



Research Article

ASSESSMENT OF MAMSA SARA IN PANDU ROGI WITH SPECIAL REFERENCE TO MILD TO MODERATE ANAEMIA - AN OBSERVATIONAL STUDY

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ABSTRACT

Ayurveda is a science of life that offers meaning of health and better living. Assessment of health, disease and assortment of treatment are done mainly by clinical observation by the physician. *Sara Pareeksha* obliges as a vital diagnostic tool and is one among the method of clinical examination under *Dashavidha Atura Pareeksha* to evaluate the status of *Dhatu*. *Mamsa Dhatu*, provides nourishment to other *Dhatu*s, provide strength, health, happiness and tranquility. **Aim and Objective:** To evaluate the status of *Mamsa Sarata* in *Pandu Rogi* with special reference to mild and moderate anaemia. **Materials and Methods:** The present study is a cross sectional observational study, conducted in 153 patients of each mild and moderate anaemia categorized based on diagnostic and inclusion criteria. Detailed history taken with a specially designed case proforma and *Charakoktha Mamsa Sara Purusha Lakshanas* assessed with a validated questionnaire. **Result:** On analysis of *Mamsa Sara Purusha Lakshanas* in *Pandu Rogi* with special reference to mild anaemia and moderate anaemia showed considerable change in the status of above mentioned *Sara Purusha Lakshanas* within and between two groups of mild anaemia and moderate anaemia. **Discussion:** In this study, 91.52% and 84.013% of *Charakoktha Mamsa Sara Purusha Lakshanas* estimated in mild anaemia patients and moderate anaemia patients respectively thus changes in *Mamsa Sarata* more appreciable in moderate anaemia patients.

INTRODUCTION

Dhatu in body present in excellent condition that person is known by that *Sarata*. The *Sara* or *Dhatu* functioning at its excellence is an indicator of the fitness of the human body. *Rakta* first acted upon by *Raktagni* and from this *Sookshma Mamsa* is formed. *Rakta*, complemented by *Vayu*, *Jala* and *Tejas* attains compactness and gets transformed into *Mamsa*^[1]. *Mamsa Dhatu* is the product of *Rakta Dhatu*. Normal functions of *Mamsa Dhatu* are to provide covering all the body entities, to help to excrete internal *Mala* to outside, and to nourish *Medo Dhatu*.

Sara Pareeksha helps to differentiate *Guru* and *Laghu Rogi*. Lean and slender may seem to be strong enough, just comparable to "*Pipeelika Bharaharanavath Siddhi*"^[2]; implies that small ants capable of carrying much more weight than its own. *Vikriti* (pathological changes) in *Sara* to be assessed as it varies according to the stages of *Samprapti* of *Vyadhi*, food and lifestyle of the individual.

MATERIALS AND METHODS

Source of Data

306 subjects of either sex, irrespective of caste and religion selected from Out-patient and In-patient Department of Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hassan, other referrals, special camps, laboratories and medical hospitals in and around Hassan.

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Method of Collection of Data

473 patients of anaemia were screened and out of that 306 subjects fulfilling the diagnostic and the inclusion criteria included for the study and randomly grouped into mild and moderate anaemia. Detailed history recorded in specially designed validated case proforma, which includes *Charakoktha lakshanas* of *Mamsa Sara* utilized for assessment and ascertainment of *Masa Sarata* in screened subjects.

Study design

Observational study

Sample size estimation

Formula for sample size calculation $S = Z^2 * P (1-P) / C^2$

For 95% confidence level, Z value= 1.96, P= Prevalence rate of anaemia= 24.8% (worldwide prevalence of anaemia according to WHO), C= confidence interval= 0.5.

$S = Z^2 * P (1-P) / C^2 = 1.962 * 0.248 (1-0.248) / 0.52 = 286$

Diagnostic Criteria

Assessment of severity of anaemia, based on hemoglobin levels according to WHO [3].

Patients with mild anaemia; Female-11.0g/dl to 11.9g/dl

Male- 11.0 g/dl to 12.9 g/dl

Moderate anaemia - Hb percentage between 8.0g/dl to 10.9g/dl (in both males and females).

With or without following *Samanya Lakshanas* of *Pandu*; *Pandutha* (pallor), *Alpa-raktatha* (quantitative and qualitative decrease of blood), *Dourbalya* (weakness), *Karna-kshweda* (abnormal sounds in ear), *Gatra-shoola* (pain in different parts of body), *Sadana* (malaise), *Shrama* (exhaustion), *Sheerna-lomata* (falling of bodily hairs), *Shoona-akshikuta shotha* (periorbital oedema), *Haritha Varna* (abnormal discoloration), *Hrudrava* (palpitation), *Swasa* (exertional dyspnoea), *Bhrama* (giddiness), *Hatha-anala* (loss of appetite), *Anna-dweshha* (aversion towards food), *Aruchi* (tastelessness), *Gourava* (heaviness), *Jwara* (rise in body temperature), *Hatha-prabhatwa* (loss of skin lustre), *Shishira-dweshha* (hatred against cold), *Nidralu* (drowsiness), *Shteevana* (expectoration), *Alpavak* (subtle speech), *Alpa-medas* (decrease of body fat), *Pindikodweshtana* (muscle cramps), *Kati-uru-pada-sadana* (fatigue of muscles of low back and lower limbs), *Arohana-ayasa* (exertion while climbing staircase).

Laboratory investigation

Hemoglobin percentage

Inclusion and Exclusion Criteria

Inclusion Criteria

Patients between 18-60 years of age of either sex, fulfilling diagnostic criteria and willing to sign the written consent included for the study.

Exclusion criteria

- Diagnosed cases of HIV, STD, TB
- Pregnancy
- Severe anaemia (less than 8.0 g/dl)

Assessment Criteria

59 questions framed under *Sthira*, *Guru*, *Shubha* and *Mamsopachita* that are being examined at *Shanka* (temporal region), *Lalata* (forehead), *Krukatika* (back of neck), *Akshi* (periorbital region), *Ghanda* (zygomatic region), *Hanu* (mandibular region), *Greeva* (neck), *Skanda* (shoulder), *Udara* (abdominal region), *Kaksha* (axilla), *Vaksha* (thoracic region), *Panisandhi* (joints of upper limb), *Padasandhi* (joints of lower limb).

Sthira assessment in general by palpating for checking firmness and sagging over the *Shanka* (over temporalis muscle), *Lalata* (over frontalis muscle), *Krukatika* (over back of neck), *Akshi* (periorbital region), *Ghanda* (zygomatic region), *Hanu* (mandibular region), *Greeva* (over neck), *Skanda* (muscles of shoulder region), *Udara* (abdominal muscles), *Kaksha* (axillary region), *Vaksha* (pectoral region), *Panisandhi* (over biceps region), *Padasandhi* (over calf muscles) and score 1 will be attributed for firmness present and score 0 for presence of sagging. Also *Sthira* evaluated by checking strength of muscles. *Sthira Lalata* assessment by evaluating the strength of frontalis muscle by asking the patient to elevate the eyebrows by placing examiner's thumb in the middle of forehead, score 1 and 0 given for movements possible against gravity and not possible against gravity respectively. *Sthira Akshi* by evaluating the strength of orbicularis oculi by asking the patient to pry open the upper eye lid against the force of physician applied over the forehead, scores given as follows; 0 for incomplete closure of eyelids, 1 for eyelids just closing with minimal resistance, 2 for good eyelid closure with some resistance, 3 for strong eyelid closure but can be overcome with difficulty and 4 for very strong closure of eyelid that cannot be overcome. *Sthira Hanu* assessment by checking the strength of buccinator muscle by asking the patient to puff out the cheeks against the force of examiner's hand, note the air escape when cheeks are compressed. Score 0 given for unable to hold the air when compressed and 1 for able to hold the air when compressed. For *Sthira Skanda*, *Panisandi* and *Padasandi* assessment of strength of deltoid muscle, biceps muscle, calf muscle with Oxford scale [4] tested against the resistance of examiner's

resistance) 0-5 grading is based on the movements. Score 0 is attributed for complete paralysis, 1 for flicker of contraction, 2 for movements possible if gravity eliminated, 3 for movement against gravity but not resistance, 4 for movement against some resistance and 5 for normal power (it is not normally possible to overcome normal adult power).

Guru (muscle bulk) is assessed by inspection of muscles at *Shanka* (temporal region), *Lalata* (forehead), *Krukatika* (back of neck), *Akshi* (periorbital region), *Ghanda* (zygomatic region), *Hanu* (mandibular region), *Greeva* (neck), *Skanda* (shoulder), *Udara* (abdominal region), *Kaksha* (axilla), *Vaksha* (thoracic region), *Panisandhi* (joints of upper limb), *Padasandhi* (joints of lower limb) and score 0 and 1 attributed for wasting present and muscle bulk present respectively. For *Guru Padasandi*, also inspect for any physical changes due to diseases, score 1 for absent and 0 for present.

Shubha refers to absence of any physical changes^[5] measured by checking any physical changes in *Shanka* (temporal region), *Lalata* (forehead muscles), *Krukatika* (back of neck), *Akshi* (periorbital region), *Ghanda* (zygomatic region), *Hanu* (mandibular region), *Greeva* (neck), *Skanda* (shoulder region), *Udara* (abdominal region), *Kaksha* (axillary region), *Vaksha* (thoracic region), *Panisandhi* (joints of upper limb), *Padasandhi* (joints of lower limb) on inspection due to any diseases. Score 1 and 0 is attributed for absence and presence of physical changes due to any diseases respectively. In addition, for *Shubha Padasandi*, score 1 and 0 given for the patient getting muscle cramps (on interrogating with the patient).

Mamsopachita refers to the presence of active movements^[6]. *Mamsopachita Shanka* assessed by asking the patient to clench the teeth, placing the examiner's hand over the temporalis muscle for checking the movements of temporalis muscle; score 1 and 0 attributed for active movements of muscle seen and movements not possible is seen. *Mamsopachita Lalata* evaluated by asking the patient to lift the eyebrow and testing the movement of frontalis muscle; score 1 and 0 will be for active movements of muscle seen and movements not possible is seen. *Mamsopachita Krukatika* tested by evaluating the movement of trapezius by shoulder shrugging; score 1 and 0 will be attributed for active movements of muscle seen and movements not possible is seen.

Mamsopachita Akshi assessment done by checking the movements of orbicularis oculi and score 1 and 0 given for active movements of muscle seen and movements not possible is seen. *Mamsopachita Ghanda* evaluation by assessing the movement of masseter muscle by asking the patient to clenching teeth and place examiners hand over the masseter muscle; score 1 and 0 will be accredited for active movements of muscle seen and movements not possible is seen. *Mamsopachita Hanu* evaluated by asking the patient to puff out the cheeks and score 1 and 0 will be attributed for active movements of muscle seen and movements not possible is seen. *Mamsopachita Greeva* assessment done by asking the patient to take a forceful inspiration and checking for the movements of sternocleidomastoid muscle; score 1 and 0 will be ascribed for active movements of muscle seen and movements not possible is seen. *Mamsopachita Skanda* by evaluating by asking the patient to adduct and abduct the shoulder and score 1 and 0 will be attributed for active movements of muscle seen and movements not possible is seen. *Mamsopachita Udara* by evaluation by asking the patient to bent side and front, forceful expiration, placing the examiners hand over abdomen and observe for the movements of abdominal muscles; score 1 and 0 will be attributed for active movements of muscle seen and movements not possible is seen. *Mamsopachita Kaksha* can be assessed by asking the patient to flex and extent the arm, evaluate the movements pectoralis muscle/biceps brachii and score 1 and 0 will be attributed for active movements of muscle seen and movements not possible is seen. *Mamsopachita vaksha* by assessing the muscle movement of pectoralis muscle by asking the patient to rotate the arm forward and score 1 and 0 will be attributed for active movements of muscle seen and movements not possible is seen. *Mamsopachita Panisandi* evaluating the movements of biceps muscle assessed by asking the patient to flex the elbow, score 1 and 0 will be attributed for active movements of muscle seen and movements not possible is seen. *Mamsopachita Padasandi* is assessed by the asking the patient to dorsiflex and plantar flex the foot for checking the movements of calf muscle and score 1 and 0 will be attributed for active movements of muscle seen and movements not possible is seen.

Statistical Analysis: All the parameters of the study are taken for analysis in IBM-SPSS Version-23

OBSERVATION AND RESULT

Table 1: Showing Chi square value of *Mamsa Sara (Sthira)* among mild and moderate anaemia

| S.No | Site - firm skin | <i>Sthira</i> | | | | | | | | | |
|------|------------------------------------|--------------------|------|----------------|------|----|-------------------------|------|----------------|------|----|
| | | Mild anaemia (153) | | | | | Moderate anaemia(N=153) | | | | |
| | | F | % | X ² | P | S | F | % | X ² | P | S |
| 1 | <i>Shanka</i> -firm | 153 | 100 | 115.10 | .000 | HS | 153 | 100 | 115.10 | .000 | HS |
| 2 | <i>Lalata</i> -firm | 153 | 100 | 115.10 | .000 | HS | 151 | 98.7 | 415.10 | .000 | HS |
| | Movements possible against gravity | 153 | 100 | 115.10 | .000 | HS | 151 | 98.7 | 145.10 | .000 | HS |
| 3 | <i>Krukatika</i> -firm | 152 | 99.3 | 149.02 | .000 | HS | 150 | 98.0 | 141.23 | .000 | HS |
| 4 | <i>Akshi</i> -firm | 152 | 99.3 | 149.41 | .000 | HS | 151 | 98.7 | 141.23 | .000 | HS |
| | Strong closure | 148 | 96.7 | 419.05 | .000 | HS | 138 | 90.2 | 128.55 | .000 | HS |
| 5 | <i>Ghanda</i> -firm | 152 | 99.3 | 145.10 | .000 | HS | 146 | 95.4 | 141.23 | .000 | HS |
| 6 | <i>Hanu</i> -firm | 152 | 99.3 | 145.10 | .000 | HS | 144 | 94.1 | 141.23 | .000 | HS |
| | Able to hold air when compressed | 152 | 99.3 | 145.10 | .000 | HS | 140 | 91.5 | 141.23 | .000 | HS |
| 7 | <i>Greeva</i> -firm | 152 | 99.3 | 145.10 | .000 | HS | 143 | 9.5 | 141.23 | .000 | HS |
| 8 | <i>Skandha</i> -firm | 152 | 99.3 | 145.10 | .000 | HS | 147 | 96.1 | 141.23 | .000 | HS |
| | Normal power | 145 | 94.8 | 145.10 | .000 | HS | 129 | 84.3 | 129.94 | .000 | HS |
| 9 | <i>Udara</i> - Firm | 151 | 98.7 | 145.10 | .000 | HS | 147 | 96.1 | 137.41 | .000 | HS |
| 10 | <i>Kaksha</i> -firm | 152 | 99.3 | 145.10 | .000 | HS | 151 | 98.7 | 141.23 | .000 | HS |
| 11 | <i>Vaksha</i> -firm | 151 | 98.7 | 145.10 | .000 | HS | 149 | 97.4 | 137.23 | .000 | HS |
| 12 | <i>Panisandhi</i> -firm | 151 | 98.7 | 145.10 | .000 | HS | 146 | 95.4 | 137.23 | .000 | HS |
| | Normal power | 136 | 88.9 | 455.98 | .000 | HS | 105 | 68.6 | 242.00 | .000 | HS |
| 13 | <i>Padasandhi</i> -firm | 151 | 98.7 | 145.10 | .000 | HS | 141 | 92.2 | 108.78 | .000 | HS |
| | Normal power | 122 | 79.7 | 149.79 | .000 | HS | 97 | 63.4 | 195.76 | .000 | HS |

Table 2: Showing Chi square value of *Mamsa Sara (Guru)* among mild and moderate anaemia

| S.No | Site - Muscle bulk present | <i>Guru</i> | | | | | | | | | |
|------|--|--------------------|------|----------------|------|----|--------------------------|------|----------------|------|----|
| | | Mild anaemia (153) | | | | | Moderate anaemia (N=153) | | | | |
| | | F | % | X ² | P | S | F | % | X ² | P | S |
| 1 | <i>Shanka</i> | 152 | 99.3 | 149.125 | 0.00 | HS | 149 | 97.4 | 137.418 | 0.00 | HS |
| 2 | <i>Lalata</i> | 152 | 99.3 | 149.025 | 0.00 | HS | 153 | 100 | 129.941 | 0.00 | HS |
| 3 | <i>Krukatika</i> | 152 | 99.3 | 149.026 | 0.00 | HS | 153 | 100 | 132.541 | 0.00 | HS |
| 4 | <i>Akshi</i> | 151 | 98.7 | 145.105 | 0.00 | HS | 150 | 98.0 | 141.235 | 0.00 | HS |
| 5 | <i>Ghanda</i> | 152 | 99.3 | 149.025 | 0.00 | HS | 139 | 90.8 | 102.124 | 0.00 | HS |
| 6 | <i>Hanu</i> | 149 | 97.4 | 126.281 | 0.00 | HS | 120 | 78.4 | 92.556 | 0.00 | HS |
| 7 | <i>Greeva</i> | 151 | 98.7 | 145.105 | 0.00 | HS | 137 | 89.5 | 95.865 | 0.00 | HS |
| 8 | <i>Skandha</i> | 152 | 99.3 | 149.025 | 0.00 | HS | 141 | 92.2 | 108.765 | 0.00 | HS |
| 9 | <i>Udara</i> -muscle bulk with fat present | 145 | 94.8 | 244.039 | 0.00 | HS | 142 | 92.8 | 243.567 | 0.00 | HS |
| 10 | <i>Kaksha</i> | 150 | 98.0 | 145.105 | 0.00 | HS | 142 | 92.8 | 108.765 | 0.00 | HS |
| 11 | <i>Vaksha</i> | 152 | 99.3 | 149.026 | 0.00 | HS | 143 | 93.5 | 116.614 | 0.00 | HS |
| 12 | <i>Panisandhi</i> | 151 | 98.7 | 145.105 | 0.00 | HS | 141 | 92.2 | 108.765 | 0.00 | HS |
| 13 | <i>Padasandhi</i> | 149 | 97.4 | 137.413 | 0.00 | HS | 137 | 89.5 | 95.695 | 0.00 | HS |

Table 3: Showing Chi square value of Mamsa Sara (Shubha) among mild and moderate anaemia

| S.no | Site - any physical changes: absent | Shubha | | | | | | | | | |
|------|-------------------------------------|----------------------|------|----------------|-------|----|--------------------------|------|----------------|------|----|
| | | Mild anaemia (N=153) | | | | | Moderate anaemia (N=153) | | | | |
| | | F | % | X ² | P | S | F | % | X ² | P | S |
| 1 | Shanka | 147 | 96.1 | 129.94 | 0.000 | HS | 132 | 86.3 | 83.45 | .000 | HS |
| 2 | Lalata | 148 | 96.7 | 133.65 | 0.000 | HS | 133 | 86.9 | 80.52 | .000 | HS |
| 3 | Krukatika | 147 | 96.1 | 129.94 | 0.000 | HS | 141 | 92 | 83.45 | .000 | HS |
| 4 | Akshi | 145 | 94.8 | 122.67 | 0.000 | HS | 123 | 80.4 | 108.7 | .000 | HS |
| 5 | Ghanda | 149 | 97.4 | 137.65 | 0.000 | HS | 120 | 78.4 | 56.52 | .000 | HS |
| 6 | Hanu | 149 | 97.4 | 137.41 | 0.000 | HS | 144 | 74.5 | 49.47 | .000 | HS |
| 7 | Greeva | 148 | 96.7 | 133.65 | 0.000 | HS | 116 | 75.8 | 38.76 | .000 | HS |
| 8 | Skandha | 146 | 95.4 | 126.28 | 0.000 | HS | 129 | 84.3 | 40.79 | .000 | HS |
| 9 | Udara | 145 | 94.8 | 122.03 | 0.000 | HS | 142 | 92.8 | 72.05 | .000 | HS |
| 10 | Kaksha | 150 | 98.0 | 145.10 | 0.000 | HS | 132 | 86.3 | 112.1 | .000 | HS |
| 11 | Vaksha | 149 | 97.4 | 137.41 | 0.000 | HS | 13 | 86.3 | 80.52 | .000 | HS |
| 12 | Pani Sandhi | 142 | 92.8 | 112.16 | 0.000 | HS | 113 | 73.9 | 34.83 | .000 | HS |
| 13 | Pada Sandhi | 126 | 82.4 | 64.059 | 0.000 | HS | 109 | 71.2 | 27.61 | .000 | HS |
| | | 117 | 76.5 | 42.882 | 0.000 | HS | 95 | 62.1 | 8.946 | .003 | HS |

Table 4: Showing Chi square value of Mamsa Sara (Mamsopachitha) among mild and moderate anaemia

| S.No | Site- Active movements of muscles seen | Mamsopachitha | | | | | | | | | |
|------|--|----------------------|------|----------------|------|----|-------------------------|------|----------------|------|----|
| | | Mild anaemia (N=153) | | | | | Moderate anemia (N=153) | | | | |
| | | F | % | X ² | P | S | F | % | X ² | P | S |
| 1 | Shanka | 153 | 100 | 149.02 | 0.00 | HS | 133 | 86.9 | 126.281 | 0.00 | HS |
| 2 | Lalata | 152 | 99.3 | 145.10 | 0.00 | HS | 147 | 96.1 | 129.941 | 0.00 | HS |
| 3 | Krukatika | 149 | 97.4 | 137.41 | 0.00 | HS | 135 | 88.2 | 89.471 | 0.00 | HS |
| 4 | Akshi | 151 | 94.8 | 145.10 | 0.00 | HS | 144 | 94.1 | 119.118 | 0.00 | HS |
| 5 | Ghanda | 148 | 96.7 | 133.65 | 0.00 | HS | 133 | 86.9 | 83.458 | 0.00 | HS |
| 6 | Hanu | 148 | 96.7 | 126.28 | 0.00 | HS | 128 | 83.7 | 69.340 | 0.00 | HS |
| 7 | Greeva | 153 | 100 | 126.29 | 0.00 | HS | 125 | 81.7 | 61.497 | 0.00 | HS |
| 8 | Skandha | 152 | 99.3 | 119.11 | 0.00 | HS | 125 | 81.7 | 61.497 | 0.00 | HS |
| 9 | Udara | 149 | 97.4 | 137.41 | 0.00 | HS | 140 | 91.5 | 105.418 | 0.00 | HS |
| 10 | Kaksha | 151 | 98.7 | 145.10 | 0.00 | HS | 141 | 92.2 | 106.541 | 0.00 | HS |
| 11 | Vaksha | 150 | 98.0 | 141.23 | 0.00 | HS | 136 | 88.9 | 89.471 | 0.00 | HS |
| 12 | Pani Sandhi | 140 | 91.5 | 105.48 | 0.00 | HS | 111 | 72.5 | 89.471 | 0.00 | HS |
| 13 | Pada Sandhi | 117 | 77.8 | 47.22 | 0.00 | HS | 100 | 65.4 | 60.497 | 0.00 | HS |

DISCUSSION

Mamsa Dhatu is the first immobile Dhatu. Support can be given with 'Sthira' or firm subjects. Rasa-Raktha-Mamsa in sequence of nourishment; whereas Kala is meant for 'Dharana Karma' for support and therefore the sequence is different. It starts from Mamsa instead of Rasa.^[7] Sthira refers to

Nischala or immobile/fixed^[8]. It can be assumed as the muscle tone (residual muscle tension or tonus); muscle's resistance to passive stretch during resting state^[9]. Guru can be assumed as the Brihmana Shakthi^[10]. Skeletal muscle composed of 75% water and 25% solids out of that comprising of proteins like myosin,

actin, troponine, nebulin, myoglobin, etc. carbohydrates, lipids, nitrogen substances like ATP, urea and creatine, inorganic substances including sodium, potassium, calcium, magnesium, chlorine, etc [11]. Body mass index (BMI) is also an indicator of nutritional status [12]. Low muscle mass is associated with poor blood - borne nutritional status [13]. Patients with low muscle mass had poor nutritional biomarkers including B-group vitamins-riboflavin Vitamin B₁₂, red cell folate, antioxidants and trace elements- zinc, copper, etc [14]. *Shubha* refers to appearance with appropriate quality without any ailments [15]. Skeletal muscles cells are known to be metabolically active responsible for beneficial effects of muscle contraction. Pathophysiologic changes in muscle mass with poor mental health and well-being include inflammation, oxidative stress, malnutrition and physical inactivity [16]. *Pandurogis* presented with reduced *Bala* as an outcome of hampered *Uttoraathara Dhatu Poshana* due to the involvement of *Rasa* and *Rakta Dhatu*. Function of *Ojas* is *Upachita Mamsa* that refers to the proper growth and nourishment of muscles all over the body. According to *Acharya Dalhana*, *Upachita Mamsa* can be understood as *Sarvachesta* or the active muscle movements [17].

CONCLUSION

A wise physician should not be misinterpreted to decide a person is strong or weak from their bulky or small body structure or appearance. Disease manifestation hinge on the excellence of *Dhatu* and its nourishment form *Ahara Rasa*. In this study, 91.52% and 84.01% of *Charakoktha Mamsa Sara Purusha Lakshanas* are appreciated in mild anaemia and moderate anaemia patients respectively. This entails depletion of *Dhatu*s more marked as the disease gets progressed. Ayurveda necessitates evidence based research in the area exclusively in diagnostic principles so that Ayurvedic diagnosis can be made more pinpointed leading to more effective treatment stratagems.

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