



A LITERATURE REVIEW ON MADATYAYA (ALCOHOLISM) AND ITS MANAGEMENT IN AYURVEDA

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ABSTRACT

Now a days alcoholism is a serious public health problem & millions of people are suffering from several systemic disorders for injudicious intake of wine or alcoholic beverages. The national average of consumption of alcohol in India by male is 29.2% & by female is 1.2%. Alcohol usually damages stomach, pancreas, liver, kidney & central nervous system. Unfortunately, the abuse of alcohol is increasing day by day in our country as well as all over the globe as a result 3 million annual death are occurring due to abuse of alcohol.

In ancient time also several *Madakara* drugs were been used by the people & different Health hazards were also faced by our *Ayurvedic* physicians. The reference of *Mada* (narcotic drug), *Madatyaya* (disease due to alcoholism), *Pana bibhrama* (alcohol intoxication), *Pana jeerna* (alcohol induced gastritis like ailments have been found in *Charak Samhita*, *Sushrut Samhita* and in other classical text in later period. In present study several ancient and modern *ayurvedic* text have been studied and information regarding the sign and symptoms of *Madatyaya* and its line of management have been furnished here with as a ready reference to the readers against alcohol abuse.

Keywords: *Ayurveda, Madatyaya, Alcohol, Pana jeerna*

INTRODUCTION

Among all the serious social problems alcoholism is the one which needs a special attention. This problem is increasing day by day. According to a report of **WHO** worldwide 3.3 million deaths in every year result from harmful use of alcohol which represents 5.9% of all deaths ⁽¹⁾ And the

percentage of alcohol attributable death among men amounts to 7.7% of all global deaths compared to 2.6% of all deaths ⁽¹⁾ among women.

Alcoholism is not a new problem it has been known since Vedic era. *Acharya charak* describe the properties of *madya* along with the disease which occurs due to injudicious use of *madya*. He describes *madatyaya* as a disease which occurs due to excess use of alcohol. The term *madatyaya* comprises of two words *mada* & *atyaya* where *mada* means *Harsha* (excitement/euphoria) & *atyaya* means *atkarman* (excess) so *madatyaya* is the over excitement ⁽²⁾ caused by excess consumption of *madya*. *Acharya vagbhatta* describe *madatyaya* as '*madena atyayo madatyaya*' which means excess intake of *madya* may cause excess excitement which is *madatyaya*. As it is a condition where different sign & symptoms are usually appeared & those have been categorically mentioned by our classics of *prevedic* period, *Vedic* period, *samhita* period, *sangraha* period & also by the ayurvedic physician of modern period. The management of that condition through *ayurvedic* measures have also been discussed. So, in present study those texts of different era have been vividly reviewed & revealed data and information have been methodically furnished here as a ready reference to the readers of this article for better understanding regarding the problem as well as proper solution of the same.

Before knowing *madatyaya* we should know about *madya*, *acharya sharangadhar* said the *Dravya* which vitiates *buddhi* and *tamo guna Pradhan* in nature are called as *madakari* ⁽³⁾. *Madya* is also a *madakari Dravya* possessing 10 qualities ⁽⁴⁾ viz *laghu*, *ushna*, *amla*, *tikshna*, *ashuga*, *ruksha*, *vyavayi*, *vikasi vishad*, *Sukshma*, which are exactly opposite of *oja* ⁽⁵⁾, i.e., *guru*, *shita*, *madhur*, *mridu*, *Prasanna*, *snigdha*, *sthira*, *slakshna*, *picchila*, *bahala*. In this regard it is necessary to mention here that the whole living body is formed by seven *dhatus* (tissues) which hold body in an accurate healthy measure those are *rasa*, *rakta*, *mamsa*, *meda*, *asthi*, *majja*, *shukra* ⁽⁶⁾. And *sara bhag* or essence of all these *dhatus* is *oja* ⁽⁷⁾ which may be called as *vyadhi kshamatwa* or resistance power of body against disease.

MATERIALS AND METHOD

Madya guna

Qualities of *madya* according to different *Samhita* ^(4,8,9,10)

Guna of madya	Charaka	Sushruta	Vagbhatta	Bhava prakash
Laghu	+	-	+	+
Ushna	+	+	+	+
Tikshna	+	+	+	+
Sukshma	+	+	+	+
Vishada	+	+	+	+
Amla	+	-	+	+
Vyavayi	+	+	+	+
Ashu	+	+	+	+
Vikashi	+	+	+	+
Ruksha	+	+	+	+

Disease arises due to *Madyapana* as per different classics

Compendium	Disease due to madyapana
Charaka samhita	Madatyaya, dhwanasak, vikshaya
Sushrut samhita	Panatyaya, paramada, panajeerna, pana bibhrama
Astanga hridaya	Madatyaya, dhwanasak, vikshaya
Madhava nidana	Panatyaya, paramada, panajeerna, pana bibhrama
Bhava prakash	Madatyaya, paramada, panajeerna, pana bibhrama

Inappropriate *madyapana* leads to *madatyaya* which in turn result in *oja vyapad*. *Acharya Bhava Mishra* describes how *madya* can destroy *oja* i.e. ten detrimental attributes of *madya* counteract and diminish the ten qualities of *oja*⁽¹¹⁾ that sustain life & vitality. It can be correlated as

Sl no	Madya guna	Oja guna diminished by madya guna
1	Laghu	Guru
2	Ushna	Shita
3	Tikshna	Mridu
4	Sukshma	Sandra
5	Vishada	Picchil
6	Amla	Madhur
7	Vyavayi	Sthira
8	Ashu	Prasanna
9	Vikashi	Sukshma
10	Ruksha	Snigdha

Correlation of *madatyaya* along with *oja vyapad* and behavioral state

STAGE OF MADATYAYA	OJA OBOSTHA ⁽¹²⁾	BEHAVIORAL STATE
Pratham mada	Oja abihata	State of excitement
Dwitiya mada	Oja alpa bihata	State of incoordination
Tritiya mada	Oja bihata	State of coma

Clinical features of different stage as per various classics

As per *charaka Samhita*⁽¹³⁾

PRATHAM MADA	DWITIYA MADA	TRITIYA MADA
•Praharshan (Exhilaration) •Pritikara (Passion) •Panannagunadarshak (Proper manifestation of the attributes of food and drinks) •Vadyageetprahasanam (Creativity of music, song, humor and stories) •Na cha buddhi smritihara (It does not impair the wisdom and memory) •Sukha nidra (sound sleep)	•Muhur smriti muhur moha (The person often remembers things and often forgets them) •Yuktaayukta prolapscha (Proper & improper excessive talk) •Sthanpanannakothayojan a viparyaya (Incoherence in standing, eating, drinking & talking)	•Bhagnadarbi iba nishkriya (person become motionless like a broken wood) •Jivennapi mritei sama (Though living the person appears as dead) •Betti na suhritjanam (Being covered with narcosis & confusion person does not recognizes his friends)

As per *Madhaba nidan* ⁽¹⁴⁾ & *Bhava Prakash* ⁽¹⁵⁾

PRATHAM MADA	DWITIYA MADA	TRITIYA MADA	CHATURTHA MADA
•<i>Buddhi smriti pritikara</i> (In the first stage of alcoholism, intellect, memory power and pleasing qualities are increased.) •<i>Sukha</i> (It is comfortable.) •<i>Pana anna nidra rati Vardhan</i> (Appetite, sleep and a feeling of wellbeing are at their peak.) •<i>Geetaswaravardhana scha</i> (He can comprehend well, sing well and voice is improved.)	•<i>Avyakta buddhi smriti bag bichesta</i> (intellect memory & speech become confused) •<i>Alasya</i> (lazyness) •<i>Nidra abhihata</i> (sleeps very frequently) •<i>Aprashanta</i> (physical activities become irregular) •<i>Unmatta</i> (acts like insane)	•<i>Na guruscha manyet</i> (does not respect elders) •<i>Khadedabhakshyani</i> (eat things which are not to be eaten) •<i>Nashtasangya</i> (loss of consciousness) •<i>Bryuaccha guhyani</i> (speaks out secrets)	•<i>Bhagnadarbi iba nishkriya</i> (person become motionless like a broken wood) •<i>Karyakaryaabibhag yo</i> (unable to determine what to do and what not) •<i>Mritadapyaparo mrita</i> (incapable of any activity like a deadbody)

Madatyaya on the basis of *doshik* predominancy can be classified as:

Vataja

Pittaja

Kaphaja

Sannipataja

Clininical features of every *doshik madatyaya* along with its treatment can be tabulated as

MADATYAYA	CLINICAL FEATURES ⁽¹⁶⁾	TREATMENT ⁽¹⁷⁾
<i>Vataj madatyaya</i>	<i>Hikka, Shwaas, Shirakampa, Parshwashula, Prajagara and Bahupralap</i>	1.<i>Vyavayi, ushna, tikshna madyapana.</i> 2.<i>Mamsarasa</i> made of <i>lava, titir, daksha</i> is administered for alleviation of <i>vata</i>. 3.Drink made with <i>sauvarchal</i> salt, <i>vyosh churna, jeerna madya</i> and a little water is given to the patient of <i>vataja madatyaya</i>.
<i>Pittaja madatyaya</i>	<i>Trishna, Daha, Jwara, Sweda, Murcha, Atisara, Vibhrama and Haritavarna</i>	1.<i>Sarkara</i> or <i>mridvika jatiya madya</i> along with juice of <i>bhavya, kharjura, parushaka, dadim</i> and <i>saktu churna</i> given in a very diluted form. 2.Meat of <i>shasha, kapinjala, ena, lava</i> along with <i>madhur amla dravya</i> and <i>yastimadhu, shali</i> rice is given to the patient. 3.<i>Mudga</i> juice with <i>sita</i> or <i>Madhura Dravya sadhita mamsarasa</i> is given to the patient.

<i>Kaphaja madatyaya</i>	<i>Chhardi, Aruchi, Hrillasa, Tandra, Staimitya, Gaurava and Sheetaparita.</i>	1. <i>Ullekhan</i> and <i>upavasa</i> is administered to the patient. 2. <i>Madya</i> prepared from <i>sharkara, madhu</i> or <i>sidhu</i> can be given along with <i>madhu, nagar, yavani</i> to the patient in <i>niram Avastha</i> . 3. <i>Astanga lavan</i> is specifically given in <i>kapha madatyaya</i> as it as an excellent promoter of digestive fire & cleansing the channel of circulation.
Sannipataja madatyaya	Clinical features resemble with features arises due to <i>visha</i> but in a lower intensity.	1. <i>Kaphasthan anupurba Chikitsa</i> (18) In <i>Sannipataja madatyaya</i> treatment of <i>Kapha dosha</i> administered at first

Pathya ahara vihara for madatyaya

Sl. no	Madatyaya	Pathya ahara	Pathya vihara
1	Vataj Madatyaya ⁽¹⁹⁾	Snigdha mamsa rasa, Shali chawal, Varuni manda, yava, urad, amla Kanji etc.	Abhyanga, utsadan, ushna jala snan, guru aguru lepa
2	Pittaja Madatyaya ⁽²⁰⁾	Parushak-pilu shitarasa, mustak dadima laja shita kasaya, chaturparni shita kasaya	Shital jal snan, shital sajjya, moti dharan, Chandan lepachandranshu sparsha
3	Kaphaja Madatyaya ⁽²¹⁾	Yava, godhum, kulattha, sushka mulak, vyosh, ruksha amla Dravya sadhita mamsarasa	Ushnajala snan, vyayama, langhana, ratri jagrana, ruksha udvartana

In modern aspect *madatyaya* can be correlated with alcohol intoxication. It can be stated as stage of excitement, stage of incorporation and stage of coma. These staging is done on the basis of concentration of alcohol on blood (BAC) level.

Stage of excitement	Stage of in coordination	Stage of coma
1. BAC level 50-150mg% 2. Euphoric 3. Person might disclose secrets 4. lowering of visual acuity 5. Mental concentration is poor & impaired judgement 6. Faculty of attention deteriorates 7. It increases the desire for sex but markedly impairs performance resulting in prolonged intercourse without ejaculation.	1. BAC Level 150-250mg% 2. In-coordination of fine & skilled movements & alterations in speech & fine finger movements. 3. Nausea and vomiting. 4. Face: Flushed. 5. Pulse: Rapid. 6. Sense of touch, taste, smell and hearing are diminished. 7. Hypothermia. 8. Breath smells of alcohol. 9. Pupils are dilated and react sluggishly to light.	1. BAC Level > 250mg% 2. Thick, slurred speech. 3. Coordination is markedly affected becomes giddy, stagger and fall. 4. Pulse is rapid. 5. Hypothermia. 6. Pupils are contracted, but on stimulation of the person, e.g. by pinching or slapping causes them to dilate with slow return (McEwan's sign). 7. Patient passes into coma with steatorous breathing.

DISCUSSION

As alcoholism is a serious public health problem all over the globe & it leads to damage major organs like liver, pancreas, heart, brain & central nervous system so genuine awareness and effective measures should be taken against such serious health hazard. In present study it has been categorically mentioned the properties of *madya* as well as its noxious effect due to injudicious use as explained by different classics of *ayurveda*. Several diseases like *paramada*, *madatyaya*, *panajeerna*, *panabibhrama* etc etc have also been revealed in *ayurvedic* literature review where the sign and symptoms are purely related to physical, psychological & psychosomatic features.

The stages of *mada* (alcohol induction) have also been found in classical text which are closely similar to the stages of alcohol intoxicación of modern science. It is interesting to note here that sometimes *madya* (alcohol) is used as a stimulating agent for preventing & curing of some ailments so, *madya* may also be called as a beneficial agent when it is taken in prescribed way through proper quantity and time. The management of alcohol intoxicación or *mada* have been described by our ancestors in a rational & reasonable manner. Long continued use of alcohol or larger quantity of alcohol causes several problems by destroying the *Ojo* (*Ojo kshaya*) & gradually *Ojo vyapad* (dearrangements of immunity) occurs. In *doshik* consideration *madya* itself is taken as the remedy of *madatyaya*. Where in *vataja madatyaya vyavayi ushna tikshna madya* is advocated. In *pittaja madatyaya madya* made by *sarkara* or *mridvika* is beneficial. In *kaphaja madatyaya sidhu* is advised to take. It is further to note here that *ayurveda* has mentioned the advantages and disadvantages of *madya* & have given clear direction regarding its use as per quantity, time, quality & other properties. In fact, *madya* in small quantity act as stimulant & in larger quantity it effects over *indriya* and *mana*, later it affects *buddhi* & *chetana* which leads to fainting so it could be stated that *madya* have a wide range of effects over the abusers. As *ayurveda* gives importance to the nature of individual (*prakriti*) so quantity, quality & time of drinking may be decided on the basis of their nature.

In the view of medicinal remedy *astanga Lavan* is administered for the treatment⁽¹⁷⁾ of *mada* in general and in specific.

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