

### ***Mamsa Dhatu: an Image of Nutritive Buildcon of Body***

Aniket A Shilwant<sup>1\*</sup> and Niraj F Mandod<sup>2</sup>

<sup>1,2</sup>Department of Kriya Sharir, G.J.Patel Institute of Ayurvedic Studies and Research, New Vidya Nagar, Anand, Gujarat, India

#### **Abstract**

*Mamsa* is one of the seven constructive build icons of body namely *dhatu*s. It is widely accepted by all the *Ayurvedic* scholars who named it as *Pishit*, *Taras*, *Palal*, *Raktateja*, *Medaskruta*, *Kravyam*, *Aamisha* and so on. It helps in formation of *Mamsa dhatu* in the body with its principle site in body as muscles, tendons and skin. It maintains the metabolism of *Mamsa dhatu* in body by *Mamsadhara kala* which is also concerned with the same. Irrespective of *Panchabhautik* origin, *Mamsa dhatu* has *Prithvi mahabhuta* in its dominance, *Vasa* (Omentum) and *Tvacha* (Skin and its layers) as its *Updhatu* (Accessory tissue) and *Kha mala* as its excretory product. The well build musculature of a person indicates good and proper nourishment of the individual. This excellence of a *Mamsa dhatu* seen in such a person is resembled by *Mamsa sara purusha* with its specific symptoms. *Mamsa dhatu* is formed by the metabolic process over *Rakta dhatu* by the respective *Dhatwagni* viz., *Mamsadhatwagni*. Thus any kind of abnormality or deviation in this process leads to disorders oriented with *Mamsa dhatu* and certainly having an impact over upcoming *Dhatu*s in series. Abnormality of *Mamsa dhatu* prominently shows emaciation, muscle wasting type disorders impairing overall health of human health, thus leading to lack of immunity and surrendering to any disease easily. So it carries an important role for sustenance and longevity of life.

#### **Keywords**

*Mamsadhatu, Mamsadhatwagni, Mamsadhara kala, Immunity*



**Greentree Group**

Received 30/09/15 Accepted 23/10/15 Published 10/11/15

## INTRODUCTION

The word *dhatu*<sup>1</sup> indicates the matter or substance which is responsible for nourishment and support of body. This undergoes metabolic reactions, gives a by-product and thereby nourishes it and provides support to body by sustaining it throughout the life. *Dhatu*s are the metabolic tissue level where the *doshas* carry out their reactions resulting into some wholesome and unwholesome products. All the seven *dhatu*s together forms the constructive framework of body, *mamsa dhatu* viz., muscle tissue if one of them. *Mamsa dhatu* is also known by its other synonyms as *Taras*, *Aamish*, *Palal*, *Pishit*, *Raktateja*, *Medaskruta*<sup>2</sup>. *Snayu* (Muscle tissue and Tendons) and *Tvak*<sup>3</sup> (Skin with its layers) are together said to be principle site of formation and control of *Mamsa dhatu* in body. However, it is present throughout the body along with osseous tissue the next *dhatu* viz., *Asthi*. Along with this principle site it manages the components of *Mamsa dhatu* present all over the body through its micro circulating channels namely *Raktavahi dhamnis*<sup>4</sup>. *Mamsa dhatu* is very essential *dhatu* in body responsible for

manifestation of proper nourishment signs and well and proportionate development of organs of body. *Mamsa dhatu* is whole and sole responsible for the strength, stamina and power of body. Also well developed musculature is necessary for fulfilment and performance of any action inside and by the organs of body.

### METABOLISM OF MAMSA DHATU

The formation of *Mamsa dhatu* in body is done by the digestion of former *Rakta dhatu* when it is nourished by more previous *Rasa dhatu* with the help of own *Dhatwagni* viz. *Mamsadhatvagni*<sup>5</sup>. This *Agni* is responsible for conversion of spontaneously flowing *Rasa dhatu* into own componential factors resembling properties with that of *Mamsa dhatu*. While this metabolic transformation process in on the way the *Rakta dhatu* is converted in *Mamsa dhatu* along with formation of its accessory *Updhatu Vasa* and *Tvacha*<sup>6</sup> with its six layers along with the excretory byproduct as *Kha-mala*<sup>7</sup>. Basically, while all this process goes on the formation of *Mamsa dhatu* is also accompanied by the universal rule that it is also *Panchabhautik*. And so thus, *Mamsa dhatu* is predominant of *Prithvi*



*Mahabhuta*<sup>8</sup>; which is responsible for attaining a perfect and particular shape (*Moorta swaroopa*) to body.

### **FUNCTION OF MAMSA DHATU**

Being a *Dhatu*, *Mamsa dhatu* carries a main function of support and nourishment to body organs and ultimately body as well. Thus it sustains the immunity, strength of an individual along with providing longevity of life. *Mamsa dhatu* specifically performs the function of *Lepana*<sup>9</sup> means coating. Muscle tissue coats the blind bony skeleton in body whereas the same musculature in the form of epithelial tissue and muscle tissue coats whole body in the form of skin and its layers. Bones and joints inside body are well proportionately limped and coated by muscle tissue as well as tendons supporting them for healthy movements of the same. The Omentum (*Vasa*) also performs the function of coating over abdominal organs such as stomach and intestine. Which surrounds those organs and protects them provides support as well. Also it provides nourishment to next forthcoming *dhatu* viz. *Meda dhatu*. Production of *Kha-mala* is also one of the functions of *Mamsa dhatu*.

**FEATURES OF MAMSA SARA INDIVIDUAL:-** *Sara*<sup>10</sup> is basically term indicating the excellent features of any

particular *dhatu* which are manifested throughout body physical as well as psychological level. *Mamsa dhatu sara* reflects the excellent and superior state of *Mamsa dhatu* and which eventually states that the individual with *Mamsa dhatu sara* has good immunity against some disorders specially related to muscle tissue. *Mamsa dhatu sara* individual has physical features of well proportionate, heavy, stable and well limped joints with muscle tissue and tendons specially joints – Temporal, Skull sutures, Vertebral, Orbital, Facial and Maxillary, Shoulder, Thorax, Joints of Upper and Lower extremity. While psychological features as- forgiving nature, well decisive power, satisfying nature, full of wisdom, intellect, enjoys physical exercise, sports as well; kindness, nobleness, health, good strength, immunity and stamina with long life<sup>11</sup>.

### **PATHOLOGICAL VIEW OF MAMSA DHATU**

The pathological side of every *dhatu* stands by its abnormal state in body either by its hyper and hypo functioning namely *Vridddhi* and *Kshaya* respectively. The *Vridddhi* or hyper functioning state of *Mamsa dhatu* in body is manifested by following features- heaviness and well and extra musculature



over trunk, hip, buttocks, face, thighs and lower extremity, thorax and upper extremity<sup>12</sup>. Which clinically resembles features of extra fat deposition and excess protein synthesis over trunk, shoulder and upper extremities, face, back and lower extremities almost features of cushings disease<sup>13</sup>. The *Kshaya* or hypo functioning of *Mamsa dhatu* in body is manifested by following features<sup>14</sup> - loss of fat and protein over above mentioned organs of body, dryness as loss of moisture content as well, lax joints due to loosely affirmed muscles and tendons. Moreover this also causes body ache, tenderness, and loose and lethargic vessel structures in body. The hypo functioning of *Mamsa dhatu* also states the muscle wasting and malnutritive disorders with defective protein metabolism.<sup>15</sup>

## DISCUSSION

*Mamsa* being a *dhatu* is essential for support, nourishment and sustenance of life. Thus it is important to protect it from being emaciated or wasted. The formation, storage and circulation of *Mamsa dhatu* throughout body are managed by the micro circulating channels of *Mamsavaha strotas*.<sup>16</sup> The factors having same properties to that of

*kapha dosha* are responsible for increment of *Mamsa dhatu* due to similar properties. The three biological humours (*doshas*) are physical entities working at *dhatu* level to contribute and carry all the activities of body. Proper nutrition and diet is manifested by well-developed musculature which contributes to maintain homeostasis in body. Whereas its abnormal state reflects by lowering the immunity of body and surrendering your body to multiple disorders specially related to muscle tissue. The other aspect of immunity is decided by *Oja* factor in body. This *Oja* itself has function of *Upachita Mamsata*.<sup>17</sup> Where *Upachay* means proper growth and development of body; *Oja* is essence of all *dhatu*s but instead *upchay* of *Mamsa dhatu* needs etiological factors supporting and promoting the same with *Mrudu*, *Mrutsna*, *Snigdha*, *Sthira* like properties.<sup>18</sup> Thus the strength, stamina and immunity of body totally depend upon *Mamsa dhatu*. The extent of *Bala* can be decided by carrying weight or some sort of physical workout which is possible only due to muscle and tendons viz. *Mamsa dhatu*. Features of individual with proper *Bala* and constitution are also mentioned by *Acharya* as *Samamamsa*<sup>19</sup> means presence of proper and proportionate *Mamsa dhatu* in body.



## CONCLUSION

*Mamsa dhatu* is one of the important of all seven *dhatu*s in body. *Mamsa dhatu* viz. Muscle tissue in terms of modern sciences also states the importance of cellular respiration occurring especially in muscle tissue. The amount of glucose in the form of glycogen is stored in muscle tissue which is essential for muscular activities. Well-developed musculature shows good nourishment status of an individual. Thus it provides a significant strength and immunity to any individual to combat against any diseased ailment affecting body. *Ayurved* science explores the *Mamsa Dhatu*, *Oja*, Immunity and its very close relation with property wise similar *Kapha dosha*. It is essential to practice the etiological factors promoting *Kapha dosha* inside body through which they nourish the similar *dhatu*s, *Mamsa dhatu* hereby. This ultimately may enhance the immune status of body. Simultaneously, the factors encouraging *Agni* and its subtle components as *Dhatwagni* should also be enhanced and must be managed in proportion so as to keep the body and its constituents consistent. The *Sthira guna* right from *Kapha dosha* to *Mamsa dhatu* is also reflected in *Mamsa*

*dhatu sara purusha* on psychological level too. It is manifested by signs of *Kshama* (forgiving nature), *Dhruti* (well decisive power), *Alaulya* (not greedy), *Arjava* (kindness). The person with *Mamsa dhatu sara* can flourish his or her career in exercise, physical or sports activities or any similar kind of profession very well. As such persons has qualities of *Mamsa dhatu sara*, they are also capable for good immune status even after exposure to environment by sport activities.

So, as all *dhatu*s support and provide nourishment to body instead *Mamsa dhatu* carries a very special importance. *Mamsa dhatu* attains a very special importance due to its role in providing immunity as all the strength, stamina, *bala* depend on *Mamsa dhatu*.



## REFERENCES

1. Vaidya Yadavji Trikamji Acharya, Sushruta Samhita of Sushruta with Nibhandhasamgraha Commentary, Sutra Sthana 14, Choukhamba Orientalia, Varanasi, 2007.
2. Professor V.J. Thaker, Purush Vichaya, Gujarat Ayurved University, Jamnagar, 1st Edition 1984.
3. Tripathi Bramhanand, Charak Samhita with Hindi Commentary, Vimana Sthana 5, Choukhamba Surbharti Prakashan Varanasi, reprint 2004.
4. Vaidya Yadavji Trikamji Acharya, Sushruta Samhita of Sushruta with Nibhandhasamgraha Commentary, Sharir Sthana 9, Choukhamba Orientalia, Varanasi, 2007.
5. Tripathi Bramhanand, Charak Samhita with Hindi Commentary, Chikitsa Sthana 15, Choukhamba Surbharti Prakashan Varanasi, reprint 2004.
6. Tripathi Bramhanand, Charak Samhita with Hindi Commentary, Chikitsa Sthana 5, Choukhamba Surbharti Prakashan Varanasi, reprint 2004.
7. Tripathi Bramhanand, Charak Samhita with Hindi Commentary, Chikitsa Sthana 5, Choukhamba Surbharti Prakashan Varanasi, reprint 2004.
8. Vaidya Yadavji Trikamji Acharya, Sushruta Samhita of Sushruta with Bhanumati Commentary, Sutra Sthana 15, Choukhamba Orientalia, Varanasi, 2007.
9. Gupta Kaviraj Atrideva, Ashtanga Hridayam with Hindi Commentary, Sutra Sthana 11, Choukhamba Prakashan, reprint, 2007.
10. Tripathi Bramhanand, Charak Samhita with Hindi Commentary, Vimana Sthana 8, Choukhamba Surbharti Prakashan Varanasi, reprint 2004.
11. Tripathi Bramhanand, Charak Samhita with Hindi Commentary, Vimana Sthana 8, Choukhamba Surbharti Prakashan Varanasi, reprint 2004.
12. Vaidya Yadavji Trikamji Acharya, Sushruta Samhita of Sushruta with Nibhandhasamgraha Commentary, Sutra Sthana 15, Choukhamba Orientalia, Varanasi, 2007.
13. K Sembulingam, Essentials of Medical Physiology, Adrenal Cortex 70, Jaypee Brothers Medical Publishers, New Delhi, 6<sup>th</sup> Edition.
14. Gupta Kaviraj Atrideva, Ashtanga Hridayam with Hindi Commentary, Sutra

Sthana 11, Choukhamba Prakashan, reprint, 2007.

15. Sir Arthur Guyton and John Hall, Textbook of Medical Physiology, Elsevier Publications, Reprinted 2008.

16. Tripathi Bramhanand, Charak Samhita with Hindi Commentary, Vimana Sthana 5, Choukhamba Surbharti Prakashan Varanasi, reprint 2004.

17. Vaidya Yadavji Trikamji Acharya, Sushruta Samhita of Sushruta with Nibhandhasamgraha Commentary, Sutra Sthana 15, Choukhamba Orientalia, Varanasi, 2007.

18. Vaidya Yadavji Trikamji Acharya, Sushruta Samhita of Sushruta with Nibhandhasamgraha Commentary, Sutra Sthana 15, Choukhamba Orientalia, Varanasi, 2007.

19. Tripathi Bramhanand, Charak Samhita with Hindi Commentary, Sutra Sthana 21, Choukhamba Surbharti Prakashan Varanasi, reprint 2004.