values, blood pressure and weight reduction. Yoga therapy addresses whole person considering emotional, mental, intellectual and spiritual needs and brings several wonderful systemic effects. Thus yoga therapy is useful to treat and prevent complications in diabetic patients. (12)

Key words:
Diabetes mellitus, Yoga therapy

Introduction:
Diabetes Mellitus usually follows systemic complications if blood sugar, lipid parameters, weight reduction is not under control and significant clinical morbidity is observed. Diabetes
is a major health problem. The World Health Organisation (WHO) estimates that nearly 200 million people all over the world suffer from diabetes and this number is likely to be doubled by 2030.\textsuperscript{1} India leads the world with largest number of diabetic subjects earning the dubious distinction of being termed the “diabetes capital of the world”. According to the Diabetes Atlas 2006 published by the International Diabetes Federation, the number of people with diabetes in India currently around 40.9 million is expected to rise to 69.9 million by 2025 unless urgent preventive steps are taken.\textsuperscript{2} Rising trend is due to sedentary lifestyle & mental stress & strain, changing food habits.\textsuperscript{3} To reduce the disease burden that diabetes creates in India, appropriate government interventions and combined efforts from all the stakeholders of the society are required.\textsuperscript{4} Yogacharya Patanjali gave a scientific path of realization to Yoga.\textsuperscript{5} Yoga exercises gently tone & shape the body, improve posture & flexibility, & contribute feeling of well-being. Yoga exercises gently press on the body’s glands & organs, resulting in positive effects for digestive, endocrine & reproductive system. This increases blood supply & oxygen supply to the organs increasing efficiency of the endocrine system.\textsuperscript{6} Yoga therapy addresses whole person considering emotional, mental, intellectual, & spiritual needs. Hence Yoga may be a positive option in treating diabetes mellitus. Hence the present study was planned to determine whether yoga therapy is useful to control diabetes and its related complications.

**METHODS:**

Cross-sectional study was carried out in 27 diabetic nurses working in Sassoon General Hospital after ethical committee approval. An informed consent was obtained from all the 27 subjects.

**Procedure:**

Inclusion criteria were fasting B.S.L. > 126 mg/dl & P.P.B.S.L > 140 mg/dl. Weight, body mass index, waist/hip ratio, blood pressure, fasting P.P. B.S.L, Glycosylated hemoglobin & lipid parameters were checked prior & after 3 months of yoga therapy.

Yoga training was given to nurses daily for 1 hr for 3 months by qualified Yoga teachers. Diabetic nurses also underwent different cleansing processes for e.g.. Jal-neti, vaman & master cleansing shankhaprakshalana. Subjects were undergone detail check up by physician and ophthalmologist prior, during and after yoga therapy

**Data Analysis:**

Data was analyzed by inferential statistics.

**RESULTS:**

Majority of cases that develop their diabetes after the age of 40 years\textsuperscript{8} Average age was 49.37 years. Weight, B.M.I. and waist hip ratio reduction was highly significant in this study. Mean systolic blood pressure was decreased from 131.33 to 126.96 and mean diastolic blood pressure was reduced from 8.59 to 77 which is statistically significant. Mean cholesterol level was decreased from 209mg/dl to 191mg/dl. Triglyceride was reduced from 182mg/dl
to 109 mg/dl all these parameters are statistically significant. Yoga therapy resulted in a statistically significant in controlling blood sugar GHB, F BSL p= <0.05, PBSL p =<0.01, cholesterol, LDL, HDL and TG p = < 0.05, systolic and diastolic blood pressure and weight reductions p =< 0.05, W/ H ratio < 0.02 parameters. Ophthalmic changes -although there is no regression, deterioration was not observed Average Cost on Medicines – Before : Rs 378 /- ( within 3 months ) After : Rs 325 /- Average cost reduction – Rs. 53 /- for 3 months per nurse. Therefore Rs 212 /- will be reduced for each nurse per year.

DISCUSSION :

Many studies have reported the beneficial effect if the practice of yoga on diabetes. Some studies have mentioned up to 65% beneficial effect of yogic therapy for diabetes. Number of receptors decreased with obesity. The level of serum insulin increases with exercise, weight loss, keep better glycaemic and lipid control which helps to reverse heart disease. Weight, B.M.I. and waist hip ratio reduction was highly significant in this study. Mean systolic blood pressure was decreased from 131.33 to 126.96 and mean diastolic blood pressure was reduced from 8.59 to 77 which was statistically significant. Yoga exercises helps to keep the blood vessels elastic and yoga exercises combined with relaxation training i.e. Yoga nidra, omkar chanting helps to alleviate the stress and has very good effects in reducing blood pressure. It also helps to increase concentration, decision making and reduce thoughts in our mind with breathing technique. Nadishodhan pranayam or alternate nostril breathing has calming effect on mind which reduces stress levels helping to reduce hypertension and diabetic treatment. Bharamari and bhasrika pranayam has calming effect on mind, brain and nervous system.

In 2005 study patients with type 2 diabetes were put on a 40 day yoga routine taught by an expert yoga teacher. The postures performed were: Surya namaskara(sun salutation), Trikonasana (triangle pose), Tadasana (Mountain pose), Sukhasana, Padmasana (lotus pose). Bhasrika pranayama (breathing exercise, Pashchimottanasana (Posterior stretch). Ardhamatsyendrasa (Half spinal twist), pawan muktasana, Bhujangasana (cobra pose). Shavasana.At the end of the 40 days of of performing the asanas, on average the study participants had a decrease in fasting glucose levels, a significant decrease in waist-hip ratio and beneficial changes in insulin levels. At the end of 40 days of performing the asanas, on average the study participants had a decrease in fasting glucose level, a significant decrease in waist hip ratio and beneficial changes in insulin levels. Ocular observation and evaluation shows no further deterioration will definitely encourage all of us to prevent further complications in diabetes. Yoga therapy addresses whole person considering emotional, mental, intellectual and spiritual needs and brings several wonderful systemic effects.

CONCLUSION :

Yoga therapy is an effective therapy in the management of diabetes mellitus. It helps to control glycemic, lipid and weight control and prevents complications. It is a cost effective way of reducing the drug expenses.
ACKNOWLEDGEMENT:

We wish to thank the participated diabetic nurses working in Sassoon general hospital. We wish to thank for Research society for the fund provision for this study.

KEY MESSAGE:

· Yoga therapy is effective in controlling diabetes mellitus.
· It reduces the dose of drugs and thus has cost reduction in purchase of drugs.

REFERENCES:


3. J Watson Medical surgical Nursing 3rd edition Publication: Bailliere Tindall page no. 664 to 668


5. Sartha Bhawatgeeta Geetavachaspati Shri Sadashivshastri, second edition page no. 49 to 59


7. Pantanjal Yogadarshan by Yogacharya Kolhatkar lind edition page no. 34, 141 to 155


11. Role of Pranayama in Type II diabetes mellitus JAPI volume 53 April 2005

Purusharthas Past & Present

Lucia Tommasini Giannandrea

Lucia Tommasini
We are living the end of an era which at the same time, is the beginning of the new era. Indeed, we have a certain number of responsibilities.

The negative point stressed at present is the belief that we have discovered almost everything and that science is a point of reference.

We neglect the past because all findings were obtained without the aid of machines and statistics. Really, no evidence was proved and instead was accepted at face value.

In modern medicine, which aspect can be proved, measured, which medical evidence can be proved only by the individual? Only pain.

There are four points in Ayurveda which are fading away: Artha, Kama, Dharma and Moksha, the four Purusharthas.

It is very difficult to treat pharmacologically the Purusharthas. Little by little they have become part of the past history of Ayurveda.

We treat the symptom/pain as a matter of reference because we indeed want to cure the illness.

In India, as a natural process of homologation and validation present in almost all sectors of sciences, an Ayurvedic Standard Treatment Guidelines has been established. This represents a major effort of the Ministry of Ayush of the Government of India.

This is an important social advance. However, it will not improve the knowledge and understanding of Ayurveda.

Healing remedies will be standardized all over the country. We cannot criticise this government initiative and at the same time recognize that the remedies prepared in the south were made for that population and their particular constitution and physical characteristics of the people of that region only.

There are certain ayurvedic remedies (willingly the writer wants to be vague) that are effective
for Italian people, others do not cause any positive effect. In Homeopathy, there are remedies effective in the north of Italy and others are effective in the south related to the same illness.

We do trials, produce statistics: interestingly the statistics have shown that pitta constitution supports physical and muscular stress much more easily. The writer imagines, as happens in the western school, that boys with the pitta constitution will now be selected to start a sporting career, football for example.

Everywhere pain is suppressed, science disregards the cause of the pain and treats all pain with painkillers.

Why does this happen? Why does science suppress the signs in order to establish an almost mechanical, standardized and automatic approach which can be easily directed?

The social wellbeing is the first aim of life.

Despite this, the four Purusharhas never leave the pages of the book and apparently are not connected to the expression of pain and illness.

Nowadays, a central nervous system illness, Parkinsons desease, is widespread. The incapacity of the brain to produce dopamine generates a number of symptoms that the most recent research shows is connected to the bowels.

Parkinsons highlights the imbalance of Vata, Pitta and Kapha. When the three doshas are involved we know that the case is difficult and at least in the west, a number of medications are used to ‘support’ excess and deficiency.

We have discovered and proved that bowel functions are linked with this illness. Of course bowels and Vata should be treated accordingly.

Mind triguna is a development which is neglected while the illness caused by the imbalance of Vata, Pitta and Kapha takes precedence.

The mental aspect of human life and the wonderful support Ayurveda can give for the realization of Purusharthas is neglected because it cannot be transformed into a medicine. In this context, Vaidyas shall not prescribe and should become examples in order to have the strength to teach. Quantic physics says that we are what we think, that our thinking can modify events, that our behaviour can generate ‘waves’ spreading from the chromosomes of the DNA.

Bowels are governed by Vata and we should select and modify the vatic psychological attitude in order to balance the bowel functions.

At the same time, we shall do the same with the kaphic psychological attitude in order to cancel its activities and reduce the cerebral tensions. We cannot forget pitta. Pitta psychological attitude can be the cause of the alteration of vata and kapha or instead, the symbolical fire of pitta has been turned off by vata and congested by kapha.
Sattva, Rajas, Tamas, the three psychological functions of the ‘I am’, have to be considered the first cause of immune deficiency.

The imbalance or deficiency of this system is really the base element of the terrain in which the cause or the pathological element of the disease resides.

We originate from Spirit or Cosmic Energy and passing through matter, we are now returning to that Cosmic Energy.

In a booklet of the Vasant Nature Cure Hospital in Ahmedabad there is a poem written by an American medical doctor and writer, Dr C.J. Buell.

Let me share it with you as a sign of scientific kinship.

PAIN SOLILOQUY

I am pain, most people hate me, / Think me cruel, call me heartless, / Study ways to bribe and fool me, / Try by every means to slay me, / Dope themselves with anaesthetics, / Fill themselves with patent nostrums, / Call the doctor with his poisons, / Seek a Homeopath or a Vaidya, / Not to cure the ills within them, / Not to cleanse and purify them, / Just to kill the guide that warms them. / Pain am I, but when you know me, / When you once have learned my secret, / How I come to help and bless you, / Warn you, guide you, teach and lead you, / When you know my loving nature, / how at first I gently twinge you, / Lightly twinge you as a warning, / Hoping thus, by kind reminder, / You will hear my voice and listen- / Sure am I that when you know me, / you will gladly then embrace me, / Call me friend and give me welcome, / When you learn to live as Nature, / In her great and boundless mercy, / In her tender, loving kindness, / In her wisdom and her goodness, / Meant that man should live and labour, / When you learn to shun the by-ways, / Leading off to vicious habits, / When you learn to keep your body, / Healthy and clean, mind pure and active, / I will not come and hurt you, / Give it work in right proportion. / Give it air, and food, and water, / Fit to build its every cell, / Fit to nourish every function, / When you teach your mind and spirit, / Pure and noble thoughts to harbour, / Drive out fear, and hate, and malice, / Cherish love and kindly motive, / This is, then, the truth I bring you, / Not to harm you but to heal you, / That I come to guide and teach you.
PITTAJ DAHA - A SINGLE CASE STUDY

Yashashri Arun Vitonde, A. K. Burley,
PITTAJ DAHA- A SINGLE CASE STUDY

1. Dr. Yashashri Arun Vitonde,
Assistant Professor, Department of Kayachikitsa,
CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad.
Email ID – yashashri15aug@gmail.com  Mobile no.- 9423649578

2. Dr. A. K. Burley,
Professor, Department of Kayachikitsa,
CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad.
Email ID – Dr.anilkburley@gmail  Mob no.- 9921550199

ABSTRACT:
Daha is a condition where in internal burnig sensation occurs not because of external causes like exposure to Sun, Fire etc but due to endogenous ie internal factors. Factors which causes pitta prakop and under the influence of vata, it spreads in the internal system and produces daha1. Most of the symptoms resembles like Pittaj Jwar ie. high temperature, lack of sleep, vomiting sensation, dryness of throat delirium and bitter taste sensation in the mouth etc. Burning syndrome , though it is not mentioned in Ayurveda. In this study, the aim of our treatment is to reduce pitta by giving Anuloman after taking Snehapan, Ksheerbasti and Pitta-shamak Aushadhi, Aahar-vihar. In this study, a patient 30 yrs. Female diagnosed as Pittaj daha was given above treatment for 2 months and successfully get relief without remission.

KEYWORDS:
Pittaj daha, Sarvang daha, Atisweda, Ksheerbasti.

INTRODUCTION:
Daha means burning sensation. In this disease, there is burning of whole body2. Aggravation of pitta due to Pittaj Prakriti, Ushna-tikshna Aahar Vihaar and Atikrodhadi Manas bhav are the main causes of this disease. There are many types of daha ie. Pittaj, Raktaj, Trishnanirodhaj, Madyaja, Raktapurakoshthaj, Dhatukshayaj, Kshataj and Marmabhigatuj. According to Yogratnakar, this is caused by aggravation of pitta , which then vitiates rakta and spreads through out the body . And finally gets localized in the skin , hence burning is caused4. While according to Harit, aggravation of saman vayu and pitta vitiates rakta and then gets localized in to the skin causing burning sensation5. In above case, symptoms are similar to Pittaj daha ie. Pittaj Jwar with Ati trishna, Atiswedapravrtti, Mukhapak, Shirashool, Atrajpravrtti, perspiration, vertigo and fainting. Hence the main treatment is to reduce pitta. For this Snehapan, anuloman, Ksheerbasti as well as all the Pittashamak chikitsa are important. Herbs of choice are Chandan, kamal, Usheer, Priyangu, Lodhra, Sugandhivala, Nagkeshar, Ela, Musta etc. used6.

CASE STUDY:
A 30 yrs female patient, housewife, came to hospital with symptoms like profuse sweat, foul odour of body and mouth, burning sensation of hands as well as legs, Stomatitis, burning micturation etc. By nature patient was anxious and short tempered (Krodhi). Due to which her marriage get spoiled. Patient was suffering with above complaints since 1 year. Treatment started first with with counseling and daily Anuloma-vilom Pranayamafor 10 min. As a routine patient was examined and diagnosed by Ayurvedic
Approch. Ashtavidha pariksha had been done.

Patient Name: ABC 30 yrs/ Female
Religion: Hindu
Occupation: Housewife
OPD No.: 2524
IPD No.: A-18
D.O.A.: 12/06/2018

Chief complaints:
1. Sarvanga daha
2. Atiswedapravrutti
3. Shirashool
4. Netra daha
5. Mukhapak- Mukhadurgandhi
6. Tiktaamlodgar
7. Atirajpravrutti
8. Malavashtambha.

(All the symptoms was from near about 1 year.)

Past History: There is no any past H/O HTN, DM, TB, Peptic ulcers or any Endocrine disorder except Hyperacidity and Short-tempered by nature.

On Examination:
G.C. – Good, Afebrile.
Temperature – 99°F
P.R. – 88/min.
B.P. – 120/80 mm Hg.
CVS – S1 & S2 Normal
RS – Chest clear AEBE
CNS – Consious, well oriented.
P/A – Soft, non tender
Jivha – Saam
Mala – Malavashtambha.

TREATMENT PROTOCOL:
Samanya chikitsa – All the Pitta alleviating procedures, diet and behavior has been followed. The patient has been kept in cool atmosphere, she was anointed with paste of cool herbs like Chandan and Usheer. Shatdhaut Ghrut was also applied at the palm and soal. As well as application of Durva swaras to all over the body. She was also advised to apply krushna murttika lepa on abdomen. Patient had been given cool water and fruit juices to drink.

Vishesh Chikitsa –
Shodan Chikitsa –
A. First of all, Aampachan done. Then Aabhyantar Snehpana was given for 3 days with Shatavarisiddha Ghrut (30 ml/60ml/90ml/120ml).
B. After Snehapana, Sarvang Snehan and Swedan done for 3 days. On 4th day Virechan given with Avipattikar churna 20 gm. with proper Sansarjan krama3.
C. Then in next week, again Sarvang Snehan and Swedan done with Shirodhara for 7 days. Chandanbalalakshadi tail was used for Shirodhara.
D. Now in next week, Sarvang Snehan (Shatavari taila) and Sweadan done with Ksheerbasti for next 7 days. Shatavarisidhha dugdha was used for Ksheerbasti.
E. Within all Panchkarma procedures, patient had taken chandanasav 20 ml BD after meal.

Shaman Chikitsa –

In second month, only Abhyantar Aushadhi was given to Patient for 1 month.
1. Mouktik Kamdudha vati 100 mg BD after meal.
3. Avipattikar churna 5 gm at night with lukewarm water.

Throughout the treatment plan, proper Pathya had been followed by patient. In Aahar, old rice, old ghee, Green gram, milk, coconut water to drink, fruit juices like Pomegranate, Pineapple, Grapes and Phalasa etc. as well as Saktu had been taken by patient. Also some Apathya was advised to her ie. Avoid prakruti and kal virudha food and drinks like tea, coffee, smoking, Alcohole, oily and spiciay food, Fasting, late night sleep, mobile games, Mental stress, tension, Anger, withholding of urges, riding on animals or vehicles, heavy exercise, exposure to heat, Sex etc8.

Follow up was taken by 1 month and Observations was carried out. No new complaints raised during the follow up period related to study.

OBSERVATIONS : In the treatment period, the patient had not taken anything except these medicines. Assessment criteria were based on the cardinal symptoms as follows –

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>OBSERVATIONS</th>
<th>BEFORE T/T</th>
<th>AFTER T/T</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Chief Complaints</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Sarvanga daha</td>
<td>Severe</td>
<td>Absent</td>
</tr>
<tr>
<td>2.</td>
<td>Atiswedaprarvuttii</td>
<td>Severe</td>
<td>Mild</td>
</tr>
<tr>
<td>3.</td>
<td>Mukhapak- Muhdurganghi</td>
<td>Severe</td>
<td>Absent</td>
</tr>
<tr>
<td>4.</td>
<td>Tikta-amla aasyata</td>
<td>Severe</td>
<td>Absent</td>
</tr>
<tr>
<td>5.</td>
<td>Ati-Rajpravruttii</td>
<td>Severe</td>
<td>Mild</td>
</tr>
<tr>
<td>B.</td>
<td>Pathological</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Hb</td>
<td>9 gm%</td>
<td>12.5 gm%</td>
</tr>
<tr>
<td>2.</td>
<td>ESR</td>
<td>37</td>
<td>10</td>
</tr>
<tr>
<td>3.</td>
<td>Urine Routine- Pus cells</td>
<td>8-10</td>
<td>00</td>
</tr>
</tbody>
</table>
DISCUSSION: According to Ayurveda, Daha is disorder involving Pitta, Vata with Raktavaha Strotas and Trimala i.e. Mutra, Purish and Sweda. The above given treatment works to reduce Saam Pitta in the body and improve the Jathargni as well as Dhatvagni by its immunomodulating effect. The given treatment were having Pittashamak properties. The present research work was mainly based on the clinical assessment of above sign and symptoms. Effect of therapy was assessed on the basis of scoring chief complaints with Blood routine examination mainly Hb%, ESR, Urine (R) examination before and after treatment. It is observed that patients depression is also decreased upto 60 % and now there is regular menstrual cycle.

CONCLUSION: In this case, complaints of patient are very much diminished. All the complaints like Sarvang daha, Atiswedaprarutti, Tikta- amlaasyta, Mukhapakmukhadurgandhi, Malavashtambha, Ati- rajaprarutti are markedly diminished in the 2 months study. In conclusion, Pittaj daha can be diagnosed as Urdhag Amlapitta and symptoms can be controlled up to higher extent by using Ayurveda treatment regimen for long period of time and by following proper Pathya in Aahar as well as Niyamit Snehapan, Anuloman, Ksheerbasti at regular basis. In this context, it is suggested that treatment should be followed regularly.

REFERENCE:
1. Charak Samhita Chikitsa sthan 17/45-46
2. Sharangdhar Pratham khanda 7/35
3. Yogratnakar –Daha prakaran
4. Harit Samhita Trutiya 27
5. Ashtang Hruday Chikitsa sthan 22/27
6. Vangasen
7. Bhaishajya Ratnawali
8. Madhav Nidan Adhyay 19

BIBLIOGRAPHY:
1. Charak Samhita
2. Ashtang Hruday
3. Textbook of Kayachikitsa – Dr. Subhas Ranade.
4. The Principle and Practice of Kayachikitsa – Dr. S.Suresh Babu
5. Introduction to Kayachikitsa – C. Dwarakanath
6. Sushrut Samhita
7. Sharangdhar
8. Yogratnar
9. Bhaishajya Ratnawali
10. Madhav Nidan
11. Vangasen
Concept of Dosha - apprehension and assessment

Mrs. Indapurkar Kavita

Kavita Indapurkar
It is time to justify scientifically the existence and functions of Doshas. Vata Pitta and Kapha are three important Doshas according to Ayurved and when we want to discuss about them always the first query arises that whether these are structural or functional. Tridoshas are structural and we can observe their functions. They are Dravyas. According to Charak Samhita, Dravyas are always associated with Gunas and karmas. So they are not only functional but also structural. Cha.Su.1/51. Dravyas are of two types ....Karya Dravyas and Karan Dravyas. Parmanu of Panchamahabhutas, Kal, Disha Atma, and Manas are nine Karya dravyas. They are Nitya. Doshas are Karya Dravyas. They are Anitya. They are formed from the Karandravyas. Dosha Dhatu Malas are Panch Bhautik...and so also Aushadhi dravyas. That's why they can be used to treat the disease. Doshas are no doubt Dravyas They are Karya Dravyas having specific properties and functions. Dravya are always with Gunas. (Vaisheshik Darshan) So assessment of any Dravya can be done by the assessment of particular Karma of that Guna. Assessment of Dosha Dhatu or Malas can be done as follows 1..Quantitative assessment 2...Qualitative assessment 3....Functional assessment. And this assessment can be done with the help of Pratyaksha or Anuman praman. Most of the time we have to take the help of Anuman praman. In some cases direct evaluation of that Dravya or Guna is possible but most of the time we have to assess the Karma of that particular Guna, and with Anuman Praman we have to do the assessment of that particular Dosha. For example assessment of Kapha Dosha can be done with the help of assessment of Karmas of its Gunas. Panchabhautik Dravyas contain twenty pairs of Gunas which show opposite actions. In disease conditions the treatment should be done accordingly. Manda Guna is one of the important Guna of Kapha Dosha.
So if we want to assess Kapha Dosha ..we have to assess with its Guna and if we want to assess Manda Guna we have to assess its function..which is Yatrakaraha...
Yatrakaraha means responsible for the journey. Journey of Sharir Parmanu. Manda Guna is responsible for controlling the speed ...controlling the Gati ...controlling the conversion. And so decaying process of Dhatuparmanu will be slower down.
Tikshna Guna is exactly opposite to Manda Guna ..which is responsible for fast metabolism. Pachan Parivartan Dahan.
As compared to that Shaman is the main function of Manda Guna.
All Kapha Vruddhikar Dravyas due to their Manda Guna increase the durability of Dhatus .
For Assessment of Dosha ,Prakruti assessment is the most important concept in Ayurveda. Examination of Prakruti is very important in diagnosis prognosis treatment and prevention of disease.
Assessment of Kapha Dosh can be done with the help of assessment of Kapha Prakruti individuals. Due to the predominance of Kapha Dosha specific characteristics are found in that particular individual.
These characteristics are explained in detail in Samhita Granthas.
Regarding Manda Guna it is clearly mentioned that Manda Guna is responsible for the slow movements .slow activities slow speech slow conversation …in that person.
The person shows slow and stable reactions. Food requirements are also less .
When we want to develop assessment criteria for Manda Guna we have to .consider these characteristics of Kapha Prakruti person .
We can ask different questions regarding his daily activities .
This will be a subjective criteria. But questionnaire is also a very important tool for assessment.
The most important thing is the validity and reliability of the questionnaire must be done.
Objective parameter for assessment of Manda Guna can be done with the help of assessment of its effect on body.
It is very essential in this era to develop objective parameters for Ayurvedic concepts. But while developing parameters one must remember that what to assess and how to assess. Because when we want to assess any particular entity...we must remember that each and every Ayurvedic entity can’t be translated and assessed on modern parameters.
Ayurveda is a science. And every science is based on it’s own principles. If we want to assess the entities explained in Ayurveda we must assess them in a proper way.
Objective parameters should be used properly, so that they can assess the function, with the help of which assessment of that Dravya can be done. Because every time it is not possible to assess the Dravya directly with the help of modern objective parameter.
Further more whatever objective parameter we are using must be reliable and valid.
Research is very important and effective way for globalization Concepts of Ayurveda are very important and must be explained in a proper scientific way.
Reliability is the degree to which an assessment tool produces stable and consistent results. Validity refers to how well it reflects the reality it claims to represent.

Objective parameter for assessment of Manda Guna can be done with the help of assessment of its effect on body.

After studying the effects of Manda Guna on body, it is observed that Manda Guna slows down the body functions and body activities.

According to modern science the concept of metabolism can be studied and correlated here. It seems that Manda Guna shows direct effect on Metabolism, it slows down the metabolic rate. According to modern science, Metabolism comprises the processes that the body needs to function.

The word ‘metabolism’ can also refer to digestion and the transport of substances into and between different cells. Everybody requires a minimum number of calories to live. This minimum number is called the basal metabolic rate.

Basal Metabolic Rate is the number of calories required to keep our body functioning at rest. The overall number of calories our body uses on a daily basis is referred to as our “total daily energy expenditure” (TDEE). It’s determined based on our BMR as well as our activity level throughout the day.

The term BMR is sometimes used synonymously with RMR, which stands for “resting metabolic rate.” The difference is that while BMR only measures basic processes of breathing, blood circulation, and temperature regulation in a completely resting state, RMR also includes energy expended by digestion and non-exercise daily movements, like getting dressed and lifting your fork to your mouth.

BMR...that is Basal metabolic rate can be considered as an objective parameter to assess the effect of Manda Guna of Kapha on our body. RMR and TDEE should also be studied from that point of view.

BMR is neither good nor bad. It’s merely our Basal Metabolic Rate, namely the average calories per day we need as a base line.

Basal Metabolic Rate is calculated by the Harris-Benedict equation (created in 1919, but still applicable today). There are various things that affect BMR according to modern science. Keeping this information in mind we should reduce the bias and do the comparative study.

Study of BMR and its association with Sharir Prakruti was done in our department, and it was found that Kapha Pradhan individuals show less requirement of calories than Pitta pradhan individuals....Rather Pitta pradhan individuals show maximum BMR.

Here it can be noted that..

This result was may be due to the effect of Manda Guna of Kapha Dosha.

This study was done on only 100 individuals. Further study must be done with the help of more sample size. This is very important and essential in this era to develop objective parameters to explain the functions of Doshas in a scientific way.

(30)
Guidelines for submission of articles.

1) Left top corner of article write one of following:
   a) Research, b) Case Study, c) Review, d) Experiment, e) Short communication,
   f) Research method, g) Standardization, h) Proceedings paper, i) Opinion paper,
   j) Patent etc.

2) Title, 3) Authors’ name, e mail id, phone no. college/institute, university,

3) Abstract not more than 200 words.

4) Mention no.of references for the article in the bracket.

5) Keywords in alphabetical order.

6) Introduction, aims, objects, methodology, observations, discussion, conclusion, etc.
as per requirements.

7) References with details such as section, chapter, page no/etc.

8) Add graphics if any at the end.

9) References be written as follows e. g.

   1) Journal : Bhoir Uday B./Kamble Pushpalata, “Evaluation of ‘Sama Aayam - vistor’


10) Send article via e mail with biography, photo to :

   a) kavitaindapurkar@gmail.com
   b) deerghayuinternational@gmail.com .

11) Send Bank Demand Draft OR cheque payable at par for Rs. 1500/- to - Editor, Deerghayu international, 36 Kothrud Gaonthan, opp.Mhatoba Mandir, Pune 411 038.

12) Author can deposit money in the following Bank account. Send receipt of amount deposited.


DEERGHAYU INTERNATIONAL

1) The peer reviewed quarterly journal for Ayurveda and Health Sciences since 1984.

2) International Standard Serial Number is ISSN 0970 - 3381 since 1986.

3) Included in Indian Citation Index.

4) Impact factor published from time to time.

5) Articles published in Deerghayu Interantional is being uploaded to AYUSH portal by National Institute for Indian Medical Heritage, Hyderabad.
Ayurvedic Books of Dr. P. H. Kulkarni

Contact for books & Ayurveda Products: Shri Swami Samarth Agency
36 Kothrud Gaonathan, Opposite Mhatoba Temple, Pune 411038.
Telefax: 20 - 25382130. email: pavanoriental25@gmail.com.
For e-books - 1) www.bookganga.com 2) deerghayuinternational@gmail.com
The Dubai Fountain is a dancing fountain show next to the Dubai Mall and Burj ... music and illuminated by over 6,000 powerful lights and 50 colour projectors. Is spectacular and was designed by the world's leading fountain designer. Each and every building in Dubai.....is different.....artistically well planned....superb......amazing... I think in Dubai there is a lot of scope for those who have different vision.....And creativity

Dhow Cruise Marina is a great way to spend an evening and enjoy views of modern Dubai. It is inclusive of Sea Sightseeing of Ultra Modern Dubai, BBQ Dinner, Tanura Show, Music and fun.

A bird's eye view from the largest Ferris wheel in Dubai
Located on the upcoming Bluewaters Island, Ain Dubai adds one more item to the list of world records to be broken by Dubai.

With a total height of 829.8 m (2,722 ft) and a roof height (excluding antenna) of 828 m (2,717 ft), the Burj Khalifa has been the tallest structure and building in the world since its topping out in late 2008.
The prestigious 'Life time achievement award' was conferred upon Dr. P. H. Kulkarni and veteran surgeon Dr. S. R. Joshi by 'Rashtriya Shikshan Mandal' (RSM)- the parent organisation of Ayurveda Rasashaia, Sheth Tarachand Hospital, Tilak Ayurveda College, Nanal Hospital and sister concerns. At the ceremony, Oncologist Dr. Shailesh Puntambekar, Dr. V. V. Doiphode, Dr. Dilip Puranik, Dr. Suhas Parchure, Dr. B. G. Dhaphale, Dr. Rajendra Huprikar, Dr. M. R. Satpute, Dr. R. N. Gangal, Dr. B. K. Bhagwat, Dr. Sanjay Gavhan and Adv. Shrikant Patil and Dr. Sadanand Deshpande were present at the dias. Dignitarie from various fields were present in the auditorium. This is where Prof. Kulkarni has devoted his life and contributed to the Ayurveda fraternity like never before. This award indeed is special because it comes from RSM.

Every one of us remembers the glorious years of his tenure as RSM chief. Series of pioneer Ayurveda conferences, Ayurveda Research Institute, NIMA, Pune University, our publications... The list is ever growing. PH had envisioned Ayurveda’s global presence much before anyone. Some awards are special. We all know that Prof. Kulkarni has stopped receiving any awards or felicitations for over a decade. He has humbly denied numerous such awards. His philosophy is simple. He says, “I have received many awards. None of them could have been achieved without the colleagues, students and family: It is the responsibility of seniors of all fields to make space for the new generation. The affection I have received keeps me working even today!” This award is just another feather in his hat. But it’s indeed special as it comes from the ‘mother’ as a blessing! We, the members of IAA, authors and readers of over 350 books, alumni and students across the globe wish PH a happy and healthy life ahead. We congratulate wish PH a happy and healthy life ahead. We congratulate you for the award and feel proud and lucky to be your students.

Take a bow!

- Dr. Atul Rakshe