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To study the functions of Dhatus according to Ayurvedic kriya Sharir (Dhatukarmabhyas)

Research Article

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Abstract

Ayurveda is an Ancient medical science related to healthiness & unhealthiness of a person. The main aim of ayurveda is to acquire *purushartha* by means of Dharma, Artha, Kam, and Moksha. For this purpose each person should be healthy in terms of body & mind. The definition of healthy person according to ayurveda is to balance *Dosha*, *Dhatu*, *Mala*, *Agni*, *Kriya*, *Prasanna Atma*, *Indriya*, & *Man*.

These healthiness is defined by comparison to physiological parameters i.e. *sharirkriyatmak* parameters which are mentioned above. The balance of *Dhatuis* called as *dhatu-samyak* is one of the important parameter of healthy person.

According to Ayurveda there are seven *dhatu*s in a person, these are *ras*, *rakta*, *mamsa*, *meda*, *asthi*, *majja*, *shukra*. These *dhatu*s are defined as per their functions called as *karmas*. These are important for healthy state of the body. As per ayurvediya kriya sharir “*Dosha Dhatu Mala mulam hi shariram*” thus *dhatu* is most important part of body because both *dosha* & *mala* are live with *dhatu*. Hence if we carried out the detail study of functions or *karmas* of *dhatu*s then we definitely get the fixed parameters which help us to keep the person healthy & to give health to the person who are suffering from disease. Due to this reason the study of *dhatu karma* is important & useful research project as per my knowledge.

Key words: *Dhatu*- (*saptadhatu*), *karma*- function of *dhatu*, *Abhaya*-To study

Introduction

Ayurvediya kriya sharir is divided in to *Dosha*, (functional principal) *Dhatu* (constitutional principal) & *mala* (waste products). (1)

Equilibrium of *Dosha*, *Dhatu*, *Mala* is essential for healthy person.

If thus equilibrium is preatu *karma* is important & useful research project as per my knowledge. Sent in person then that person is fit to *resume Dharma, Artha, Kama, Moksha* which are

the four *purushartha* of human life. In other words it is clear that equilibrium of both *dosha*, *dhatu*, *mala*, in a person is a state of healthiness & when this equilibrium doesn't exist then the state is unhealthiness.

Ayurvediya kriya sharir mentioned the *dosha*, *dhatu*, & *malas*, according to their qualities (*guna*). & function (*karma*). The study of “*Doshakarmabhyas*” is possible by observing the effect of *Dosha gunas* on our body & mind. *Malas* are

expelled from our bodies, hence the examination of *malas* is also possible.

The remaining dhatus in equilibrium state acquired the body & also nourishes to each other by laws- 1) *kshirdadhi* 2) *kedarkulya* 3) *khalekapot*.

The *dosha* & *mala* are living with *dhatus* & the diseases also begin from *dhatu vaishmya*, because *khavaigunya*. (starting of disease) also occur in *dhatu*

Thus dhatus also play important role in our body & mind. Hence if we collect all functions of dhatus serially & develop the parameters according to function of dhatus then the concept of dhatus & their functions has been well elaborated, which is helpful for aim of *swasthsya-swasthya rakshan & aturasya vikar prashamanach*.

Due to this reason the topic presented here is to study the function of *dhatus according to Ayurvediya kriya sharir i.e. Dhatukarmabhyas*

Aims and objective

A) Aim- To study the functions of *Dhatus* according to *Ayurvedic kriya sharir. i.e. (Dhatukarmabhyas.)*

B) Objectives –

- 1) To collect all functions of *sapta-Dhatus* described in *Ayurveda*
- 2) To develop parameters in healthy person & to check functions of *Dhatus* with the help of *Ayurvedic literature & modern science*.
- 3) To study functions of *Dhatus*.

Review of literature

1) “*Karma*”-*Ayurvedic definition prayatnadi karma chesitmuchyate / charak su. Ad. 1/49.*

2) *panchmahabhutatmak constitution of our body.*

a) *Dosha: vata: vayu+Akash mahabhutadhikya*

2) *Pitta: Tej mahabhutadhikya*

3) *Kapha: Apa +pruthvi mahabhutadhikya*

Dhatu:

1) *Ras: Apa mahabhutadhikya*

2) *Rakta:Tej +Apa mahabhutadhikya*

3) *Mansa: Parthiv mahabhutadhikya*

4) *Meda: Apa+ Parthiv mahabhutadhikya*

5) *Asthi: Parthiv+ vayu mahabhutadhikya*

6) *Majja: Apa mahabhutadhikya*

7) *Shukra: Apa mahabhutadhikya*

Mala:

1) *Purish: parthiv mahabhutadhikya*

2) *Mutra: Apa+Tej mahabhutadhikya*

3) *sweda: Apa mahabhutadhikya*

3) Description of dhatus according to 1) *Nirukti* 2) *Defination* 3) *Dhatubheda –poshya & poshak* 4) *No. of Dhatu* 5) *place of dhatu in our body (sthan)* 6) *Dhatu swarup* 7) *Dhatu poshan with different theories* 8) *Dhatvagni* 9) *Dhatu parinati –kal.*

4) Description of each Dhatus according to 1) *Nam* 2) *Nirukti* 3) *Synonyms* 4) *place* 5) *parinati* 6) *swarup & guna (qualities)* 7) *sar lakshan* 8) *quantity (praman)* 9) *function* 10) *Types* 11) *Upadhatu* 12) *Mala* 13) *kshaya lakshana* 14) *Vruddhi lakshana*

Collective functions of *saptadhatu* as per *Vagbhatacharya & Susrutacharya*

1) *Ras- prinan, tushti, raktaposhan*

2) *Rakta- Jeevan, sharir varna, dhatupuran, bal, sukha, asandighdha sparshayan, mansa poshan*

3) *Mansa: lepan, bal, medapushti.*

4) *Meda: snehan, swedotpatti, drudhatva, asthipushtikam.*

5) *Asthi: dharan,majjaposhan.*

6) *majja: Asthipuram, preeti, snehan, bala, shukrapusti*

7) *Shukra: Garbhotpadan, dhairya, chavan, dehabala, preeti, harshan.*

Materials & methods

- 1) Place of study: Dept. of kriya sharir, Govt. Ayurvedic College Nanded-431601
- 2) Period: 2000 to 2003

3) Inclusion criteria

- a) Age group- 20 to 40 Yr.
 - b) Number of person- 50
 - c) Healthy persons which are doing their daily activities easily & not suffering from any disease.
 - d) Only male persons because semen analysis test is one parameter in shukra dhatu function.
- 5) Area: Nanded & Parbhani city.
6) By random sampling method.

Exclusion criteria:

- a) Age group: Below 20 & above 40 yrs.
- b) Persons suffering from systemic diseases.
- c) Females.

Method

Darshan sparshan prashne parikshet ch Roginam// Astang hruday Ad 1/12.

Darshan prashna sasparshe pariksha trividha smruta// charak chikitsa Ad 25/ 22.

All the measurable things concern with function of Dhatus & above method is used for examination.

Dhatu function wise description is as follows.

Ras Dhatu:

- a) *Prinan- Ras Dhatu saryakti lakshne, nadi parikshan,* measurement of blood pressure, Examination of Heart as a mula sthan, ECG.
- b) *TUSHTI - Darshan, sparshan, prashana, pariksha.*
- c) *Raktaposhan - Darshan, sparshan, prashan pariksha.*

Rakta Dhatu:

- a) *Jeevan- Hb%, RBC Count, respiratory rate.*
- b) *sharirvarna: Rakta dhatu sarvyakti lakshane, darshan, sparshan, prashna pariksha.*
- c) *Dhatupuram;Nadi pariksha, examination of blood pressure.*
- d) *Bala: Harward step test*
- e) *sukh: darshan, sparshan, prashna pariksha.*
- f) *Asandigha sparshdhyan- use of cotton, pin & til tail.*
- g) *Mansa poshan – Darshan, Sparshan, Prashna Pariksha.*

Mansa Dhatu;

- a) *Lepana-measurements by tape of parts of body described in mansadhatusar lakshane, weight, muscle tone.*
- b) *Bala-By weight lifting.*
- c) *Medapushti- Darshan, sparshan, prashna pariksha.*

Meda Dhatu:

- a) *Snehan- meda dhatusar lakshane, measurement of abdomen by tape, body mass index, west hip ratio.*
- b) *Swedotpati- Darshan, sparshan, prashna, pariksha.*
- c) *Drudhata*
- d) *Astipustikarma*

Asthidhatu-

- a) *Dharan – Asthi Dhatusar vyakti lakshane, weight, height, nail, & teeth examination,*
- b) *Majjaposhan- Darshan, sparshan , prashna pariksha.*

Majja Dhatu-

- a) *Asthipuran- majjadhatusar lakshane, Reflexes.*
- b) *preety: - Darshan sparshan, prashna pariksha.*
- c) *snehan*
- d) *Bala- sharir bala, manobal, smruti, buddhi pariksha.*

- e) *shukra pushti- darshan, sparshan, prashna pariksha.*

Shukra Dhatu-

- a) *Garbhotpadan-* for married *prashna pariksha*, for unmarried semen analysis test,
b) *Dhairya; Darshan, sparshan, prashna.*
c) *chavan*
d) *Dehabala*
e) *preety*
f) *Harshan*

Equipment & instruments for examination-

- 1) *Rasa Dhatu* - vernier calliper, stop watch, spigmomanometer, haemocytometer, stethoscope, ECG machine.
- 2) *Rakta Dhatu*:-Haemoglobinometer, haemocytometer, stop watch, cotton, pin, til tail.
- 3) *Mansa Dhatu* -Tape, weighing machine, weight lifting.
- 4) *Meda Dhatu* - Tape.
- 5) *Majja Dhatu* - clinical hammer, paragraph for smruti parikshana, charts for buddhi parikshana.
- 6) *Shukra Dhatu* - semen analysis kit, Dropper, glass slide, microscope.

Assessment

The detail examination paper has been made including above mentioned parameters.

The examination of person has been done as per paper by using above mentioned tools with *darshan, sparshan, prashna pariksha.*

The findings recorded person wise.

Thus the assessment is made as per method mentioned above.

Results

After examination of 50 persons the following results find out.

- 1) The age group in between 20 to 33 yr.

- 2) *Twacha sukshmatva* in between 1.5 to 3.5 mm.
- 3) Pulse rate between 64 to 100/min.
- 4) Blood pressure systolic in between 100 to 140 mm of hg. Diastolic in between 60 to 90 mm of hg.
- 5) Haemoglobin in between 11 to 16 gm%.
- 6) RBC In between 3.2 to 6.4 millions/mm³.
- 7) Respiratory rate 16 to 24 /min.
- 8) Weight in between 41 to 74 kg.
- 9) *Mansadhatu* bal in between 2.5 to 7 unit
- 10) The time to absorb one drop of Til tail in between 10 to 60 minute.
- 11) BMI in between 14.52 to 28.12 kg/m².
- 12) Waist hip ratio in between 0.69 to 0.92
- 13) Height in between 153 to 178 cm
- 14) No. of teeth in between 28 to 32.
- 15) 20 *pravar*, 26 *madham*, & 4 *avar manobal.*
- 16) 13 *uttam*, 34 *madhyam*, & 3 *hin smruti.*
- 17) 02 *uttam*, 29 *madhyam*, 19 *hin buddhi.*
- 18) Volume of semen in between 1.5 to 4 ml.
- 19) Sperm count in between 53 to 90 million/ mm³.
- 20) Sperm motility in between 52 to 80 %.

Discussion & conclusion

- 01) *Dhatusar lakshana* are useful to determine the functions of *dhatu*.
- 02) Modern parameters which are used are also useful to determine the function of *dhatu*.
- 03) *Vagbhatacharya* explained one main function of each *dhatu*. *Susrutacharya* explained many functions of *dhatu*.
- 04) If the area & sample increased for study of function of *dhatu*. & by taking help of modern parameters then it is beneficial to develop parameters of functions of *dhatu*.
- 05) From the above discussion it is concluded that the above study is

helpful to keep functions of *dhatu*s in balance state in our body. & little path towards the studies function of *dhatu*s according to *Ayurvedic kriyasharir*.

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