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Review Article

EVALUATION OF BRAHMI GHRITA KALPA IN AYURVEDIC LITERATURE

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ABSTRACT

Brahmi Ghrita mentioned in Ayurvedic manuscripts with slight variation in their ingredients as well as therapeutic indications. This Ghrita was first time mentioned in Charak Samhita having ingredients like Brahmi (*Bacopa monneri*), Vacha (*Acorus calamus*), Shankhapushpi (*Evolvulus alsinoids*), Kushtha (*Saussurea lappa*) and cow's ghee and indicated for treatment of Unmand, Apasmar and Graha disorders. In due course of time, this formulation was modified by various Acharya as per requirement of patients, nature of disease, Desh, Kala etc. Recently government of India published official document known as Ayurvedic Formulary of India which has same indications and ingredients along with method of preparation as mentioned in Astang Hriday. Besides this other manuscripts of Ayurveda like Vaidhayka Chintamani, Sahasrayoga etc. mentioned Brahmi Ghrita for treatment of gastrointestinal disorders, Swar- bheda etc. along with Unmad, Apasmar and their ingredients are varied according to their therapeutic claim. It is clear that this Ghrita is so nicely formulated that at least one ingredients act as bio-enhancers (enhances therapeutic properties) and other ingredients as per etiopathogenesis of respective disorders except Charak Samhita and Bhav Prakash. In nut cell, we can say that Brahmi Ghrita mentioned in Charak Samhita and Bhav Prakash should be used for treatment of Unmad and Apasmar and if these disorders are associated with other disorders then composition of Ghrita will be varied according to nature of other diseases.

Keyword: Brahmi Ghrita, Manuscripts, Unamd, Apasmar

INTRODUCTION

According to the World Health Organization report (WHO 2001) approximately 450 million people suffer from mental or behavioural disorder, yet only 12.3 % people receive even the most basic treatment and the global burden of mental disease will rise 15 % by 2020¹. In this relation efforts have been made to improve access to care in the general practice setting for patients with common mental disorders² and elucidate mental (psychological) disorder³. Clustering of common psychological and somatic disorders might influence access to mental health care. This Clustering has been established among patients with depressive disorder, anxiety disorder, and alcohol dependence⁴⁻⁶. The presence of a co morbid somatic disorder may distract physicians from recognizing and treating depressive disorder^{7,8}. This attitude has been found to be an important barrier to mental health service utilization i.e. patients with co morbid depression and a somatic disease may assume along with their physicians that the symptoms are due to the somatic disease, not to the depression, and that symptoms will resolve once the somatic disease is treated^{9,10}. In this connection, during literary survey it was observed that Brahmi Ghrita, formulation mentioned for treatment of Unmad and Apasmar (these disorders are closely related with mental and behavioural disorders). Brahmi Ghrita was mentioned first time in Charak Samhita having ingredients like Brahmi (*Bacopa monneri*), Vacha (*Acorus calamus*), Shankhapushpi (*Evolvulus alsinoids*), Kushtha (*Saussurea lappa*) and cow's ghrita. After that period there was various changes

occurred in its ingredients and therapeutic indications as per requirement of patients, nature of disease, Desh, Kala etc. At present time five types of Brahmi ghrita are mentioned by different Acharya with differing composition and indication which create confusion to the physician that which composition of Brahmi Ghrita will be used in particular disorders. Therefore, it is need of time to evaluate different composition of Brahmi Ghrita in light of scientific parameters for therapeutic claim by different Acharya. The difference in their ingredients may be responsible for different therapeutic activity. So in this survey, an attempt has been done to scientific evaluation of different composition of Brahmi Ghrita along to their therapeutic claimed. Important manuscripts of Ayurveda starting from Charak Samhita, Bhaishjya Ratnavali to Ayurvedic Formulary of India are the source of various preparation of Brahmi ghrita. Among vast literature of Ayurveda these manuscripts covers almost all formulations of Brahmi ghrita along with chronological development. Besides this, Brahmi Ghrita was search out in various international and national journals for scientific evaluation pharmacological properties of ingredients.

Charaka Samhita

Brahmi Ghrita was first time mentioned in Charak Samhita having Brahmi (*Bacopa monneri*), Vacha (*Acorus calamus*), Shankhapushpi (*Evolvulus alsinoids*), Kustha (*Saussurea lappa*) and Purana ghrita (Clarified butter of Cow) for treatment of Unamad, Apasmar and graha disorders.

Astang Hridaya

Brahmi Ghrita mentioned in Astang Hridaya contained Brahmi, Vyosh (Composition of Sunthi, Maricha and Pippali), Trivrit, Danti, Shankhapushpi, Aragvadh, Saptala and Vidang (*Embelia ribes*). During preparation of this Ghrita, two prastha of Brahmi swarasa (juice) was added in one prastha clarified butter and kalka dravya (Paste) which was prepared by Vyosh, Trivrit, Danti, shankhapushpi, Aragvadh, Saptala and Vidang also incorporated in to above mixture and heated till completion point and by filtrating Brahmi Ghrita was prepared. This Ghrita is mentioned for treatment of Apasmara, Unmada, Vandhyatva, Kushtha, Vaksvara bhringa, Smriti ksaya and Buddhi mandya.

Vaidyak Chintamani

Brahmi Ghrita was prepared with Brahmi swarasa and Ghrita along with equal amount of Brahmi, Mundi, Vacha, Kustha, Neelkamal, Pippali, Saindhav. In this preparation Brahmi swarasa was three times of churna which was made up of equal proportion of Brahmi, Mundi, Vacha, Kustha, Neelkamal, Pippali, saindhav was taken along with Ghrita which is four times of Brahmi swarasa and used for treatment of Apasmara and sarva roga.

Bhav Praksah

Brahmi Ghrita contained *Bacopa monneri*, *Acorus calamus*, *Evolvulus alsinoids*, *Saussurea lappa* and Purana go-ghrita (Clarified butter of Cow). It was mentioned for treatment of Apasmara and Graha disorders.

Sahsrayogam

Brahmi Ghrita contained Haridra, Amalki, Trivrita, Haritaki, Pippali, Vidang, Saindhav, Sarkara, Vacha and Ghrita. In this formulation Haridra, Amalki, Trivrita, Haritaki each having one pala and Pippali, Vidang, Saindhav, Sarkara, Vacha taken in quantity of one karsh. It was prepared by four times of Brahmi Swarasa (made up pressing the kalka of whole plant Brahmi), kalka (prepared by Haridra, Amalki, Trivrita, Haritak, Pippali, Vidang, Saindhav, Sarkara, Vacha) and one prastha of Ghrita. By application of pachan heat Brahmi Ghrita was prepared and indicated in vakasuddhi (speech disorders).

Chakradatta

Brahmi Ghrita was mentioned in Rasayan Prakaran as well as Swara bheda Prakaran. This content Brahmi, Haridra, Malati, Kushtha, Trivrit, Haritaki, Pippali, Vidanga, Saindhava, Sarkara, Vacha, Ghrita and water prepared as per Sneha paka process. This Ghrita is used in various disorders according to its duration of use.

Ayurvedic Formulary of India

Brahmi Ghrita was prepared by 1.53 litres of Brahmi Swarasa, 786 g of Ghrita, Kalka dravya made up of 12 g of Sunthi, Maricha, Pippali, Shyama Trivrit, Trivrit, Danti, Shankhapushpi, Saptala, Krimihar and Nripdrum (Aragvadh) each. The above mixture was heated on mild heat. In this way Brahmi Ghrita was prepared. It was used in treatment of Apasmara, Unmada, Vandhyatva,

Kushtha, Vaksvara bhringa, Smriti ksaya and Buddhi mandya.

Observation

Brahmi Ghrita of Charak Samhita contain *Bacopa monneri*, *Acorus calamus*, *Evolvulus alsinoids*, *Saussurea lappa* and cow's ghee, with due course of time composition of this Ghrita varies along with therapeutic indications. Among these only ingredients and indication of Brahmi ghrita was mentioned in Charak Samhita and Bhav Prakash but in Astang Hridaya and Ayurvedic Formulary of India gives details of pharmaceutical process along with ingredients and indication. It is also observed that composition and indication of Brahmi Ghrita varies in manuscripts predominantly prescribed in northern region of India (Charak Sahmita, Bhav Prakash) and manuscripts of southern region of India (Astang Hridaya, Vaidyika Chintamani and Sahashrayogam).

Researches on Individual Herbs

Brahmi Ghrita have great therapeutic values, it enhances the learning-memory process, as well as used for treatment of amnesic disorders¹¹; besides this, Brahmi Ghrita having CNS depressant, anti convulsing¹² activity. By reviewing the literature, it is observed that Brahmi Ghrita contains Brahmi, Vacha, Kushtha, Shankhapushpi, Ghrita, Maricha, Pippali, Sunthi, Haridra, Trivrit, Danti, Saptala, Vidang, Aragvadh, Nilotpala, Saindhav, Sarakra, Amalaki, Haritaki, Mundi and Malati. Among them *Bacopa monneri* has been well-known medicine for a number of disorders, particularly those involving anxiety, learning and memory disorders¹³. The roots and rhizomes of *Acorus calamus* are used in Ayurvedic medicine on a regular basis for the treatment of insomnia, melancholia, neurosis, loss of memory and remittent fevers¹⁴. *Evolvulus alsinoids* has been reported for improving learning and memory¹⁵. *Saussurea lappa* has been reported to possess anti-inflammatory activity¹⁶. Clarified butter act as memory enhancer, anticonvulsant and anti-inflammatory agent¹⁷. Vyosh (composition of Sunthi, Maricha, Pippali) and Pippali was reported as bio enhancer¹⁸⁻²¹. Curcumine, obtained from *Curcuma longa* having antioxidant, anti-inflammatory, gastro protective and hepato protective activities besides this also act as bio enhancer²². Embelin, isolated from the berries of *Embelia ribes*, shows significant anti-implantation and post-coital anti fertility activity along with Ascaricidal, anthelmintic, anti-inflammatory, antibacterial, febrifuge.²³ *Sphaeranthus indicus* indicated in cervical lymphadenitis, chronic sinusitis, migraine, epilepsy, lipid disorders, dysuria²⁴. Phyllembin obtained from *Embelia officinalis* exhibits CNS depressant and spasmolytic activities potentiates action of adrenaline and hypnotic action of Nembutal and have anabolic, anti diabetic, antioxidant property²⁵. *Terminalia chebula* indicated for cyst disorders, digestive disorders, vomiting, enlarged liver and spleen, cough and bronchial asthma and for metabolic harmony²⁶. *Operculina turpethum* act as purgative, anti-inflammatory (particularly used in rheumatic and paralytic affections; also in fevers, oedema and hepatic and haemophilic diseases) agent²⁷. Besides this Puran Ghrita, is considered especially good for healing the mind. Its bitter property enables it to remove blockages in

the mind's subtle channels. So it is mainly indicated for mental disorders (Unmad and Apasmar).

Conversation

History of Ayurveda is divided into ancient (2000 BC-500 AD), medieval (500 AD-18 AD) and current era (18 AD- till date)²⁸. Charak Samhita, Astang Hridaya are comes under ancient manuscripts, Chakradatta, Bhav Prakash in medieval and Ayurvedic Pharmacopodia of India in current era. Brahmi Ghrita described in ancient text i.e. Charak Samhita, Astang Hridaya having different compositions differing in their ingredient and therapeutic claim. In Charak Samhita, this Ghrita contain Brahmi (*Bacopa monneri*), Vacha (*Acorus calamus*), Shankhapushpi (*Evolvulus alsinoids*), Kushtha (*Saussurea lappa*) and cow's ghee for treatment of Unmad, Apasmar and graha disorders while Astang Hridaya contain Brahmi Vyosh, Trivrit, Danti, Shankhapuspi, Aragvadh, Saptala, Vidang and Ghrita indicated for Apasmara, Unmada, Vandhyatva, Kushtha, Vaksvara bhringa, Smriti ksaya and Buddhi mandya. In Charak Samhita diseases were classified into Sharirik (somatic) and Manshik (psychological/mental disorders)²⁹; so that formulations mentioned in it is used either somatic or psychological disorders. As per Astang Hridaya seat of diseases is Mana along with Sharir (psychological disorders along with somatic disorders and Brahmi Ghrita is indicated in psychological disorder along somatic disorders. From above it is clear that basic seat of diseases varies in both Samhita that may be the reason for differing composition and indication of Brahmi Ghrita. Vaidyaka Chintamani and Bhav Prakash are classical manuscript of medieval period, between them Bhav praksh followed the reference of Charak Sahmita and Vaidyaka Chintamani contain Brahmi, Mundi, Vacha, Kustha, Neelkamal, Pippali, Saindhav and Ghrita as ingredients and indicated in Apasmar as well as all diseases, it showed that it is mainly indicated for Apasmar associated with other diseases. Sahashrayogam and Ayurvedic formulary of India is current document in the field of Ayurveda, the composition of Brahmi Ghrita as well as indication is diverge in both documents. Ayurvedic formulary of India have same ingredients and indications as mentioned in Astang Hridaya but Sahashrayogam contain Brahmi Haridra, Amalki, Trivrita, Haritaki, Pippali, Vidang, Saindhav, Sarkara, Vacha and Ghrita as ingredients indicated for speech disorder. Speech disorders may occur as symptoms of either by somatic or psychological disorders depending upon of pathology of diseases. It

might be possible that as per Sahasrayogam, Brahmi Ghrita is used in speech beyond the consideration of their pathology which may be somatic or psychological. Brahmi Ghrita mentioned in Charak Samhita and Bhav Prakash have five ingredients^{30,31} among them four ingredients i.e. *Bacopa monneri*, *Acorus calamus*, *Evolvulus alsinoids* and Puran ghrita are scientifically validated for psychological disorders and *Saussurea lappa* is reported for anti inflammatory activity. Thus we can see that this formulation is specially indicated for psychological disorders. Brahmi Ghrita mentioned in Astang Hridaya and AFI having twelve ingredients^{32,33} among them three i.e. Brahmi, Shankhapushpi and Ghrita reported for psychological disorders and nine ingredients are reported either for somatic disorders (Trivrit dway, Danti, Aragvadh, Saptala, vidang) or having bio enhancer (Trikatu) properties. This indicates that Brahmi Ghrita with these ingredients is indicated for treatment of psychological as well as somatic disorders i.e. psychosomatic disorders. In Vaidhayak Chintamani, Brahmi Ghrita contain eight ingredients³⁴ among them three i.e. Brahmi, Vacha, ghrita are reported for psychological disorders and other four ingredients i.e. Kustha, Mundi, Vacha, Neelkamal Saindhav for somatic disorders and one i.e. Pippali act as bio enhancer, thus this formulation shows balanced ingredients for somatic as well as psychological disorders due to this region it is indicated for Sarv-roga (somatic as well as psychological disorders). Brahmi Ghrita mentioned in Sahrayogam³⁵ contained Brahmi Vacha and Ghrita as psychoactive and Amalki, Trivrita, Haritaki, Vidang, Saindhav, Sarkara as somatotropic and Pippali Haridra as bio enhancer herbs. Among twelve ingredients³⁶ of Brahmi ghrita mentioned in Chakradatta three i.e. Brahmi, Vacha and Ghrita are well established psycho active herbs and seven herbs (Malati, Kushtha, Trivrit, Haritaki, Vidanga, Saindhava, Sarkara) reported for somatic disorders and two (Haridra Pippali) having property of bio enhancer. So that this composition cover somatic and psychological disorders indicated for Rasayan purposes which promote longevity to persons. In Charka Samhita it is clearly mentioned that physician may add and remove the ingredients of any formulations as per their wisdom in accordance with patients, nature of disease, Desh, Kala etc.³⁷ to avoid any untoward effect on patients. So variation at ingredients level mentioned in different manuscripts of Ayurveda will be accepted accordance with patients, nature of disease, Desh, Kala etc.

Table: Various Composition Brahmi Ghrita in Different Classical Text Books

S.N	Contents	C. Sama	A. Hri	V. Chi.	B. Pra.	Sahasrayoga	Chakradatt	A.F.I
1	Bramhi	+	+	+	+	+	+	+
2	Vacha	+	-	+	+	+	+	-
3	Sankhpuspi	+	+	-	+	-	-	+
4	Kustha	+	-	+	+	-	+	-
5	Maricha	-	+	-	-	-	-	+
6	Pippli	-	+	+	-	+	+	+
7	Trivrita	-	+	-	-	+	-	+
8	Danti	-	+	-	-	-	-	+
9	Saptla	-	+	-	-	-	-	+
10	Vidang	-	+	-	-	+	+	+
11	Aragvadh	-	+	-	-	-	-	+
12	Mundi	-	-	+	-	-	-	-
13	Nilotpal	-	-	+	-	-	-	-
14	Saindhav	-	-	+	-	+	+	-
15	Haridra	-	-	-	-	+	+	-
16	Amalaki	-	-	-	-	+	-	-
17	Haritaki	-	-	-	-	+	-	-
18	Sarkara	-	-	-	-	+	+	-
19	Sunthi	-	+	-	-	-	-	+
20	Malati	-	-	-	-	-	+	-
21	Ghrita	+	+	+	+	+	+	+

C. Sam-Carak Samhita, A. Hri- Astang Hridaya, V. chi.- Vaidya Chintamani, B. Pra- Bhav Prakash, A.F.I.- Ayurvedic formulary of India

CONCLUSION

Brahmi Ghrita mentioned in Ayurvedic manuscripts contain Brahmi, Vacha, Ghrita acting psychological disorders except Charak Samhita and Bhav Prakash where Shankhpushpi is mentioned along with these three ingredients. Besides this these two books contain only Kustha but other manuscripts having more than five ingredients which either act on somatic disorders or as bio enhancers. In nut shell we can say that Brahmi Ghrita mentioned in Charak Samhita and Bhav Prakash act on psychological disorders and mentioned in other manuscripts act on psychosomatic disorders.

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