

### **Review Article**

# Clinical Significance and Research-oriented Approach of Dhatu Sarata (Tissue Excellence)

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## A B S T R A C T

These Ayurveda specialities - dosha, dhatu, mala, agni (digestive fire), prakriti (human constitution), and dhatu sarata (tissue excellence) form the basis for Ayurveda diagnosis, therapy, and research. Acharya Charak stated, "bala mana vishesh gyaanartham updishyate," which means that *dhatu sara* assesses an individual's level of strength. The purest form of *dhatus*, *sara*, must be in its ideal state (*Prakrit avastha*) and not influenced by any *dosha* in order to exhibit these traits. When dhatvagni and bhutagni are in their optimum state, the formation of samadhatus takes place and when these dhatus are in their excellent state, it is called sara of that particular dhatu. Rasayana chikitsa, which helps to achieve excellent attributes of rasadi dhatus, or body cells and tissues, can be prescribed for enhancing an individual's sarata. Dhatu sarata (tissue excellence) related literature was gathered from several Ayurvedic compendia as well as current literature. Recent research articles were also looked up from different database search engines. After exploring the literature relevant to the analysis and reporting of dhatu sarata, it was found that there hasn't been much study done in this field. To analyse these factors for better diagnosis and understanding of the concept and to record dhatu sarata at the OPD level, a feasible, standardised tool must be designed. As multiple factors including age, season, digestion, and physical strength, affect an individual's sarata, this review article primarily focuses on the idea of dhatu sarata and its utility in the field of research and treatment.

**Keywords:** *Dhatu Sara, Sara Pariksha,* Tissue Excellence, *Saptadhatu,* Ayurveda

## Introduction

The perfect, age-old science of life, Ayurveda is considered to be one of the greatest gifts which the Sages of ancient India gave to humanity. Due to its importance in maintaining the health of a healthy individual (*Swasthasya Swasthya Rakshanam*), we have never stopped using the principles and concepts of Ayurveda even in the present era.<sup>1</sup> Ayurveda has explained the physiological functions of the human body under three elements i.e., *Dosha* (bodily humor), *Dhatu* (tissues), and *Mala* (waste material).<sup>2</sup> They are described as the roots of our bodies. For physical, mental, and social well-being, it is essential that all three be in balance. Also, these three forms the base of the knowledge of anatomy, physiology, pathology, and treatment in Ayurveda. The

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specialities of Ayurveda on which diagnosis, treatment, and research are centred include Dosha, Dhatu, Mala, Agni (digestive fire), Prakriti (body constitution type), and Dhatu sarata. Dhatus that are properly nourished have sufficient strength to preserve the health and immune system. Each person has Sara, which represents the excellent attributes of each dhatu on both levels, physical and psychic. The purest form of *dhatu* is referred to as "Sara."<sup>3</sup> Sara is portrayed by Acharya Chakrapani as "Vishudhataro Dhatu," which means "the essence of all Dhatus". Guidelines for the clinical examination of the patient (rogi pariksha) under the Dashavidha pariksha (tenfold examination) have been defined by Acharya Charak. He has described dhatu sarata in the context of *Dashavidha Pariksha*.<sup>4</sup> These guidelines include a physical constitution (Prakriti), morbidity (vikriti), excellence of tissue elements (Sara), compactness of tissues or organs (samhanana), measurement of body constituents (pramana), homologation (satmya), psychic condition (satva), power of intake and digestion of food (aharshakti), power of performing exercise (vyayam shakti) and age (vaya). Additionally, he said, "bala mana vishesh gyaanartham updishyate," which indicates that dhatu sara gives us the knowledge of the degree of strength of an individual.<sup>5</sup> Dhatu sarata is a term that encompasses three distinct perspectives. It refers to the balanced state of the *dhatu* from a quantitative, qualitative, and functional standpoint, which is resistant to any abnormal vridhi (increase), kshaya (reduction), or dhatu pradoshaja vikara (signs of vitiated dhatu). Acharya Charak emphasised that the strength of a person does not correlate to their body's mass or shape, such as their lean or well-built stature. It would be misleading to assume that a strong person has good strength based solely on appearance, or that someone who is lean is always weak, as the opposite condition may happen. This is illustrated using an analogy of ants, which, while having a small body, can carry heavy weights greater than their own weight.<sup>6</sup> In addition, Ashtanga Hridaya (teeka) observed that "elephants have big and corpulent bodies possessing less strength than the lean and short bodies of lions."7 Sara pariksha should be carried out to prevent such misinterpretations.

#### Evaluation of Dhatu Sarata by Bala Assessment

The following three kinds of *bala* have been described by Acharya Charak: *Sahaja* (inherited/ innate, present from birth), *Kalaja* (seasonal or periodic), and *Yuktikrita* 

(acquired). Sahaja Bala is innately (since birth) present in the body and mind. Kalakrita Bala is determined by a person's age and seasonal variations. Six seasons have been described in Ayurveda where an individual born during shishir and hemanta ritu has uttam bala (maximum strength). Vasant and sharad ritu comprise madhyam bala (medium strength) whereas grishma and varsha ritu have hina bala (minimum strength). The combined effect of a person's dietary and other physical regimen determines their acquired strength, or yukti krita bala. Dhatu samya kara ahara viharas in Yuktikritam bala increase dhatu sarata whereas Asatmyviharas diminish dhatu sarata. The samanya vishesh principle, which states that all existent elements increase when the samanya principle is true and decrease when the vishesha principle is true, provides a clear explanation for this.8 A weak quality dhatu in an individual can be improved by giving the proper ahara and vihar (yuktikrita).9 For the evaluation of dhatu sarata, Kalaj and Yuktikrit bala are regarded as confounders.

## Sapta Dhatus (Seven Tissues)

Ayurveda considers the basic human body to be formed by dosha, dhatu, and mala.10 Another is 'dhranaat dhatavah' which means 'that which bears.' Dhatus, one of the basic components of the body, fulfils the roles of poshana (nutritional reservoir) and *dharana* (structural framework). The ahara rasa helps in the formation of rasa dhatu, which then nourishes other dhatus. The Dhatu Nirman is affected by the nourishment that comes from ahara, vihar and aushadh. All seven dhatus go through certain alterations (metabolism) that lead to the formation of sara and kitta. The kitta is expelled, and the sara is utilised for the formation of dhatu. Good nutrition aids in the development of good dhatu, which is necessary for the prevention of disease. Dhatu's strength is also influenced by an individual's agni. Each dhatu contributes in a distinct way to keeping a body healthy, and it gradually deteriorates with age. Ageing causes a gradual loss (kshaya) of each dhatu's quality and quantity.<sup>11</sup> Rasa dhatu, Rakta dhatu, Mamsa dhatu, Meda dhatu, Asthi dhatu, Majja dhatu, and Shukra dhatu are the seven types of *dhatus* according to Ayurveda. When all the *dhatus* are in their ideal state and exhibit functional excellence (utkrushta karma), the characteristics of an excellent dhatu (dhatu sara lakshana) are attained.

Table 1 shows *dhatus* and their functions with their contemporary correlation in modern physiology.

	Dhatus Comparing Tissue		Functions (Karma)	
R	asa dhatu	Plasma of body	Preenana (nourishment)	
Ro	akta dhatu	Blood cells	Jeevana	

#### Table I.Dhatus and Their Functions

Mamsa dhatu	Muscles and components Lepana (adhering)	
Meda dhatu	Adipose tissue, marrow of small bones (red marrow)	Snehana (oiling)
Asthi dhatu	Bone and cartilage	Dharana (stabilising)
Majja dhatu	Bone marrow of large bones (yellow marrow)	Poorana (filling)
Shukra dhatu	Sperm and ovum	Garbhotpadana (reproduction)

## Dhatu Sara

The purest form of *dhatus*, *sara*, must be in its ideal state (*Prakrit avastha*) and devoid of any *dosha*. A person with the purest form of *rasa dhatu* is considered to be *rasa/twak sara purush*. The characteristic features of *twak sara* are explained. The concept of *sara* is only related to *dhatu*, not *updhatu* or *mala*. The effectiveness of *agni* determines the quality of *dhatu*. When *dhatvagni* and *bhutagni* are in their optimum state, the formation of *samdhatus* takes place. When the *Agni* is in *mandavastha*, it leads to the *vriddhi* of all *dhatus* whereas, when the *dhatu* agni and *bhutagni* are in *deeptavastha*, it leads to *kshaya* of all *dhatus*. If this condition persists continuously, it leads to a pathological condition.<sup>12</sup>

## Ongoing Trends in Reporting Dhatu Sarata

Dhatu sarata (tissue excellence) related literature was gathered from several Ayurvedic compendia, and research articles were also looked up from different database search engines. Searching the literature related to the evaluation and documentation of dhatu sarata revealed that there has not been much work done in this field. All researchers have used both predictor and outcome variables in the assessment of *dhatu sarata*. It is not feasible because the characteristic features of *dhatu sarata* representing predictor variables are indicative of its sarata and not the outcome variables. Acharyas have not mentioned how to record and grade dhatu sarata in terms of sarva sara, madhyam sara, and asara. Most researchers have used a self-preparatory pro forma which has not undergone the statistical test of validity and reliability. They have recorded the agreement to the signs and symptoms of dhatu sarata in the form of YES or NO (dichotomous). In general, different researchers tend to describe sarata in various ways. In one study, a person was classified as belonging to the "Sarva Sara" group if he/ she had more than 75% of all the positive traits that were suggested (for all *dhatus*) in the Charak Samhita. Madhyama sarata was considered if the person had 25%-75% of the positive traits. The presence of less than 25% of the features was described as asara.<sup>13</sup> Since the range of madhyam sara (50) is two times higher compared to sarva and asara (25), the variability in madhyam sara is more as the range is more as compared to other *sara*.

One cannot know the independent scores of a particular

*dhatu* because the above calculation represents the *sarata* of all the *dhatus*. Some scholars divided the *dhatu sarata* into three equal categories of 33.3% each, with the *madhyam sarata* category being less than 33.6% and the *sarva sarata* category being 66.7% and above.<sup>14</sup> Since the range is the same (33.3%) for each type of *sarata*, the variability in each type of *sarata* is the same and therefore it is consistent and hence reliable. Another method used for *sara* assessment to express overall *dhatu sarata* is by the weighted mean score which too has certain limitations. To determine the weighted mean score, statistics calculations are necessary, however they are impractical to use in a clinical setting (OPD level).

## Lacunae in Current Trends

However, the literature is not very clear about how sarata should be graded or assessed in a person. Although there is no verified and standardised tool freely available to measure dhatu sarata, many researchers have proposed various objective criteria for evaluating the *dhatu sarata* of all dhatus, but these objective methods are not justified to evaluate the subjective criteria (the characteristics) of the sarata given by Acharyas. As per the available questionnaire for the measurement of dhatu sarata, predictors are assessed in the form of YES or NO, for example, if an investigator wants to investigate the snigdhta of a person as per the available pro forma, it is assessed that either a person is having snigdhta or not at all, where NO option indicates the person is devoid of *snigdhta* but actually no person is devoid of *snigdhta*. The pro forma should measure the predictors as the investigator wants to measure. The available pro forma does not fulfil these criteria when a person opts for NO. It is necessary to develop a feasible and standardised tool in order to analyse these factors for improved diagnosis and comprehension of the concept, and to record dhatu sarata at the clinic level in lesser time. AyuSoft (developed by C-DAC, Pune, India) has developed a standardised computer-based sara parikshan software to determine the *dhatu sarata* of an individual. This software is a paid version. Acharya Charak has explained eight types of sarata whereas Ayusoft measures 9 types of sara including sarva sara. This software provides an outcome of sara and asara in the form of a bar diagram for each dhatu separately. Additionally, there is no reference to the madhyam sara.

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## Different Factors affecting Dhatu Sarata

#### Dhatu Sarata in different Vaya (Age Group)

Children (balya awastha) generally have less dhatu sara since their dhatus are in the developing stage (Aparipakwa, Asampoorena Dhatutwam). Due to ksheena dhatus, vriddha exhibit less dhatu sarata whereas, madhyam ayu purusha (middle age) possesses the best sara due to uttam bala.<sup>15</sup>

#### Dhatu Sarata according to Ritu (Season)

Agneya ritu or adana kala which is called the period of low nutrition and absorption (*shishir*, *vasant*, and *grishma*) produces a gradual decrease in the strength of *dhatus* (from *uttam bala to hina bala*), whereas *visarga kala* (*varsha*, *sharad*, and *hemant*), also known as the period of nutrition and liberation produce a gradual increase in the *bala* of an individual (from *hina bala to uttam bala*).<sup>16</sup>

# Dhatu Sarata and Ahara Matra/ Agni (Digestive Strength)

The depletion of all *dhatu sarata* might result from eating less food than is necessary to nourish all of the body's tissues. The effectiveness of the *agni* determines the quality of the *dhatus*. Balanced *agni* (*samagni*) aids in maintaining the *dhatus* in a homeostatic state.<sup>17</sup>

#### Dhatu Sarata and its Determinants (Bijabhaga)

Dhatu sarata is greatly influenced by the factors (garbhotpadaka bhavas) responsible for foetal development. Body tissues like twak, rakta, mamsa, and meda are derived from maternal factors whereas asthi and shukra are derived from paternal factors during embryogenesis. A developing foetus's dhatus get nourishment by rasaja bhava, also known as rasa. The satva of the foetus is determined by the satvaj bhava. Matruj, pitruj, and satmayaj bhavas (genetic material) help in the formation of dhatus and ultimately influence *dhatu sarata*. The strength of *dhatus* also depends on the strength of *beejabhag* (gene related to the uterus).<sup>18</sup>

# Dhatu Sarata and Vyayama Shakti (Optimal Capacity to do Exercise)

Both of these attributes evaluate a person's *bala*. Each quality is significant to the evaluation of *bala* in its own right. While *bala* assessment by *vyayama* is more general, its assessment via *sara* is more specific. The assessment of *bala* can be performed by *Sara pariksha* if a person has low *vyayama* shakti, which helps a physician to identify the *dhatu* responsible for the disease's genesis.

#### Dhatu (Asthi) Sarata and Bone Mineral Density

According to Ayurveda, an *Asthi sara* person possesses a good quality of *Asthi dhatu* which is determined by *asthi dhatu sara parikshana*. Modern science explains that a person having a high bone density level has good quality *asthi dhatu*, which can be determined by bone densitometry. Bone density and *sarata* were compared, and it was discovered that those with higher percentages of *Asthi sarata* had superior bone density. Bone density and *Asthi sarata* have a perfect association, according to a statistical study.<sup>19</sup>

#### **Classification of Dhatu Sara**

According to Acharya Charak, *sarata* can be divided into the following three categories depending on the strength of *dhatu* i.e., *sarva sara* (the best quality of all tissues can be considered as an optimal state of tissues), *madhyam sara* (moderate quality of tissues can be considered as suboptimal state of tissues) and *asara* (no or low quality of tissues can be considered as non-optimal state of tissues). The classification of *dhatu sarata* as per Ayurvedic texts has been given in Table 2.

S. No.	Charak Samhita <sup>20</sup>	Sushruta Samhita <sup>21</sup>	Ashtanga Hridya	Kashyap Samhita <sup>22</sup>
1.	Twak	Sattva	Twak	Twak
2.	Rakta	Shukra	Rakta	Rakta
3.	Mamsa	Majja	Mamsa	Mamsa
4.	Meda	Asthi	Meda	Meda
5.	Asthi	Meda	Asthi	Asthi
6.	Majja	Mamsa	Majja	Majja
7.	Shukra	Rakta	Shukra	Shukra
8.	Sattva	Twak	Sattva	Sattva
9.	-	-	-	Oja sara

 Table 2.Classification of Dhatu Sarata as per Ayurvedic Texts

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## Sarva Sara Purusha

People are said to be in *Sarva sara purusha* (the most optimal condition of tissue health) state if they have the characteristics of all of the *sara*. Such an individual has enormous strength, is well-respected, persistent, and self-assured in all endeavours, and has a robust and balanced body with balanced movements, resistance to diseases, more offspring, and a longer lifespan.<sup>23</sup>

#### Asara Purusha

Asara purusha (a less-than-optimal (suboptimal) condition of tissue health) can be defined as attributes that were

contrary to those that were mentioned in *Sarva sara* purusha.<sup>24</sup>

### Madhyama Sara Purusha

The *Madhyama sara purusha* (average condition of tissue health) is a person who possesses moderate *sara* qualities. *Asara* indicates that either an individual's *ahara vihar* or *agni* is vitiated, making them more susceptible to diseases (*doshas* aggravation, *agni* vitiation, and improper *dhatu* formation, leading to decreased *dhatu sara*). *Sarva sara* also denotes that an individual is accustomed to an *ahara vihar* that is wholesome for him with proper functioning.<sup>25</sup>

Dhatu Sara	Physical Features (Predictor Variables)	Physiological Features (Outcome Variables)
Twak sara	Snigdha, shlakshna, mrudu, prasanna, sukshma, alpa, gambhira, sukumara loma, Saprabha tvacha In addition to having thin, sparse, deeply rooted hair, these people have oily, smooth, soft, healthy, and shiny skin.	Sukh, saubhagya, aishwarya, upbhog, buddhi, vidya, Arogya, Praharshana, Ayushyatvam <sup>26</sup> They are blessed with joy, fortune, strength, happiness, intellect, wisdom, health, rejoicing and longevity.
Rakta sara	Karna- akshi- mukha- jivha- nasa- oshtha- pani- pada tala, nakha- lalata- mehana (snigdha, raktavarna, srimad bhrajishnu) They have an unctuous (oily), red hue, a gorgeous, dazzling appearance of the ears, eyes, face, tongue, nose, lip, soles of the feet and palms, nails, forehead, and genital organs.	Sukh, muddta, Medha, Manasvitva, Soukumaryam, Anatibalam, klesha sahishnutvam, Ushna asahishnu tvam <sup>27</sup> Such people exhibit happiness, cognitive ability, enthusiasm, moderate strength, and resilience to hot environments.
Mamsa sara	Shankha- lalata- krukatika- akshi- ganda- hanu- greeva, skanda- udara- vaksha- pani- pada- sandhaya- (snigdha, guru, shubha), mamsopachita Their hands, feet, joints, axillae, chest, eyes, cheeks, jaws, neck, shoulder, abdomen, and joints are all large, stable, and well-wrapped with muscles.	Kshama, dhriti, alolya, vitta, vidya, sukh, arjava, arogya, bala dirghayu <sup>28</sup> This essence stands for wisdom, wealth, contentment, happiness, simplicity, vitality, power, and prosperity.
Meda sara	Varna- swara- netra- loma- nakha- danta- oshtha, mutra- puri savisheshatha sneha medasaranam They exhibit substantial unctuousness (oiliness), particularly in their lips, urine, faeces, voice, eyes, hair, skin hair, nails, and complexion.	Vitta, aishwarya, sukh, upbhog, pradananya, arjav, sukumar, upcharata <sup>29</sup> This is a sign of affluence, power, joy, pleasure, charity, simplicity, and a sense of duty.
Asthi sara	Parshni- gulfa- janu- aratni- jatru- chibuka- shira- parva (sthoola) asthi, nakha, danta sthool They have pronounced heels, ankles, knee joints, elbows, collarbones, chins, heads, flanks, joints, bones, and teeth.	Mahotsaha, kriyavanta, kleshasaha, sthira shareera, ayushmanta <sup>30</sup> These people have a strong body, are long- lived, active, and very passionate.
Majja sara	Mrudu anga, balavanta, snigdha – varna, swara, sthula- deergh- vrutta sandhi A person should be referred to as majja dhatu sara if they have soft body parts, robust and unctuous skin, a lovely voice, and prominent, lengthy, and rounded joints.	Dirghayu, balavanta shruta, vita, vijyana, apatya, sammana <sup>31</sup> They are long-lived, strong, wealthy, honourable, and have progeny.

Table 3.Predictor (Independent) and Outcome (Dependent) Variables of Dhatu Sara

Shukra sara	Saumya, Saumya prekshana, ksheerpoornalochana, praharshabahula, Snigdha- vrutta – sara samhita, shikhara dashan, (prasanna, snigdha) varna, swara, bhrajishnu, mahasphik The physical characteristics of those with shukra dhatu sarata include a delicate and endearing appearance, lovely eyes that seem to be filled with milk, ecstasy, unctuous, rounded, firm, even, and compact teeth, a nice and unctuous voice, and prominent buttocks.	Streepriya, upabhoga, balavanta, sukha, aishwarya arogya, vitta, smmana, apatya <sup>32</sup> They get drawn to women and are gifted with procreation, strength, luxury, health, prosperity, and happiness.
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#### Dhatu Sara Lakshana from a Research Perspective

The characteristic features given by Acharya Charak for each *dhatu sara* can be classified as a predictor (independent) and outcome (dependent) variable as shown in Table 3. In *dhatu sarata shloka*, the first line represents the predictor variables and the next line represents the outcome variables, for example, the physical features explained in the first line of *twak sara purush* as *snigdha*, *shlakshna*, *mridu*, *prasanna*, etc can be considered predictor variables, also called an independent, explanatory variable which is used to predict the occurrence of another variable whereas, the characteristic features like *sukh*, *saubhagya*, *aishwarya*, *upbhog*, *buddhi*, *vidya*, and *arogya* are the outcome or dependent variables which are observed and measured by changing the predictor variables.

# Significance and Application of Sara Pariksha in Clinical Diagnosis and Treatment

Along with evaluating the *bala pramana* of an individual, sara parikshan also helps to determine the disease prognosis, for example, Ushna asahishnu twam (cannot tolerate hot environment, or hot substances) is one of the features of *rakta sara purush*, so accordingly they need particular precautions during treatment. Garbhakara bhavas influences the sarata of the offspring during pregnancy, hence it is important to consider the parents' dhatu sarata in order to produce the best progeny. We can suggest rasayana chikitsa to improve the dhatu sarata condition in order to produce progeny.<sup>33</sup> The bala cannot be assessed by looking at an individual only because of being corpulent and possessing a large body or a lean and short stature. This is the reason why the essence (sarata) of *dhatu* is to be examined before understanding the *bala* of a patient.<sup>34</sup> There are five forms of pharmaceutical preparation; swarasa, kalka, shrit, sheeta, and phanta. The potency of these medications decreases in the preceding sequence, therefore *swarasa* has the most potency and should be provided based on the patient's health and the severity of the ailment, for example, we can prescribe medicines of swarasa kalpana to individuals with uttam bala. Samshodhan chikitsa (purification therapy) can be prescribed in individuals with *uttam bala*. Also, they can tolerate drugs that are heavy, sharp, and hot in potency (*guru, tikshna*, and *ushna*). On the basis of *sara*, an individual can decide the profession they want to be in, for example, *uttam* sara (*bala*) people can opt for wrestling, gymnastics, or other sports. *Rasayana* is a therapy for improving bodily tissues and cells, i.e. *rasadi dhatus*. Therefore, individuals not having *uttam bala* or *sarata* can be advised *rasayana chikitsa* (rejuvenating therapy), and appropriate *ahara* and *vihar*. Additionally, it fosters youth, excellence in lustre, complexion, and voice, optimum strength of the body and sense organs, perfection in deliberation, respectability, and brilliance. It further promotes longevity, memory, intelligence, freedom from sickness, and lifespan.

### Discussion

The Ayurvedic concept of *dhatu sarata* is distinctive. All dhatu sarata have distinct, subjectively determined physical and psychological traits that Acharya Charak has mentioned. The essence of all dhatus is sara. It is the purest form of dhatus. Sara parikshan is significant in analysing a patient's bala pramana (strength). Bala can be considered as vyadhikshamatva and the physical strength of an individual. The sarata examination provides insight into the seven dhatus' and the mind's (satva) qualitative state. Factors like vaya (age), ritu (season), vyadhikshamatva, bheejabhag, ahara matra, and agni influence dhatu sarata. Acharya Charak classified dhatu sara into sarva sara (optimal state of tissue health), madhyama sara (sub-optimal state of tissue health), and asara (non-optimal state of tissue health) depending on the strength of dhatu sarata. Twak sara, rakta sara, mamsa sara, meda sara, asthi sara, majja sara, shukra sara, and satva sara are the eight varieties of *dhatu sara* that have been described by the acharyas. Additional sara i.e., Oja sara has been described in Kashyap Samhita. In the present era, dhatu sara parikshan can be done for clinical and diagnostic purposes to determine the strength and treatment purposes and achieve healthy progeny and vyadhikshamatva. A person with the rakta dhatu predominate sara, for instance, can readily tolerate and even recover from the symptoms of rakta pradoshaj

*vikar*. A physician needs to comprehend the idea of *dhatu* 

sarata and its parikshan because it has several therapeutic

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**Conclusion** One of the tenfold examinations of patients is the *Sara pariksha*. It helps to determine the *bala* (strength) of an

individual. Along with evaluating the bala pramana of an individual, sara parikshan also helps to determine the disease prognosis. Physical and psychological characteristics are used to describe each individual sara. The characteristic features given by Acharya Charak for each dhatu sara can be classified as a predictor (independent) or outcome (dependent) variable from a research perspective. Knowledge of *sarata* at the clinical level helps to determine whether to prescribe samshodhan or samshaman chikitsa. Samshodhan chikitsa and guru, ushna, and tikshna medicine can be prescribed to individuals having uttam bala, and samshaman chikitsa or soumya medicines can be prescribed to persons having hina bala. By recommending rasayana chikitsa, which helps to achieve outstanding attributes of rasadi dhatus, or body cells and tissues, a person's sarata can be improved. A validated, workable and readily accessible method that can be used to quickly determine dhatu sarata at the clinical level is required in order to examine these parameters for better diagnosis and concept understanding.

## Conflict of Interest: None

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applications.

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