



EXPLORING THE EFFECTS OF ALCOHOL INTOXICATION THROUGH THE LENS OF AYURVEDA AND MODERN SCIENCE.

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ABSTRACT

Alcohol intoxication is a prevalent problem worldwide, causing numerous health and social issues. While contemporary medicine provides various treatments and interventions for alcohol-related problems. Ayurveda, the ancient Indian system of medicine, offers a unique perspective on understanding and addressing alcohol intoxication. This article aims to explore alcohol intoxication from both Ayurvedic and contemporary viewpoints, shedding light on their respective approaches, treatments, and overall understanding of this condition.

Keywords: *Madya*, *Madatyaya*, Alcohol intoxication

INTRODUCTION

As alcohol (*Madya*) is regarded as food. Food sustains life, but when consumed inappropriately it causes a variety of diseases. Alcoholism is extensively described in Ayurvedic (*Samhita*) literature. Due to its similarities to poisoning and its ability to cause delirium (Moha), Acharya *Charaka* addresses alcoholism after explaining the therapy of

poisoning in a chapter. According to Acharya *Sharangadhar*, alcohol is defined as "the drug causing mental derangements or hampering intellect along with the drugs by virtue of its predominance of Tamoguna" (*Madakari*). Ex: *Madya* and *Sura* (various alcoholic beverages)¹.

In *Charak samhita Madya Varga* classified under one of 12 *Ahara Varga*. It is utilized as *Ahara Dravya* (Food Supplement), as *Anupana* (After Drink) or as *Aushadhi* (Medication). Based on use, *Madya* is categorized into two kinds as medication and as beverage. In Ayurveda, based on techniques and natural substances used name of different preparations are: *Asava*, *Arishta*, *Sura*, *Varuni* and *Sidhu*. Out of these, the initial two are utilized for medication and others for refreshment.

Madya is the one which produces *Mada*. When given in an appropriate amount, in time and in proper system, it brings joy, strength, lessens dread, strain. Furthermore, act as an *Amrut* (*Nector*) for the body². The patient who has *tamas* and *rajas manas Prakruti* will easily habituate for alcohol than *satvik manas prakriti* and vice-versa. In the absence of alcohol, continuous demand of it felt which is known as *Panapkrama* (Alcohol Withdrawal Syndrome)³.

Properties of *Madya* (alcohol)

It has mainly 10 properties as Light, Hot, sharp, finely entering, Sour, quickly absorbed, quick acting, rough, depressant & non slimy⁴. Sushrut also explains that the alcohol is sour in taste, fast, subtle, vivid, dry, quick acting, spreads all over the body, even digestion and dislodges the connection in the joints & essential immunity factors in the body⁵. As sour taste is the prime quality in *Madya*, *Charak* explains along with sour taste it has 4 sub tastes are as sweet, bitter, acrid & astringent tastes.

Difference between alcohol, poison & Oja (essence of *Dhatu*)

As the properties of alcohol are similar to poison. The properties of *Oja* are opposite to poison & alcohol, as *Oja* are heaviness, cold, clear, slimy & unctuous. Alcohol counteracts the properties of *Ojas* by its own properties such as 1) heaviness by lightness 2) Coldness by hotness 3) Sweetness by sourness, 4) softness by sharpness 5) Clarity by quick action 6) Unctuousness by Roughness 7) stability by quick absorption 8) smoothness by depressant action 9) sliminess by non-sliminess 10) Viscosity by subtleness. So, it gets results of this affliction, the mind get agitated & so causes intoxication means

narcosis⁶. Due to excessive drinking alcohol destroys *Oja* so disturbance occurs in the function of mind, intellect & senses.

Benefits of alcohol – If alcohol is taken in proper manner, in proper quantity & in suitable time act as *Nector*. Alcohol improves relish & appetite, is cordial, promotes voice & complexion is saturating, bulk promoting, strength promoting, alleviator of fear, grief & exertion. It is useful for those who awakes for all night, it raises the voice of dumb, awakens those who oversleep, it relieves constipation, alcohol also acts as a medicine of *Madatyaya* & disorders produced by alcohol⁷. It also enhances the sexual pleasures and senses works properly & attentively. Alcohol if taken in combination with unctuous substances e.g., rice and meat or any other articles of food mainly with butter, oil, ghee in proper manner it enhances the longevity, muscular strength, Replishment of the body, good looks, satisfaction of mind, inclination & strength boldness⁸.

Demerits of alcohol –

In ancient *Samhitas* alcohol was considered a CNS depressant. Alcohol directly affects the nervous system (*Vata Nadi sansthan*). In the alcohol resides delusion, fear, sorrow, anger, even death, so also insanity, infatuation, fainting, epilepsy & tetanus. There is loss of memory alone is present then all activities become improper. It also causes loss of three pursuits of life (religion, economy & sexual life.), intelligence, courage, shame etc. All liquors are injurious to the eyes, causing impotency. They kill down the strength of men & nonconductive to promote life⁹.

Stages of Alcohol Intoxication – Different authors of ayurveda explain it in different ways. *Charak* explains in three stages and *Madhav Nidan* explains it in four stages.

Stage 1- Also known as Primary intoxication¹⁰ - The symptoms are pleasantness of intellect & memory, happiness, increase in desire for drinking, eating, sexual enhancement, development of reading, speaking, words loudly & singing songs loudly.

Stage 2 – Also known as *Madhyam mada*- secondary intoxication / medium intoxication ¹¹ - The alcoholic in this stage having confused so he has uncertain intellect, memory & speech. He has reverse activity, restlessness, he behaves like an insane. The person becomes covered with laziness & he sleeps again and again.

Stage 3- Third stage of Intoxication ¹² - In this stage the person is totally intoxicated so he behaves like a mad person, he does not give respect to elders, teachers. He eats such types of food which are not edible, then he loses his control over senses & speaks out the secrets of his heart. Charak explains one middle stage i.e., intermediate stage between second & third stage & explained all above symptoms.

Stage 4 – Fourth stage of Intoxication ¹³ – In this stage the person is motionless like a broken stick, he is in deep narcosis, so loses the senses of what to do & what not to do. He does not perceive the pleasurable senses, nor does he recognise his friends, he is worse than a dead body. If the person drinks a lot of alcohol at a time, then there is complete loss of sensation & narcosis occurs early. Sphincters relax so incontinence of urine and stool then begins stertorous breathing, cyanosis develops & the death of person is due to respiratory centre paralysis. This is related to *Madhava's* fourth stage & *Charaka's* third stage. *Charak* explains that the first stage of intoxication

starts when the Heart is involved & stimulated but the Ojas is not affected so this stage is full of pleasure (stage of excitement). In the second stage of intoxication Ojas is damaged so there is confusion, loss of memory, distinct speech, improper talk & unable to stand (Stage of in coordination). In third stage of intoxication ojas is severely damaged so the person becomes motionless & can't recognise anyone¹⁴ (stage of narcosis)

Types of Alcoholism (Madatyaya) –

All the experts of Ayurved (*Charak, Sushrut, Vagbhat, Madhav nidan*) stated four types of alcoholism i.e., *Vataj, Pittaj, Kaphaj* and *Tridoshaj*. The details of each are given below.

Vataj Madatyaya

The person who is emaciated & his food is mainly rough in nature & doing more exercise than he will suffer from alcoholism who is predominant in Vata.

Nidana:

If a person is excessively emaciated because of *Krodha, Shoka, Bhaya, Vyavaya, Chankramana, Sahasa*, while eating Ruksha type of food, less quantity of food or limited quantity of food, drinks Madya at night which is excessively fermented, then this leads to the impairment of his Nidra and *Vataja* type of *Madatyaya* instantaneously develops ¹⁵.

The symptoms of Vataj Madatyaya are tabulated in Table no 1.

Sr.no	Symptoms	Charak (Chi24/91))	Sushrut (Uttar 47/17)	Vagbhat (AHN6/18)	Madhav N. (18/16)
1	Hiccup	+	-	-	+
2	Dyspnoea	+	-	+	+
3	Tremors in head	+	+	+	+
4	Pleural pain	+	+	-	+
5	Insomnia	+	-	-	+
6	Irrelevant talk	+	-	-	-
7	Stiffness	-	+	-	-
8	Bodyache -	-	+	-	-
9	Cardiac distress	-	+	-	-
10	Headache	-	+	+	-
11	Seeing bad dreams	-	-	+	-

Pittaj Madatyaya

Nidana: If a person, indulging in food that is *Amla, Ushna and Teekshna*, having wrathful disposition and having liking for excessive exposure to the fire and sun, drinks excess quantity of *Madya* that is *Teekshna, Ushna* and *Amla*, then he suffers from the *Pittaja* type of *Madatyaya*¹⁶.

Symptoms of *Pittaj madatyaya* are tabulated in table no.2.

Sr no.	Symptoms	Sushrut (Uttar47/17)	Vagbhat AHN6/19	Madhav N.18/17	Charak (chi 24/94)
1	Thirst	-	+	+	+
2	Burning sensation	+	+	+	+
3	Fever	-	+	+	+
4	Sweating	-	+	+	+
5	Fainting	+	+	+	+
6	Diarrhoea	-	+	+	+
7	Giddiness	-	+	+	+
8	Greenish complexion	-	+	+	+
9	Delirium	-	-	-	-
10	Dryness of mouth	-	-	-	-
11	Yellowish of face & eyes	+	+	-	-
12	Red eyes	-	+	-	-

Kaphaj Madatyaya**Nidana:**

If a person who is habituated to *Madhura, Snigdha* and *Guru Ahara*, who does not perform *Vyayam*, who takes *Diwaswapna* and who indulges in *Sukhasana*, excessively drinks *Madya* which is not an old one or which is prepared of *Guda*, and *Paishtika*, then he immediately develops *Kaphaja Madatyaya*¹⁷ Symptoms of *kaphaj madatyaya* are tabulated in table no3.

Sr no	Symptoms	Charak (chi.24/97)	Sushrut (Uttar47/17)	Vagbhat (AHN 6/20)	Madhav N. (18/18)
1	Vomiting	+	+	+	+
2	Anorexia	+	-	-	+
3	Nausea	+	-	+	+
4	Drowsiness	+	-	-	+
5	Stiffness	+	-	-	+
6	Heaviness	+	-	+	+
7	Feeling of cold	+	-	-	+
8	Excessive salivation	-	+	-	-
9	Urticaria	-	-	+	-
10	Increased sleep	-	-	+	-
11	Lassitude	-	-	-	-

Tridoshaj Madatyaya

If the symptoms of all dosha are seen at a time, then it is called as Tridoshaj madatyaya (severe intoxication).

General symptoms of alcoholism

General symptoms explained by Vagbhatacharya as there are profuse delusion, chest pain, loose motions, severe thirst, fever with rigors, anorexia and loss of taste. There is headache, pain in pleural region or sides of flank, bone pain, tremors, cutting pain in vital spots, constriction in chest, blindness, cough, breathlessness, Insomnia, perspiration, indigestion & stasis of food inside the stomach for longer time, swelling, confusion, irrelevant talk, vomiting, nausea, dizziness & seeing bad dreams¹⁸. Charak said that along with this, disorders of eyes, ears & mouth also occur.

Diseases caused by Irregular Alcohol intoxication.

1. **Panatyay-** (Intoxication due to excessive drinking)-

VATA: *Stambha, Angamarda, Hrudaya Graha, Toda, Kampa shiroruja.*

PITTA: *Sweda, Pralapa, Mukhashosha, Daha, Murchha.*

KAPHA: *Vamathu, Sheeta, Kapha Praseka.*

SANNIPATA: Presence of all symptoms.

2. **Paramad** – (Reactionary effects of abuse of alcohol) – Heat & sense of heaviness in the body, bad taste in mouth, excessive accumulation of *Shleshma / kapha in the body, aversion of food, suppression of stool & urine, thirst*, headache and a crushing pain in the joints are the symptoms present in *Paramad*¹⁹.
3. **Panajirna** – (Alcoholic Gastritis) – distension of abdomen, acid or sour taste in mouth, vomiting, deficient gastric digestion, burning pain in stomach are the clinical features of alcoholic Indigestion²⁰. There is aggravation of deranged pitta should be existing factor of this Diseases.
4. **Pan Vibhram** – (chronic alcoholism) – pricking pain in heart & limb, feeling of full of smoke in the throat, salivation, unconsciousness, fainting, vomiting, fever, headache, burning sensation, & aversion to various alcohols & food²¹.

Alcoholic addiction view of Ayurveda

The person who starts drinking alcohol excessively after discontinuing it may suffer from *Dhwansaka* and *Vikshaya*. *Dhwansaka*- Symptoms of *Dhwansaka* are excessive salivation, dryness of mouth & throat, intolerance to sound, excessive drowsiness & increased sleep. *Vikshaya* - Symptoms of *Vikshaya* are abnormality in heart and throat, delusion, vomiting, body ache, fever, thirst, cough and headache. These are same as that of *Vatik Madatyaya*, so occurs fast in who are emaciated & debilitated. Sushrut said that these symptoms of *Dhwansaka* & *Vikshaya* are mentioned in *Panatyay*.

Aacharya Jejjata said that those born in alcoholic addict family they are more or less immune to the effect of alcohol like poison-girl or (Vish kanyā).

Incurable symptoms of alcoholism – Incurable symptoms of alcoholism are - whose upper lip become atrophied, who feel very cold externally & burning sensation internally, who has oily radiance over face, whose tongue, lips & teeth becomes black, and eyes become yellowish or bloody reddish.

Upadrava of Madatyaya - *Hikka* associated with *Jwara, Vamathu, Vepathu, Parshwashoola, Kasa* and *Bhrama*²². Hiccough, fever, vomiting, tremors, pain in flank (pleural pain), cough these are the complications that were developed in over drunken.

Asadhya Lakshna

The following are the characteristics of Asadhya Lakshana: *Heenottaraushitam, Atisheetam, Amandadaaham, Tailaprabhaasyam, Jihvaushtiha, Dantamasitam, Vaaneel* and *Peetanayana rudhirataa*²³.

General Line of Treatment

All types of *Madatyaya* are *Tridosaja*. Treatment should be based on the dominant dosas. However, most of the time treatment is started for *kapha* dosa as pitta and *vayu* are manifested towards the end in most of the cases of *Madatyaya*²⁴.

1) Counselling

i. Motivational counselling ii. Group counselling

2) Relaxing Therapies:

Music therapy, *Siropichu, Sirodhara, Padabhyang, Takradhara*

3]. *Padanshik Chikitsa*

Madya is used in small amounts or tapering doses.

Shodhana Chikitsa –

i. If fit for Vamana- *Sadya Vamana* with *Yastimadhu Phanta* and *Saindhava jala*.

ii. If unfit for *Shodhana*- symptomatic treatment. n. *Shamana Chikitsa*

Formulations-

Preparations	Ingredients
<i>Kharjuradi Mantha</i>	<i>Kharjura, Mridvika, Vriksamla, Amalaki, Dadima (Bhaisajya ratnavali)</i>
<i>Mrudvikadi Kashaya</i>	<i>Mrudvika, Madhuka, Yastimadhu, Pippali, Kharjura, Chandana, Sariva, Musta, Laja, Ushira(Saharsha yoga)</i>
<i>Draksharishta</i>	<i>Draksha Twak, Patra, Ela, Nagakesar, Pippali, Vidanga, Dhataki (Sharangdhar samhita)</i>
<i>Sreekhandasava</i>	<i>Sweta chandana, Jatamansi, Haridra, Musta, Ushira, Amalaki, Maricha, Lodhra, Dhataki, Guda. (Bhaisajya ratnavali) A</i>
<i>Ashvagandharishta</i>	<i>Ashvagandha, Manjistha, Haritaki, Haridra, Madhuka, Arjuna, Musta, Chandana, Trikatu. (Bhaisajya ratnavali)</i>

DISCUSSION

According to Ayurveda, alcohol consumption disrupts the balance of doshas, the fundamental energies that govern the body. In particular, alcohol aggravates the Pitta dosha, which is responsible for digestion, metabolism, and heat regulation. Excessive alcohol consumption leads to a vitiation of Pitta, resulting in impaired digestion, inflammation, and liver damage. Ayurveda also recognizes the impact of alcohol on the mind, as it disturbs the balance of the subtle energies and can lead to emotional and psychological imbalances. From a contemporary perspective, alcohol intoxication is primarily viewed as a medical condition with a focus on physical and psychological aspects. Contemporary medicine recognizes alcohol as a central nervous system depressant, causing impairment in motor coordination, judgment, and cognitive function. Treatment approaches typically involve detoxification, counseling, support groups, and medications, if necessary, to manage withdrawal symptoms and prevent relapse. Therapies such as cognitive-behavioral therapy (CBT) and motivational interviewing are often employed to address the psychological aspects of alcohol use disorders.

Integration of Ayurvedic and Contemporary Approaches:**Single drugs used –**

i. *Brahmi* ii. *Ashwagandha* iii. *Bhringaraja* iv. *Kushmanda* v. *Jatamansi* vi. *Shankhapushpi* vii. *Mandukparni* viii. *Guduchi*

An integrated approach that combines the wisdom of Ayurveda with contemporary medical interventions can provide a holistic and comprehensive framework for addressing alcohol intoxication. Ayurvedic treatments, with their emphasis on detoxification, restoration of dosha balance, and herbal remedies, can complement contemporary interventions by supporting the body's natural healing mechanisms. Additionally, Ayurveda's emphasis on lifestyle modifications, including dietary changes, stress reduction, and mindfulness practices, can contribute to the overall well-being and recovery of individuals struggling with alcohol-related issues.

CONCLUSION

Alcohol intoxication is a complex condition that affects individuals physically, mentally, and emotionally. While contemporary medicine offers valuable interventions for addressing alcohol-related problems, Ayurveda provides a unique perspective on understanding the underlying imbalances and offers holistic treatments to restore health and well-being. Integrating the principles and practices of Ayurveda with contemporary approaches can potentially enhance treatment outcomes and provide individuals with a comprehensive path to recovery from alcohol intoxication. By acknowledging the insights from both Ayurveda and contemporary medicine, we can

foster a more holistic and inclusive approach to addressing this significant public health concern.

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