



Literary Review of Clinical Application of Aja Dugdha in Different Ayurvedic Texts

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ABSTRACT

Milk is essential part of diet in human life. It is nutrient rich fluid produced by female mammals. The most commonly consumed milk comes from cows, goats, sheep and buffalos. Ayurvedic sciences has enumerated eight different types of milk and explained their properties and health benefits. Aja Dugdha is one of them. It is *Madhur*, *Kashaya*, *Laghu* and *Sheeta*. It is mentioned as *Sarva Roghar*. It is therapeutically used in many diseases like *Rajyakshma*, *Raktapitta*, *Atisara*, *Kasa* and *Jwara*. It is recommended as *Pathya* in many diseases. It is one of the contents of many ayurvedic formulations prepared for *Nasya Karma*, *Anjana*, *Lepa*, *Basti*, *Dhoopan* and *Karanpoorana*.

Key Words: *Aja Dugdha*

INTRODUCTION

Milk is considered as the important constituent of balanced diet. It is the first food for mammals which provides all the nutrients needed for growth and development of body.

The milk is complex oil in water emulsion which contains proteins, fats and carbohydrates with lesser amount of vitamins, minerals and enzymes.

The physical properties and composition of milk varies between species. Most commonly the cow and goat milk are consumed as health drinks. Both can be easily incorporated into the diet and offer a range of valuable macro and micro nutrients. Goat milk confers some unique properties when compared to cow's milk. Goat milk and its derivatives contain several bioactive compounds

that might be useful for patients suffering from variety of chronic diseases.

COMPOSITION OF GOAT MILK

Goat milk contains fat in the form of triglycerides, phospholipids and free fatty acids. The main characteristic of goat milk fat is the high content of short and medium chain fatty acids and small size of fat globules which are easily digested and provide excellent source of energy. The protein portion has fundamental role on nutritional value of milk. Casein is the main protein and whey is the secondary protein present in goat's milk. Casein is of four sub types out of which alpha S casein is intolerable and it is fortunate that goat milk contains its low percentage and thus it is suitable for children and people who cannot tolerate milk. The carbohydrate present in milk is lactose and



oligosaccharides. It is carrying lower level of lactose than cow's milk and higher level of oligosaccharides. The level of lactose becomes even lower when cultured into yogurt. Thus it can be consumed by people having lactose intolerance. In the context of minerals, it is high in potassium than sodium. It also has high level of calcium and nucleotides but low level of iron, zinc and copper. It is also a good source of vitamin A ^{8,9,10}.

HEALTH BENEFITS OF GOAT MILK

HYPOTENSIVE EFFECT

The protein in goat milk possesses hypotensive action due to its peptide form which possesses hypotensive effect. The bioactivity of goat milk protein releases angiotensin converting enzyme inhibitory peptides from hydrolyzed goat milk which acts as anti hypertensive¹⁰.

PROVIDES INTESTINAL HEALTH

Oligosaccharides present in goat milk are partially digested in small intestines and pass to the large intestine where they stimulate the growth of beneficial gut bacteria. These are able to reduce the pathogen binding to the intestinal mucosa and prevent the infections¹⁰.

PREBIOTIC ACTIVITY

The gut bacteria viz. bifido bacteria and lactobacilli play a very important role in keeping the digestion healthy and strengthening the immune system. These bacteria present saccharolytic activity. These are developed in the gut due to the presence of oligosaccharides in goat milk which act as prebiotic and constitute substrate for these desirable bacteria¹⁰.

PREVENTS GASTRIC ULCERS

Goat's milk alkalizes the digestive system and helps to increase the pH level in the gut so also prevents gastric ulcers⁸.

Ayurvedic Science emphasizes on maintaining the health of human beings and treating the diseased individuals with the herbs, minerals, medicated ghee, oil, milk and yogic kriyas. In Ayurveda, there is a descriptive mention of milk and its benefits from different species of animals and plants. Among the animals, the goat milk is considered very beneficial and is very much similar to cow's milk in health properties. Different authors have given the qualities of goat's milk as under.

Acharaya Sushruta

- The qualities of Aja Dugdha (goat milk) are similar to Godugdha. Especially it is used in Rajyakshma (emaciation/tuberculosis).
- It is Hitkarak, Agnideepak (appetizer), Laghu (light – easy to digest) and Sangrahi (absorbent).
- It cures Shwasa (dyspnoea), Kasa (cough) and Raktapitta (bleeding). Aja Ksheer is Sarva Roghara ^{S.Su. 45/51-52}.

Acharya Charak

- The Aja Dugdha (goat milk) is Kashaya (astringent) and Madhura (sweet) in taste, Sheeta (cold) in potency. It is Malasangraha (binds the faeces), Laghu (light), cures Raktapitta (bleeding), Atisara (diarrhoea), Kshaya (emaciation), Kasa (cough) and Jwara (fever) ^{C.Si.27/222}.

Acharaya Vagbhatta

- The Aja Dugdha is Laghu (light). It cures Shosha (emaciation), Jwara (fever), Shwasa



(dyspnea), Raktapitta (bleeding) and Atisara (diarrhoea)^{A. H. Su. 5/24}.

Acharya Bhavmishra

- The Aja Dugdha is Kashaya (astringent), Madhura (sweet), Laghu (light), Sheeta Virya (cold potency), Balya (tonic) and Sangrahi (absorbent).

- It cures Raktapitta (bleeding), Atisara (diarrhoea), Kasa (cough), Shosha (Emaciation), Kshaya (tuberculosis/emaciation) & Jwara (fever)
B. P Nigantu 6/16

Acharya Kaydev

- The Aja Dugdha is Deepana (appetizer) and Madhu (sweet) in taste, Laghu (light), Sangrahi (absorbent), Sheetal (cold), Snigdha (demulcent), Kashaya (astringent), Mradu (soft), Shukrala (increases semen) and Balya (tonic).

- It cures Kasa (cough), Arsha (haemorrhoids), Atisara (diarrhoea), Shwasa (dyspnea), Trishna (excess thirst), Khshaya (emaciation), Vatarakta (gouty arthritis), Kshataksheen (injured), Raktapitta (bleeding) Pradar (leucorrhoea) and Jwara (fever)^{K. Nighantu sholaka 33-135 Dugdha varga}.

Raj Nighantu

- Aja Dugdha (goat milk) is capable of destroying all types of diseases as Aja consumes various types of herbs and little quantity of water and does excess walking.

MEDICINAL USES OF AJA DUGDHA (GOAT MILK) IN CHARAK SAMHITA

- In Vat Yukta Raktapitta, Aja Ksheer is recommended^{C. Ch. 4/83}.

- In Nasagata Raktapitta, Nasya of Aja Dugdha and Aamrasthi is given

C. Ch. 4/101.

- In Pittaj Gulama, Aja Dugdha is recommended as Aahar^{C. Ch. 5/133}.

- Aja Dugdha is mentioned as Pathya in Rajyakshma^{C. Ch. 8/116}.

- Aja Dugdha is given as Aahar is Kshataksheen Roga^{C.Ch. 11/83}

- Aja Dugdha is recommended in Udara Roga^{C.Ch. 13/108}

- Aja Dugdha is recommended with Triktu Churan for three months in Udara Roga^{C.Ch. 13/152}.

- Aja Dugdha is indicated with Kutaj Raskriya in Rakta Arsha^{C.Ch. 14/191}.

- Aja Dugdha is recommended with Vastuka Pattra Rasa in Rakta Arsha^{C. Ch. 14/194}

Aja Dugdha is used as anupana with Neloutpala, Manjitha, Mochrasa, Raktachandan, Tila and Lodhra churan^{C.Ch. 14/193}.

- Aja Dugdha is recommended in Pittaj Atisara on regular basis to increase the Jatharagni, Bala and Varana^{C.Ch.19/57}.

- In Rakta Atisara, Sheeta Aja Dugdha is mixed with Madhu and Sharkara for Paanarth, Bhojanarth and Gudaa Prakshalanarth^{C.Ch.19/71}.

- In Rakta Atisara, Aja Dugdha is recommended with Audana^{C.Ch.19/75-76}.

- In Rakta Atisara, KrishanTil kalka 1 part and 5 parts Sharkara are mixed in Aja Dugdha and given. It stops the bleeding spontaneously^{C.Ch.19/84}.



- Anu Taila prepared with Aja Dugdha and other constituents is recommended in Vataj Pratishayaya as Nasya ^{C.Ch.26/139-140}.
- In Vataj Netra Roga Aja Dugdha is mixed to equal quantity of Brahti, Erandamool, Shigru pushpa, Saindhav Lavana and made into varti. It is used in eyes as Anjana ^{C.Ch.26/240}.
- Aja Dugdha is mentioned as Pathya in Vat Shonit Roga ^{C.Ch.29/53}.
- Aja Dugdha is used as Parisheka to manage Daha and Shoola in Vat Shonit Roga ^{C.Ch.29/126}.
- Aja Dugdha is mixed to the powder of Til, Priyal, Madhuka, Bisnaal and Vetasmool and applied as a Lepa in Daha and Raga in Vat Shonit ^{C.Ch.29/133}.
- Aja Dugdha is mixed to the Sehchara moola and Jeevanti and made into paste that is applied with Ghee in Daha present in Vat Shonit Roga. Aja Dugdha can be applied by mixing it with Til pishti ^{C.Ch.29/139}.
- In Yoni Roga, Aja Dugdha is given with Rasanjana or Laksha ^{C.Ch.30/96}.
- Aja Dugdha is used to prepare the herbs in Sthiradi Yapan Basti. The basti is for Bala, Varna and is good Vrishya ^{C.Sidhi 12/16}.
- Aja Dugdha is used to make Chatursneha Anuvasan Basti ^{C. Sidhi 12/18}.
- Aja Dugdha is used to prepare Anu Taila for Nasya Karma ^{C. Sidhi 5/63-70}.
- Aja Dugdha is considered as Shoshhara, Stanya sattmya, Doshnashaka, Raktasangrahi and Raktapittahar ^{C. Sidhi 25/40}.

- Aja Dugdha is Kashaya and Madhura Rasa, Sheet Virya, Grahi and Laghu. It treats Raktapitta, Atisaar, Kshaya, Kasa and Jwara ^{C. Sidhi 27/222}.

MEDICINAL USES OF AJA DUGDHA IN SUSHRUTA SAMHITA

- Aja Ksheer is mentioned under Ksheervarga ^{S.Su 45/47}.
- If there is unavailability of Matri Dugdha for Balak, he can be fed with Aja Dugdha ^{S.Su 10/53}.
- In the Chikitsa of Vrana, when it is not healed properly, it turns Krishna and then, Pandu Karma is beneficial in these Vranas. For that Rohiniphal (Haritki Bheda) is made into paste with Aja Dugdha and applied on Vrana ^{S.Su 1/95}.
- In Vataj Vatrakta, Tail, Mulethi or Prishanparni are heated with Aja Dugdha and given to the patient with Madhu and Sharkara ^{S.Su 5/7}.
- Aja Dugdha is mixed with Gokshura Beej Churan and Madhu and is consumed for 7 days to remove the Ashmari ^{S.Su 7/19}.
- Aja Dugdha in Vataj Abhishyanda – Mix the fine powder of Mulethi, Haridra, Harad and Devdaru in equal quantity with Chaag Dugdha (Goat milk) and use as an Anjana (collyrium) in Vataj Abhishyanda ^{S.U 9/14}.
- Suvarna Gairik (1 part), Saindhav Lavan(2 parts), Pippali (4 parts), Sunthi (8 parts) are mixed with Aja Dugdha and used as Anjana ^{S.U. 9/15-16}.
- In Praklinna Vartma Roga (Vrtamgata Roga) Kansya Malla is burnt with Karpas vastra and then made into fine powder. This fine power is mixed with Aja Dugdha and is used as Anjana (collyrium) ^{S.U.12/50}.



- In Naktandhya (Drishtigata Roga) fine powder of Mainsheela, Harad, Sounth, Marich, Pippali, Bala mool, Sariva, Samudrafena is mixed with Aja Dugdha and made into Varti for use as Anjana (collyrium) ^{S.U.17/8}.
- In Netravedna and Lalima (Ocular pain, Hyperemia) fine power of Ksheerkakoli, Sariva, Tejpattra, Manjith and Mulethi in equal quantity is mixed with Aja Dugdha and made to warm in low heat. Then applied as a lepa in eyes ^{S.U.17/89}.
- In Prasadanjana (Applied After Shalya Karma of Lingnasha) – Equal quantity of Meshshringa Pushpa, Shirish Pushpa, Dhava Pushpa, Chameli Pushpa, Muktapishti and Vaidoorya are taken and made into fine powder. Then this powder is mixed with Aja Dugdha. All the material is kept in Tamrapattra for 7 days. On 8th day, Yavakar Varti is prepared and used in operated eyes with Gulab Jala ^{S.U.17/96-97}.
- Bilwadi Taila in Badhirya - The kalka of Bilwa, Gomutra, Til Taila and Aja Dugdha is heated till only oil is left. It is used as Karnapurna in Badhirya ^{S.U 21/35}.
- Powder of Mulethi, Sharkara, Lodhra, Paysia and Sariva is taken with Aja Dugdha and Madhu in Rakta Atisara ^{S.U 40/120}.
- Krishna Tila, Mochras, Lodhra, Mulethi and Utpala in equal quantity are taken with Aja Dugdha and Madhu in Rakta Atisara ^{S.U 40/123}.
- Administration of Aja Dugdha on daily basis is indicated in the patients of Rajyakshma ^{S.U 41/58}.
- Aja Ksheer is administered in Raktapitta ^{A. H. Ch 2/36}.
- Aja Ksheer is indicated in Rajyakshma as Shoshhar ^{A. H. Ch. 5/6}.
- Aja Dugdha is used as Anupaan with Kutajavleha in the treatment of Rakta Arsha and is also used as Snehpaan with food ^{A. H. Ch. 8/107}.
- Aja Dugdha is cooked with Lodhra, Tila, Mochrasa, Manjistha, Chandan and Kamal and administered with Shaali Chawal in Rakta Atisara ^{A. H. Ch. 8/112}.
- Aja Dugdha is mentioned as Pathya in Rakta Arsha ^{A. H. Ch. 8/119}.
- Aja Dugdha is indicated in Niram Atisara ^{A. H. Ch. 9/67}.
- Aja Dugdha is best in treating raised Pitta Dosha, Trisha and Jwara yukta Rakta Atisara ^{A. H. Ch. 9/83}.
- Aja Dugdha with Sanskarit Jala, Netrabala, Kamal and Sounth is helpful in Rakta Atisara ^{A. H. Ch. 9/86}.
- 1 part paste of Krishan Til and 5 parts Sharkara when taken with Aja Dugdha checks the bleeding spontaneously ^{A. H. Ch. 9/92}.
- Aja Dugdha is mentioned as Pathya for Pittaj Gulma ^{A. H. Ch. 14/74}.
- Aja Dugdha is mixed with oil and is used as Prisheka in Vat Shonita ^{A. H. Ch. 22/25}.
- Aja Dugdha is mixed with Sehchara, Jeevanti moola and Ghee and is applied in patients of Vata Shonita ^{A. H. Ch. 22/33}.
- Aja Dugdha is mixed with powder of Pundreek, Mulethi, Kakoli, Kantkari, Agara, Haldi,

MEDICINAL USES OF AJA DUGDHA IN ASHTANG HRIDYA



Srotanjana, Yava and Ghee and this is made into Varti with the smoke of Amlaki pattra and used as Anjana in Sirashukra Roga of eye A. H. Ch. 11/49-50 .

•Aja Dugdha is mixed with Draksha, Nalada, Lodhra, Mulethi, Shankha, Tamra, Swarna, Kamal, Padmakh and Utpala .It is made into Varti and is indicated in Raktaj Timir A. H. Ch. 13/74 .

• Aja Dugdha mixed with Tagar, Trikatu, Triphla, Hartaal, Mainseel and Samudraphena is made into Varti and is used as Anjana in Ratryandhya A.H.U. 13/87 .

•A paste is made by mixing Aja Dugdha with Malti Pushpa, Shirish Pushpa, Dhava Pushpa, Meshashringi Pushpa and is coated inside the walls of tamrapattra for 7 days. After that the material is scratched out and is mixed with Aja Dugdha and is used as Prasaadanjana A.H.U.14/31-32 .

•In Vardhmaan Pippali Yoga, two thousand Pippali are to be consumed with Aja Dugdha as Rasayan A.H.U. 39/101 .

MEDICINAL USES OF AJA DUGDHA IN BHAISHAJYA RATNAWALI.

•Add Aja Dugdha in the swaras of Jamun ,Aamra and Amla leaves and take with honey in Rakta Atisara Bh. R. Atisaradhikara .

•Mix Bilva churna in Aja Dugdha and boil .Then add Sharkara, Mochras and Inderjou. Take it in Rakta Atisara Bh.R. Atisaradhikar .

•Aja Dugdha is considered as Amrita in Jeerna Atisara. Take it with herbs or 3 times water Bh. R. Atisaradhikar .

•Aja Dugdha is mentioned as Pathya in Atisara Bh. R. Atisaradhikar .

•Aja Dugdha is mentioned as Pathya in Grahni Roga Bh. R. Grahni Rogadhikar .

•Aja Dugdha is mentioned as Pathya in Arsha Roga Bh. R. Arshrogadhikar .

•Aja Dugdha is mentioned as Pathya in Rajyakshma Roga Bh. R. Rajyakshmaadhikar .

•Aja Dugdha is mentioned as Pathya in Kasa Roga Bh.R. Kasroga .

•Aja Dugdha is mentioned as Pathya in Shwasa Roga Bh.R. Hikkashwasadhikar .

•Aja Dugdha is mentioned as Pathya in Vatrakta Roga Bh.R. Vatraktaadhikar .

•Aja Dugdha is mentioned as Pathya in Gulma Roga Bh.R. Gulmaadhikar .

•Aja Dugdha is mentioned as Pathya in Udara Roga Bh.R. Udarrogaadhikar .

•Triphla, Kukutand Twak, Kasees, Loharaj, Neelotpala, Vidanga and Samudraphena are made into powder and mixed with Aja Dugdha . This paste is applied in inner side of tamra pattra and kept for 7 days. Then the paste is removed and again ground with Aja Dugdha and made into Varti. This Drishtiprada Varti is used to provide vision Bh.R. Netra Rogaadhikara .

•A paste made with Ksheerakakoli, Sariva, Manjistha, Mulethi and Aja Dugdha is applied on eyes as Pathya Bh.R. Netrarogadhikara .

•Aja Dugdha with Jamun Twak in equal quantity is given to children suffering from Grahni Roga Bh.R. Balrogadhikara .

MEDICINAL USES OF AJA DUGDHA IN KASHYAP SAMHITA



• In Rajyakshma Roga, it is indicated that no other milk should be consumed except Aja Ksheer ^{Ka.}

Samhita – Rajyakshama Chikitsa

• In the diseases of eyes, Saindhav Lavana, Marich, Rasanjan, Manshila are mixed with Aja Ksheer and made into Varti. This Varti is used as Anjana in treating Netra kandu, Timir and Updehadushika ^{Ka. Samhita – Nasya}

Karmiya Sidhi

• For Preta Nivarana, Aja Dugdha is mixed with Ghee, Sidharthaka, Madhu, Meshashringi, Soma, Khara mutra and kesha and made into dhoopa. This dhoopa is Uttam Dhoop for patients suffering from preta and putna greha ^{Ka. Samhita – Dhoopkalpa}

• Aja Ksheer mixed with Kapitha, Bilwa and Khadir is Uttam Ashchyotna ^{Ka.Samhita – Kukuunak}
Chikitsa Adhyaya

• Mulethi and Daruhaldi are taken in equal quantity and mixed with Aja Ksheer. It is Uttama Ashchyotan ^{Ka.Samhita. Kukuunak Chikitsa Adhyaya}

• Mukhalepa prepared with Padmak, Kamal, Mulethi, Sharkara and Aja Ksheera is used in Akshi Roga ^{Ka.Samhita Kukuunak Chikitsa Adhyaya}

CONCLUSION

Ayurveda is the ocean of extensive knowledge which is beneficial in treating the ailing humanity. Ayurvedic texts like Charak Samhita, Sushrut Samhita, Ashtang Hridya, Bhaishajya Ratnawali and Kashyap Samhita have advocated Aja Dugdha as a Medicine and Pathya . It is called as Hitkari and is capable of destroying all types of diseases.



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