ABSTRACT

Mamsa literally means flesh or meat. Mamsa Dhatu refers to muscles and its Upadhatus are Twacha and Snayu. Mamsa Dhatu is formed from Sarabhaga of Rakta Dhatu. It is predominant of Pruthvi Mahabhuta. MamsaDhatu is ascribed with functions like Shareera Pushti and Lepana Karma. The best quality of Mamsa is expressed by evaluating Mamsa Sara Purusha Lakshanas. Dusti of Mamsa Dhatu results from Ahitakara-Ahara-Vihara leading to Mamsa Vrudhhi, Kshaya or Mamsa-Pradoshaja Vyadhis. Mamsa is considered as one among the Ahara Dravya and possess Brumhaniya property. Different source, qualities and utility of Mamsa is explained in Samhitas with their benefits. Samhitas clearly explains Sevya and Tyajya Mamsa and qualities of Mamsa derived from different part of the animal body. Sushruta mentions some key point like Shareera Avayava, Desha, Kala, Matra, Linga etc of animal while selecting Mamsa for purpose of consumption. Kukkuta is considered as Shresta for Balya. Aja Mamsa possesses similar qualities to Mamsa of human beings, hence acts as Bruhmhaniya. Mamsa possesses therapeutic value, hence it is used in different therapeutic procedures, preparation of Oushadhi and in Panchakarma procedure etc.

KEYWORDS

Mamsa, Classification, Utility
INTRODUCTION

The term Mamsa is commonly used to denote muscle, flesh or meat. In Ayurveda literature synonyms of Mamsa includes Pishita, Taras, Palala, Raktu-Teja, Medaskruta, Kravyam, Aamisha etc.1 According to Acharya Charaka quantitative measure of Vasa (Mamsa Sneha) in human body is three Anjali Pramana2. Mamsa is nourished and maintained by Sara Bhaga of Rasa and Rakta Dhatu3. Mamsa Dhatu possesses Rakta Varna and is predominant of Pruthvi Mahabhuta4. During metabolic transformation, Rakta Dhatu is converted into Mamsa Dhatu. In the process Upadhatu, Vasa and Twacha with Kha-Mala is formed5. Twacha being Upadhatu of MamsaDhatu covers the whole body. Lepana (covering) and Meda Pushti (nourishment of Medodhatu) are primary important functions ascribed to Mamsa Dhatu. Sira (veins), Snayu (ligaments), Asthi (bones), Asthi Parva (small bones), Sandhi (joints) are covered in the body by Mamsa6. Therefore it supports and maintains Bala (strength) of the body7. According to Charaka immaculate state of Mamsa Dhatu is assessed and expressed through Mamsa Sara Lakshanas8 like Sthira (firm), Guru (heavy), Shubha (splendor), Mamsopachita (well-nourished mamsa covers) Shankha (temporal region), Lalata (forehead), Krikatika (nape), Akshi (eyes), Ganda (cheeks), Hanu (jaw), Greeva (neck), Skandha (region from neck to shoulder joint), Udara (abdomen), Kaksha (armpit), Vaksha (chest region), Pani (hand), Pada (foot) and Sandhi (joint). Mamsa dhatu also contributes to Samhanana by bestowing compactness to the body. Mamsa Rasa is mentioned under Dasha Vidha Pareeksha attribute Satmya9 along with Ghruta, Ksheera, Taila, Shadrasa etc. The factors attributed to MamsadhatuDushti include excessive indulgence in Abhisheyandhi (oozing), Sthula (bulky), Guru (heavy) Ahara and Vihara like Diwaswapna (day sleep)10. Mamsa Dhatu Dushti manifests as Vrudhi and Kshaya. Vrudhi of Ganda (enlargement of cheeks), Granthi (glandular swelling), Adhimamsa (excess muscular growth) in Uru (thigh,) Udara (abdomen) and Kantadishu (neck etc region)11. Mamsa KshayaLakshana comprises of Akshaglan (Weakness of sense organs), Sushkata of Ganda, Sphik (dryness of cheeks, buttocks), Sandhi Vedana (pain in the joint)12. Acharya Charaka mentions following Mamsa Pradoshaja Vikara like Adhimamsa (excess muscular growth), Arbuda (Tumor), Kila (a kind of tumor), Galashaluka (uvulitis),...
Galashundika (tonsillitis), Putimamsa (putrefied flesh), Alaji (furuncle) etc\textsuperscript{13}. Mamasa Sevana as Ahara is also identified as Nidana for few disorders like Vatarakta\textsuperscript{14}, Sthoulya\textsuperscript{15}, Kushta\textsuperscript{16}, Arsha\textsuperscript{17}, Galaganda\textsuperscript{18}, Rakta Pitta\textsuperscript{19} and Shoola\textsuperscript{20} in susceptible person.

AIMS AND OBJECTIVES

A review on literature connected to Mamasa in Charaka Samhita, Sushruta Samhita, AstangaSangraha and AstangaHrudaya in the light of commentaries and dictionary for specific understanding and practical clinical utility.

MATERIALS AND METHODS

This article is a review on different aspects connected to Mamasa including, source, classification, qualities of Mamasa of different parts of body and uses etc compiled from Ayurveda classics such as – Charaka Samhita, Sushruta Samhita, Astanga Hridaya and Astanga Sangraha along with commentaries. Ayurveda dictionaries like Amarakosha, Monier Williams have also been referred.

DISCUSSION

Charaka classifies animals into 8 different groups based on their habitat, character and nature, as Prasaha (Animals or birds having food by snatching), Bhumishaya (residing in burrow in earth), Anupa (residing in marshy land), Varishya (residing in water), Jalachara (birds moving on water), Jangala (residing in dry land forest), Vishkira (gallinaceous or animals disperse food before eating), Pratuda (peckers or those striking at the food before eating)\textsuperscript{21}. Sushruta enumerates 6 different sources of Mamasa namely Jaleshaya, Anupa, Gramya, Kravyabhuja (meat eating animals), Ekashapha (animals having bifurcated hoops) and Jangala. Mamasa of these sources are considered to be superior in ascending order. He broadly categorizes Mamasa into 2 main categories as Jangala and Anupa. Further Jangala is divided into 8 types as Jangala, Vishkira, Pratuda, Guhashaya, Prasaha, Mriga, Bileshaya and Gramya. Among these Jangala and Vishkira are considered as Pradhana\textsuperscript{22}. Astanga Sangraha, Astanga Hrudaya classify Mamasa Varga into 8 groups as follows; Mriga, Vishkira, Pratuda, Bileshaya, Prasaha, Mahamriga, Ap (Jala)-Chara and Matsya. Among these Mriga, Vishkira, Pratuda are Jangala. Mahamriga, Ap (Jala)-Chara and Matsya are Anupa. Bileshaya and Prasaha are Sadhara\textsuperscript{23,24}.

Animals included under each source of classification are as follows; Mriga (animals) were hunted for the purpose of...
Mamsa (meat) consumed as food. They include Harina (Antelope), Ena (Black deer), Kuranga (Roe deer), Rksa (Musk bear), Gokarna (mule deer), Mrgamatruka (hog deer), Shasha (hare), Sambara (indian sambar), Charukska (gahelle) and Sharabha (wapiti), Kaalapucchaka (black tailed deer), Varapota (antelope), Karaala (species of Musk deer), Krtamaala (spotted antelope), Svadamstra (mouse deer), Viskira includes birds that collect food by scratching the ground with beaks or claws. They include Lava (common quail), Vartika (grey partridge), Varttira (rain quail), Kukkuba (crow-pheasant), Kapinjala (jungle bush quail), Upachakra (Sushi chukor), Chakora (chukor), Kottakaaraka (barking deer), Tittitri (partridge), Vartaka (male bustard), Neprrika (species of bird), Kalavinka (white caamara), Mayura (peacock), Krakara (crane), Kukkutta (cock), Sarangi (species of antelope), Vavaalaka (species of bird)

Pratuda are birds that use their beaks to collect food like insects and worms. They include Jivajivaka (common mynah), Bhrnga (king bird of paradise), Sarika (shama thrush), Latta (Scarel minivet), Kokila (koel), Jati (hea pie), Kapota (dove), Chataka (sparrow), Vataha (true pie), Paravata (pigeon), Parabhruta(cuckoo), Koyastika (packer bird), Kulinga (sparrow), Gokshvedaka (kind of bird), Dindimanaavaka (flying reiteratedly), Shuka (parrot), Sarikaa (turdus salica), Valguli (kind of bat), Latva (kind of bird), Lattusaka (kind of bird), Sugruha (taylor bird), Khanjarita (species of wagtail), Haarita (pigeon), Daatyuka (cuculus melanoecucus)

Bileshayas are those animals living in burrows, they include Bheka (Frog), Godha (Iguana), Svaavid (Porcupine), Gandaka (Gecko), Cillata (Musk Shrew), Nakula (mongoose), Salyaka (porcuoines), Shasha (rabbit), Vrusadamsha (kind of animal living in a burrow), Lopaaka (kind of jackal), Lomasakarna (kind of animal living in burrow), Kaadali (deer), Ajagara (python), Sarpa (snake), Mushika (Mouse), Mahaabbhru (cat)

Prasaha are animals and birds that catch their food by mouth and teeth, tear and swallow. They include Go (cow), Khara (ass), Asvatara (mule), Ustra (camel), Ashva (Horse), Dvipi (panther), Simha (lion), Rksa (bear), Vanara (monkey), Vrka (Wolf), Vyagra (Tiger), Marjara (cat), Mushika (mouse), Kaaka (crow), Kurara (species of eagle), Caasa (blue jay), Shashthagati (hawk), Uluka (owl), Chilli (bird of prey), Syena (species of eagle), grudhra (vulture)

Mahamriga includes Varaha (hog), Mahisha (buffalo), Nyanku (antelope)
Ruru (deer), Srmarra (wild boar), Varana (camel), Chamara (yak), Khadga (rhinoceros), Gavaya (Gyal cow) and Gaja (elephant)\textsuperscript{40}.

Varichara animals include Hamsa (swan), Sarari (skimmer), Kadamba (whistling teal), Baka (common crane), Karandava (goose), Plava (pelican), Balaka (snow wreath crane), Utkrosa (trumpeter), Chakravaka (ruddy Sheldrake), Madgu (little cormoraut), Krauncha (demoiselle), Pushkarahva (lilly trother), Kesari (comb dock), Manitundaka (Red watted lapwing), Mrnaalakantha (snake bird), Kakatunda (common river bird), Pundarikaksha (white eyed pochard), Megharava (screamer), Ambukukkuti (water hen), Ara (cobbler’s owl bird), Nandimukhi (flamingo), Vati (grebe), Sumukha (laughing gull), Sahacari (petrel), Rohini (tropic bird), Kamakali (frigate bird), Sarasa (Saras a crane), Raktasirsaka (sarasa crane with a red head)\textsuperscript{41,42}.

Different varieties of Matsya (fish) includes Rohita (kind of fish), Pathina (shrimp), Kurma (tortoise), Kumbhira (alligator), Karkata (crab), Shukti (pearl oyster), Shankha (conch snail), Udra (cat fish), Timingala (whale), Makara (great indian crocodile), Sambuka (snail), Saphari (kind of small fish), Varmi (kind of fish), Chandrika (chada fish), Culuki (sea hog), Nakra (crocodile), Shishumara (dolphin), Raji (stripped snake), Cilicima (kind of fish)\textsuperscript{43}.

**Mamsa Guna-Karma:** In general Mamsa possesses Guru Guna, Madura Rasa and Sheeta Virya. Hence, it is Brumhaniya. Sushuta considers it as Pitta-SleshamaVardaka\textsuperscript{44}. According to Astanga Hrudhaya JangalaMamsa is Sheeta (Cold), causes Baddamala (constipation), Laghu (light for digestion) and beneficial in Kapha-Pittaja Vikara and Kapha-Vataja Vyadhis\textsuperscript{45}.

Mamsa Rasa is best for Hrudaya, indicated in Shosyata (dehydrated), Krushyata (emaciated) and person with Ksheena Retas (semen). It promotes Bala, Varna, Swara, Vaya, Budhhi, Indriya and act as ambrosia when consumed in prescribed method. Mamsa Rasa is considered as Sarva-Roga Prashamana.Mamsa Rasa is advised for regular consumption for those habitually indulging in Vyayama, Vyavaya and Madhya\textsuperscript{46}.

Mamsa derived from different source possess different qualities. Shasa (rabbit) Mamsa is Deepaneeya, predominantly Katu Rasa possessing qualities like Ruksha, Grahi and Sheeta\textsuperscript{47}. Vartaka (male bustard) Mamsa is Ishad-Ushna, Snigdha, Brumhaniya and leads to Sthoulya. Tittiri (partridge) Mamsa is best as Medhya, improves Agni and Shukra and considered as Varnya and Vatahard\textsuperscript{48}. Lava (common
Mamsa possesses Kashaya-Madhura Rasa, Katu Vipaka, and Sannipata Prashamana. Shikhi (Peacock) Mamsa is Apathya, but beneficial for Shrotra, Swara and Chakshu. According to Charaka it is Balya, Guru, Madhura, Snigdha, Vatahara and Varnya. It promotes Mamsa Dhatu, Shukra Dhatu and cures Swarabheda. Kukkuta (cock) Mamsa is similar to Shikhi Mamsa, it is Vrushya, Guru and Kapha Vardhaka. According to Sushruta it is Balya, Vatahara, Vrushya, Guru, Madhura, Swedagna and Ushna Virya. It is indicated in diseases like Vataroga, Kshaya, Chardhi and Vishama jwara. Karkara and Upachakra is Deepaneeya and Hrudhya. Meat of Kanakapota is Guru, Lavana Rasa and Kaphakara. Chataka (domestic sparrow) Mamsa is Madhura, Snigdha, Balya, Vatahara and Shukrala. Indicated in diseases like Shosha, Kasa and SannipataPrasamana. It is Sangrahi and Deepaniya. Mamsa of Mahamruga is Sheeta and Kravyadas (carnivorous animal) possess Lavana Rasa and Katu in Vipaka. They are beneficial for Mamsa Vardana, Arshas and Grahini Dosha. Aja Mamsa (Goat meat) is Na-Ati-Sheeta Na-Ati-Ushna. It does not lead to Dusti of any Doshas and is homologous with muscle of human body. It is Brumhaniya and Anabhishyandhi in nature. Sushruta considers it to be beneficial in Pinasa-Nasha (Cures Nasal Catarrh). Avi Mamsa (sheep meat) possesses qualities opposite to Aja Mamsa except Brumhana Karma. Mahisha (Buffalo) Mamsa is Usna and Guru. It is Balya, Brumhaniya and induces Nidra. Sushruta explains its therapeutic benefits in diseases like Shwasa, Kasa, Pratishya, Vishama Jwara and Atyagni. Varaha Mamsa (Pork) is similar to properties of Mahisha Mamsa. It is Shukrala, Balapradha and relieves Shrama (fatigue).

Matsya Mamsa (Fish) is Shrestha Kaphakara. Rohita, Godha, Ena are best among Matsya Varga. Charaka opines that Matsya Mamsa is Madhura, Guru and possesses Ushna Virya. It is Brumhaniya, Balya, Vatahara, Snigdha and Bahudosahara. Sushruta considers Matsya Mamsa as Maha-Abhishyandhi (causes Srotorodha), Tridoshakara and causes Kusta Roga. Among all variety of Matsya, Rohita Matsya is considered as best. It promotes digestion and strength. Further Sushruta opines that sea fish is superior to river and pond fish. Kurma (tortise) Mamsa is considered as Medhya, Smruthikara, Shukrala, Balya and beneficial in Netra rogas. Hamsa Mamsa (swan meat) is Guru, Snigdha, Vrushya, Brumhaniya, Ushna Virya, Vatahara and Cures Swarabheda.
Mamsa possesses therapeutic utility and administered in disease like Rajayakshma\(^\text{65}\). Mamsa-Rasa is used in various medicinal preparation like Ghruta (E.g. Amrutaprasha Ghrutha)\(^\text{66}\), Taila (E.g. Mahamasha Taila)\(^\text{67}\) and Rasayananas (E.g. Aja-mamsa rasyana). Mamsa is employed in Bahya Chikitsa like Pinda Sweda (Mamsa Pinda Sweda), Abhyantara Chikitsa like Basti (Rajayavana Basti). Mamsa Rasa finds a special place during Samsarjana Karma after Panchakarma treatment, specifically as Akruta-Mamsa-Rasa and Kruta-Mamsa-Rasa\(^\text{68}\).

Ayurveda literature clearly mentions Sevya and Tyajya Mamsa (consumable and non-consumable meat). Mamsa of animal Sadhyo-Hatha (just killed), Madhya-Vaya (middle age) and Shudha (pure) is considered ideal for consumption. Among meat of animal with Chatushpada (four foot), female animal meat is Pradhana. Among birds, meat of male bird is Pradhana\(^\text{69}\). On the contrary, animal that is already killed, lean or very stout and died due to Vyadhi (disease) or by effect of Visha (poison) is not advisable for consumption\(^\text{70}\).

Shushka Mamsa is Guru in nature, leads to Arochaka and Pratishyaya. Mamsa of Prani killed by Visha is fatal. Consumption of BaalaPrani (tender age animal) Mamsa induces Chardhi. Vruddha Prani (old aged animal) Mamsa produces Kasa and Shwasa. Mamsa of Vyadhi Yukta Prani (diseased animal) is Tridosha-Karaka. Klinna Mamsa produces Chardhi, whereas, Krusha (emaciated) Prani Mamsa causes Vata Prakopa\(^\text{71}\).

Properties of Mamsa vary with different parts of the animal body. Madhya Deha Mamsa (Trunk portion) of all Prani (animal) is Guru\(^\text{72}\). Meat of Purva Bhaga (anterior part) of male animal and Paschima Bhaga (posterior part) of female animal and Grabhini animal is Guru. Meat of female animal with Chatushpada (four foot) is Laghu in nature. Mamsa of Shira (Head), Skandha (shoulder), Prusta (back), Uru (thigh), Katya (hip), Sakti (legs) are Guru (heavy) in nature. Meat of Amashaya and Pakvashaya are guru in nature in preceding order. Among Dhatus from Rasa to Shukra, successive once are heavier in nature. Meat from Vrushana (Testicles), Medhra (Penis), Vrukka (Kidney), Yakrut (liver), Guda (Rectum) are Guru (heavy) in nature succeedingly\(^\text{73}\). Among the birds, the Ura (chest) and Greeva (neck) are especially Guru in nature, Madhya Bagha is Sama (neither Guru or Laghu) in nature. Mamsa of bird which consumes fruit is Ativa-Ruksha (very dry), Mamsa of carnivorous birds is Brumhaniya, fish eating birds meat is Pittakara and birds inhabiting in arid land is Vataghna\(^\text{74}\). Meat of animal belonging to groups like Jalaja,
Anupa, Gramya, Kravyabhuja, Ekashapa, Prasha, Bileshya, Janagala, Pratuda, Viskira are Laghu (lighter) in nature in succeeding order. While consuming Mamsa, Matra (quantity) should also be considered. Mamsa possessing Guru Guna should be consumed in Alpa Praman and Laghu Mamsa may be consumed till attainment of Trupti25.

CONCLUSION
A close review of Samhitas revealed use of Mamsa as a component of non-vegetarian food source and medicament. Mamsa from different sources have varied Guna Karma and should be used accordingly to get desirable positive benefits. Sushruta has laid down guidelines while selecting the source for Mamsa like Shareera-Avayava (part of body) of Prani, Swabhava (Nature), Linga (Gender), Pramana (Constitution), Samskara (method of processing) and Matra (Quantity). If these guidelines are not adhered to then even Hita-Ahara may result into Ahita-Ahara. If superior kind of meat is not available, then the meat of a middle aged Sadyo-hatha animal should be utilized for consumption. Kukkuta is considered as Shresta Balya. Aja Mamsa possesses similar qualities to Mamsa of human beings, hence acts as Bruhmhaniya. Mamsa Ahara is specifically advised in disease like Rajayakshma, Shosha, Karshya due to inherent Bruhmhaniya Guna. Mamsa finds wide utility as Ahara, in preparation of Shamana Oushadhis, for Shodhana procedures, Panchakarma, Upakarmas procedures, SamsarjanaKarma and so on.
REFERENCES


