A CONCEPTUAL STUDY OF SAMHANANA AS A MEASURING TOOL

Waghulade Hemangini Sanjay
Professor & HOD Department of Kriya Sharir
Dr. D.Y. Patil College of Ayurved and Research Centre, Nerul, Mumbai, Maharashtra, India

ABSTRACT

For examination of healthy persons, samadoshatva, samagnitva, samadhatutva, sama malatva & samakriya should be assessed. For assessing samadhatutva, Ayurved has mentioned some examinations like anguli pramanā, aayam vistar samatva, pourushmana, samhanan, sara etc. Samhanan examination has been chosen for the study which is mentioned in ten-fold examination of Charak samhita. Samhanan examination is useful for knowing the strength as well as immunity of a particular person. The parameters given by Charakacharya are mainly subjective & assessment may change due to subjective bias. So this is an attempt to decide objective parameters to get uniformity & to avoid subjectivity in samhanana examination. In the definition of samhanana given by Charakacharya, it is mentioned that samhanana of three dhatus i.e. rakta, asthi & mamsa should be assessed. So it has been tried to assess the qualities & functions of rakta dhatu, mamsa dhatu & asthi dhatu. It has also been tried to decide parameters for samhanana examination so as to bring objectivity in this examination. It is concluded that samhanana examination can be done more precisely & accurately with the help of parameters & this examination will be definitely helpful in assessing the strength & immunity of a particular person.

Keywords: samhanana, bala, sama dhatutva

INTRODUCTION

Ayurveda gives priority to maintain healthy state of an individual & its second aim is to treat the disease of patient. The criterion for the person to be called healthy is sama doshatva (equilibrium of bio-energies), samagnitva (equilibrium of digestive fire), sama dhatutva (equilibrium of tissues), sama malatva (equilibrium of wastes), sama kriya (equilibrium of body functions) and is happy with balanced state of soul, sense organs and mind. For assessing sama dhatutva, Ayurved has mentioned some examinations like anguli pramanā, aayam vistar samatva, pourushmana, samhanan, sara etc. Examination of a diseased person becomes necessary to obtain knowledge regarding the span of life, strength & the intensity of morbidity, because it is on the basis of intensity of morbidity that the dosage of the therapy is determined & the latter is dependent upon the strength or the power of resistance of the individual. Therefore the patient should be examined with reference to his prakruti (physical constitution), vikruti (morbidity), sara (excellence of dhatus), samhanana (compactness of organs), pramana (measurement of body organs), satmya (homologation), sattva (psychic constitution), aaharshakti (power of intake & digestion of food), vyayamshakti (power of performing exercise) & vaya (age) in order to ascertain strength of a person. From these examinations, one can know about the
strength & immunity of that particular person. Samhanana examinations has been chosen for the study which is mentioned in dashavidha pariksha (tenfold examination) of Charak samhita.

Samhanana is a concept given by Charakacharya. Concepts are mental images or perceptions & therefore their meanings vary markedly from person to person whereas variables are measurable. It is important for the concepts to be converted into variables as they can be subjected to measurement. Therefore this is an attempt to establish objective parameters for samhanana examination.

NEED OF STUDY

Samhanana examination is useful for knowing strength as well as immunity of a particular person. Immunity or strength depends on dhatubala (strength of tissues). Dhatubala can be measured by subjective & objective criteria. Subjective criteria can differ from person to person. Objective criteria can bring uniformity in assessment. Charakacharya has explained dashavidha pariksha to assess strength of a person. Samhanana examination is one out of those criteria but this type of assessment is neglected now a days. In definition of samhanana, it is mentioned that samhanana of three datus i.e. rakta,asthi & mamsa should be assessed. So it has been tried to assess the qualities & functions of rakta dhatu, mamsa dhatu & asthi dhatu & to decide parameters for samhanana examination so as to bring objectivity in this examination.

AIMS & OBJECTIVES

1. To review the literature of samhanana.
2. To decide parameters for samhanana examination & to bring objectivity for assessment of the strength & immunity of a person from his/her samhanana.

MATERIALS & METHOD

A] Literature search
a) Brihatrayi & laghutrayi
b) Modern texts
c) Relevant websites

B] Type of study – Conceptual study

Conceptual study of samhanana

Meanings of samhanana word from various shabda koshas & Samhitas:

a) Compactness, firmness, the body, person, strength.
b) Compact, solid, firm, striking together, robustness.
c) In Sushruta Samhita Sutra sthana, while explaining the significance of mamsa rasa, the word ‘samhanana’ is referred as physique. Mamsa rasa (meat soup) bestows contentment (nourishing), restores life, relieves dyspnea, cough & consumption, mitigates vata, pitta & fatigue, good for heart, satisfying to those who have loss of memory, vitality & voice, who have become weak by fevers, loss of tissues, injury to the chest, fractures & dislocation of bones & joints, the emaciated & poor of semen; builds physique, unites bones, increases semen & strength when added with dadima, it is aphrodisiac & when processed with pungent etc., it mitigates the doshas.
d) In Sushruta Samhita Nidana sthana, while describing the signs & symptoms of kaphaja granthi, the word ‘samhanana’ is referred as growth. That produced by kapha, the swelling is cold to toe such, not discolored, has slight pain but severe itching, grown big like a stone, develops slowly & when pricked exudes white thick pus.
e) While describing definition of samhanana in Charak Samhita Vimana
sthana ,a term “sunivishta mamsa shonit” is used & in Charak samhita sutra sthana ,a term “anivishta mamsa shonit” is given in reference with vyadhikshamatva (immunity).Chakrapani has commented on anivishta as uneven or flabby muscles & other tissues.¹⁸

Definition of samhanana -

A person is to be examined with reference to his samhanana or compactness of the body. Samhanana, samhati & samyojana terms are synonymous. A compact body is characterized by the symmetrical & well divided bones, well-knit joints & well bound muscles & blood .An individual having a compact body is very strong otherwise he is weak. When the body is moderately compact, the individual is possessed of moderate strength.⁹ According to Charak, persons having proportionate musculature & compactness of the body no doubt possess very strong sensory & motor organs & as such they are not overcome by the onslaught of diseases. They can tolerate hunger, thirst, the heat of the sun, cold & physical exercises. They can have good digestive capacity & assimilation.¹⁰ In Ayurveda, the process of learning, research and clinical practice are empirical (based on observations) and which follow scientific methods. Like other systems of ancient Indian learning, Ayurveda is discovered through most recognized schools of acquiring knowledge and producing evidence i.e. Pramanas viz. (1) Direct perception through sense organs (Pratyaksha), (2) Inference (Anumana) (3) Verbal texts from many of the trustworthy persons, who knows truth and communicate correctly (Aptopadesha) and (4) Logical/rational interpretation (Yuktii), etc. These pramanas can be applied as tools for acquiring knowledge regarding Roga (disease) & Rogi (patient) and healthy persons too. The diagnosis in Ayurveda is based on a two-fold approach to diagnostics viz. (1) Examination of the patient i.e., Rogi-pareeksha; and (2) Examination of the disease i.e., Roga-pareeksha. Therefore, Rogi- pareeksha is essentially concerned with ascertaining the constitution of the individual and status of his health and vitality. This is achieved through tenfold examination of patient comprising of Prakriti,Vikriti, Sara etc. Samhanana refers to the physique of a person. A compact body frame usually suggests a healthy body. Lean or obese body is unhealthy.Samhanana (Physical build) examination of the body is carried out by well-built healthy body, symmetric bones, strong stable joints and sufficient flesh and blood.

According to definition of samhanana as stated by Charak, samhanana of rakta dhatu, mamsa dhatu & asthi dhatu should be assessed. In our Samhitas, the excellent qualities of dhatus i.e. dhatu sarata (tissue excellence) and their functions are explained very well. While assessing the qualities of dhatus, the characteristics of sarata that are explained in our Samhitas can be considered. But only characteristics related with sharir (body) can be considered & not the psychological ones because in samhanana, no manas bhavas (psychological elements) are mentioned. Functions of dhatus are also given in Samhitas.

To decide criteria for assessment of dhatus, qualities & functions of dhatus can be considered.

Qualities of rakta sara person:- According to Charak, the salient features of rakta sara persons are: Karna (ears), netra (eyes), mukha (face), jihva (tongue), nasa (nose), oshtha (lips), panitala (palms), paadatala
According to Sushruta, mamsasara is known to possess few depressions (hollows) in the body, to have well covered (concealed) bones and joints and to be muscular. According to Sushruta, mamsasara is known to possess few depressions (hollows) in the body, to have well covered (concealed) bones and joints and to be muscular.

**Functions of mamsa dhatu:-** The functions of mamsa dhatu given in our Samhitas are- Skin is the upadhatu of mamsa dhatu which covers whole body. Lepa (covering) is main function of mamsa dhatu. Meda pushthi (nourishment of medodhatu) is the important function of mamsa dhatu. Mamsa peshi (muscles) confer bala (strength) & working capacity to the body. Since sira(veins),snayu (ligaments),asthi (bones),asthi parva (small bones)& sandhi (other joints of muscles etc.) of the body are covered by muscles ,they are strong. In all, lepa,meda pushthi & bala are functions of mamsa dhatu according to our Samhitas.

**Qualities of asthi sara person:-** According to Charaka, the salient features of asthi sara persons are: Parshni (heels), gulpha (ankles), janu (knees), aratni (distance between elbow & tip of small finger), jatru (sternum),chibuk(chin),parva (digits),asthi(bones),nakha (nails),danta (teeth) are sthula (robust or big). According to Sushruta, asthisara is known to possess a big head and shoulders and big teeth, jaws, bones and nails.

**Functions of asthi dhatu:-** Function of Asthi dhatu is dharana (to provide support to the body) & majja poshana (nourishment to majja dhatu). Asthi dhatu supports the body, keeps body in erect position. In all, dharana & majja poshana are the functions of asthi dhatu according to our Samhitas.
DISCUSSION
Criteria for rakta dhatu assessment
While assessing qualities of rakta dhatu,

<table>
<thead>
<tr>
<th>Organs to be assessed</th>
<th>Quality</th>
<th>Gradation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rakta sara organs like ears, eyes, mouth, tongue, nose, lips, palms &amp; soles, nails, forehead</td>
<td>Snigdha + Raktavarna + Shrimad + Bhrajishnu</td>
<td>4</td>
</tr>
</tbody>
</table>

While assessing functions of rakta dhatu, For Jivan karma, Hemoglobin can be measured. As Haemoglobin carries oxygen which is necessary for life, jeevan function can be assessed by measuring Haemoglobin in blood. If the blood is pure & in appropriate quantity, then the other dhatus get nourished properly. The strength of other dhatus & ultimately the strength of body will increase due to proper quality & quantity of rakta dhatu. RBCs are major vehicle for O₂ & CO₂ transport. Haemoglobin present in RBCs acts as a buffer & helps in maintaining O₂ transport. Haemoglobin is a combination of haem & globin. Globin is a protein which is a body building material. So bala or strength of rakta dhatu can be assessed by measuring RBCs. Varna prasadan depends on pure rakta dhatu so it can be assessed by darshan examination. Varna prasadan can be recorded as Yes-1 & No-2. While assessing sukh function of rakta dhatu, intellectual happiness can be assessed. As rakta dhatu is responsible for medha i.e. intellect, intellectual happiness can be judged by interest in reading, discussion & listening & it can be graded as reading -1, reading + discussion-2 & reading + discussion+ listening-3.

Rakta dhatu circulates throughout the body & nourishes all dhatus & is responsible for aggravation & alleviation of all dhatus. This can be understood by nadi-bala(strength of pulse). By knowing nadi bala, Puran karma can be graded as uttam-3, madhyam-2 & hina-1 accordingly.

It is observed from textual literature that tactile (sparsha dnyana) disorders get cured by using drugs that are useful for treatment of rakta dhatu or for purifying rakta dhatu. For proper functioning of sparshanendriya, rakta dhatu should be in proper condition. Hence sparsha dnyana can be understood as a function of rakta dhatu. For assessing sparsha dnyana, sphygmomanometer can be used. The sphygmomanometer is tied around the upper extremity. The mercury level is raised up to 150 mm & the time when the person feels numbness in hands is noted.

Criteria for mamsa dhatu assessment
While assessing qualities of mamsa dhatu,

<table>
<thead>
<tr>
<th>Organs to be assessed</th>
<th>Quality</th>
<th>Gradation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mamsa sara organs like temples,</td>
<td>Shhira</td>
<td>1</td>
</tr>
</tbody>
</table>
Sthira & Shubha qualities can be judged by *darshana* (visual) examination. Guruta can be measured by a measuring tape. To measure *mamsopachitata*, vernier caliper can be used. While observing *sandhi*; height, breadth & circumference of *janu sandhi* (knee joint as it is a major joint) can be measured & graded accordingly. While assessing functions of *mamsa dhatu* Lepa is one of the functions of *mamsa dhatu*. So it can be assessed by observing *acchidra gatratra* i.e. well bounded muscles which can be observed by yes/no criteria. Meda *pushti* depends on *mamsa dhatu* so it can be assessed by measuring *snigdha kala* with the help of moisture meter or time for absorption of oil can be noted. *Bala* i.e. *sharir bala* is assessed by *vyayam shakti* (physical strength) & *vyayam shakti* is determined by one’s ability to perform work. 

### Criteria for asthi dhatu assessment

While assessing qualities of *asthi dhatu*, *Asthisara* organs like heels, ankle, knee, distance between elbow & tip of small finger, sternum, head can be measured by a measuring tape to assess *sthulata*. Small joints, nails, teeth, chin can be measured by vernier caliper. Skeleton is formed by bones i.e. *asthi* so while doing *asthi* examination, *aayam & vistaar* (anthropometry) of whole body can be measured. While assessing functions of *asthi dhatu*, for *dharana & majja poshana karma*, serum calcium & serum phosphorus can be measured. As calcium & phosphorus are the important minerals that provide rigidity to skeleton & are responsible for strength of bones, *dharana & majja poshana karma* can be assessed from these criteria.

### CONCLUSION

Samhanana examination is one of the major examinations for the assessment of strength & immunity of a person. With the help of objective parameters, *samhanana* examination will become more suitable for its practical use by reducing subjective bias.

### Further scope of study

*Samhanana* examination can be used as a measuring tool for examination of study subjects in various clinical studies.

### REFERENCES


24. Sushruta Samhita of Sushruta with Nibandhasangraha Commentary of Shri


CORRESPONDING AUTHOR
Dr Hemangini Sanjay Waghulade
Professor & HOD Department of Kriya Sharir Dr. D.Y. Patil College of Ayurved and Research Centre, Nerul, Mumbai, Maharashtra, India

Source of support: Nil
Conflict of interest: None Declared