

Ayurvedic management of Alcohol Withdrawal syndrome- A case Report

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Abstract

In the world wide, Alcohol abuse creates a bad impact on the individual as well as the family and community. The most serious complicated symptoms associated with chronic alcoholism is said to be Alcohol Withdrawal Syndrome. In AWS, sudden death is common. When a chronic alcoholic tries to stop the intake of alcohol suddenly, it leads to AWS. AWS includes the symptoms such as nausea, vomiting, sweating, headache, auditory, visual and tactile hallucination, delirium tremor etc. A 56yrs old male who is chronic and heavy alcohol for over 18 years abstained from alcohol for 3 days. Consequently, he started having palpitation, sweating and tremors with the complaints of nausea, vomiting, reduced appetite, disturbed sleep, headache, restlessness, fatigue, constipated. He was treated in OPD with combination of ayurvedic internal medication and procedures for 45 days and is on follow up till date. Internal medicine such as chavyadhi churna, punarnavadi ghrita, bhrami vati, ashwagandha churna and haritaki with milk is given. Externally the patient was treated with abhyangam, shirodhara, nasyam. The treatment procedure was done in OPD with selected ayurvedic protocol. The condition was assessed before and after the treatment with clinical Institute withdrawal assessment of Alcohol revised scale (CIWA-Ar) Scale

Keywords: AWS, Madatyaya, dugdha Haritaki, ayurvedic management, CIWA-Ar scale

Introduction: According to the international classification of Disease (ICD 10), more than 200 illness are caused due to alcohol consumption¹. Alcoholism or Alcohol use disorder is a condition in which repeated alcohol – related difficulties in at least 2 of 11 life areas that cluster together in the same 12- month period. In most of the countries, 10-15 % of men and 5-8 % of women were in lifetime risk of an alcohol use disorder as they start drinking alcohol occasionally imbibe to excess². According to World Health Organization (WHO) the total per capita consumption of alcohol by individuals above 15 years of age is 6.2 L of pure alcohol per year which equals 13.5g of pure alcohol per day³. Alcoholism is an irresistible urge to consume alcohol. The person suffering from alcoholism are aware of the side effect that is producing in their body, but even though they cannot resist the urge to consume alcohol⁴. The etiological for alcoholism are epigenetic, psychological, socio- economic and environmental factors⁵. Alcohol produces temporary increase for metabolism in the living being which causes inhibition of their capacity and so body demand the alcohol in the absence within the cell. Thus, continues demand for alcohol in the absence cause Alcohol withdrawal Syndrome which can be correlated as panapkrama in Ayurveda. Madatyaya is a combination of two words mada meaning intoxication or harsa meaning excitement and Atyaya meaning excess. Vidhivipareet(unscentific) consumption of madya creates a dreaded disease called Madatyaya. The sudden stoppage of intake of alcohol leas to Dhwamsaka and Vikshaya⁶. According to Kashyapa, it is said to be panapkrām⁷. Madatyaya is a tridoshaja vyadhi where kapha stana undergoes dushti along with agni producing ama. So, the general line of treatment aims in removing ama, treating vata kaphahara and srothosodhana. Acharya Vagbhata explains the madatyaya treatment to be performed upto 7 or 8 days to overcome the ill effects, which is quite correct in the case of AWS⁷. AWS consists of symptoms and signs arising in alcohol- dependent individuals,

typically within 24-48 hours of consumption of their last drink. Nausea, vomiting, tremor, paroxysmal sweats, anxiety, agitation, tactile- auditory – visual disturbance, headache and clouding of sensorium are the major symptoms of AWS⁸. The management protocol includes intervention, detoxication and rehabilitation⁹. In ayurvedic treatment protocol includes panchakarma (purification therapies) internal medication and advise pathya food and life style changes.

Table:1 Diagnostic Criteria¹⁰

Criteria	Symptoms
Criteria A	Cessation of (or reduction in) alcohol use that has been heavy and prolonged
Criteria B	1. Autonomic hyperactivity (e.g. sweating or pulse rate greater than 100bpm) 2. Increased hand tremor. 3. Insomnia. 4. Nausea or vomiting. 5. Transient Visual, tactile, or auditory hallucinations or illusions. 6. Psychomotor agitation. 7. Anxiety. 8. Generalized tonic-clonic seizures
Criteria C	The signs or symptoms in Criteria B cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
Criteria D	The signs or symptoms are not attributable to another medical condition and are not better explained by another mental disorder, including intoxication or withdrawal from another substance Specify if: with perceptual disturbances: This specifier applies in the rare instance when hallucinations (usually Visual or tactile) occur with intact reality testing, or auditory visual, or tactile illusions occur in the absence of a delirium.

Clinical presentation: A 56 years old Indian Hindu male patient hailing from kulasekaram, Kanyakumari district, Tamil Nadu presented in N.Ganesan Ayurveda clinic, kalladimamoodu, Kanyakumari district, in a OPD on 19/5/2024. The patient was treated on OPD bases given 30 days internal medicine and 21 days external therapies.

Drug History: Patient was taking alcohol for more than 10 years. He started occasionally but later it increases gradually in dose. He tried to stop intake of alcohol, but he fails to do so.

Clinical Features: He suffers with the complaints of tremulousness of hands, increased agitation and anxiety, nausea and vomiting, increased sweating and decreased sleep, headache and generalized weakness. On examination, the patient was found to be so anxious, the appetite was much reduced. He was of medium built. His BP was 110/70mmHg, pulse was 78/min, the chest was clear, eyes were pallor, the abdomen was soft and non-tender, bowel habit clear. On mental status examination, attention and concentration were partially impaired.

The case was diagnosed as Alcohol Withdrawal Syndrome (AWS) with the above-mentioned diagnostic Criteria.

Table 2: Assessment of Ayurvedic parameters¹¹

Dosha	Vata+Pitta+ Kapha
Dhatu	Rasadi dhatu, especially Rasa, Rakta
Agni	Manda
Koshta	Madhyama
Prakriti	Sharirka- Vata pitta Manasika dosha- Rajas and tamas
Satva	Avara
Srotas	Manovaha, rasadi sarva srotas
Mula sthana	Hridaya

Assessment of the effect of the therapy was done based on change observed at the clinical level. A numerical score was assigned for each sign by using CIWA-Ar Scale.

Showing hematological investigations Before Treatment and After Treatment

Investigation	Before treatment (Day 1)19/4/2024	After treatment (Day 30)18/5/2024	Follow up (Day 45)3/6/2024
Hb%	13gms%	15gms%	15gms%
ESR	45mm/1hr	18mm/1hr	15mm/1hr
TC	8200 cells/c.mm	8400 cells/c.mm	8400 cells/c.mm
Fasting Blood Sugar	90 mg/dl	85 mg/dl	88 mg/dl
Total Cholesterol	220mg/dl	199 mg/dl	200 mg/dl
Serum creatinine	0.2 mg/dl	0.8 mg/dl	0.8 mg/dl
SGOT	50 unit/ml	33 unit/ml	33 unit/ml
SGPT	55 unit/ml	37 unit/ml	37 unit/ml
Total bilirubin	1.9 mg/dl	0.9 mg/dl	0.9 mg/dl
Direct bilirubin	0.7 mg/dl	0.2 mg/dl	0.2 mg/dl
Indirect bilirubin	1.2 mg/dl	0.7 mg/dl	0.7 mg/dl
Alkaline phosphatase	19 KA Unit	12 KA Unit	12 KA Unit

Treatment protocol:

Internal Medicine:

Medicines	Dose	Time	Rationale
Haritaki Curna with Milk ¹²	5gms	Empty stomach	Balance vata and kapha, Acts as deepaniya, rasayana, brimhama, yogavahi, grahi, lekhaneya, madhya and ayurvedhak.
Purnavadi Ghrita ¹³	12gms	Before food BID	It acts as detoxifying and anti-inflammatory
Chavyadi curnam ¹⁴	5gms	After food BID	It has digestive anti-inflammatory and calming properties
Tab. Brahmi vati ¹⁵	1	After food BID	Balance vata pitta. Cure anxiety, tactile hallucination also insomnia
Tab. Liv 52	1	After food BID	Balance vata pitta. Hepatoprotective
Drakshasava ¹⁶	30ml	After food BID	Mitigate vata and pitta. Appetite enhancer, liver protector and to replace alcohol to control withdrawal

External treatment:

Treatment	Days	Medicine	Rationale
Abhyangam	14days	Balaaswagandha taila	It eliminates toxins and mental exhaustion, purifying, rejuvenating effect and balances the doshas ¹⁷
Nadi swedana	14days	Decoction of dashamoola	Enhances the absorption of medicine, promotes relaxation and helps in deep toxin cleaning ¹⁸ .
Shirodhara	21days	Brahmi taila	Vasodilatation, tranquilly effect due to increase in brain circulation, cognition, improves sleep and memory also relieves irritability and stress ¹⁹
Nasyam(pratimarsha)	7days	Jatamansi taila	Neuro protective, stimulant effect to nervous system and gives mental clarity ²⁰
Padaabhyanga	21 days	Tila taila	Reduces stress and improves overall well-being ²¹

Satvavajaya chikitsa: Non-drug psychotherapy such as diet, words and objects to boost satva and balance rajatama. It includes meditation, yoga and pranayama. It gives positive enforcement and rewards for no consumption. Meditation makes mind calm, happy, it reduces anxiety, stress, fear, frustration, hyperactivity and anger²²

Assessment:

Assessment of effect of the therapy was done based on changes observed at the clinical level. Patients sign and symptoms were assessed by using Clinical Institute Withdrawal Assessment of Alcohol revised Scale (CIWA-Ar Scale)

Table 3: Clinical Institute Withdrawal Assessment of Alcohol revised Scale (CIWA-Ar Scale)

Symptoms of aggravation	Rating of aggravation	Before treatment	After treatment	Follow up
Nausea/vomiting	0-None/2-Mild/4-Intermittent dry heaves/7-constant vomiting	4	0	0
Tremors	0-None/1-Not visible but felt at fingertips/4-Moderate with arms extended/7-Severe at rest	4	1	1
Sweating	0-None/1- Barely moist/4-Beads/7- Drenching sweat	4	1	0
Anxiety	0-None/1-Mild/4-Moderate/7- Severe, Panic, Delirium	4	1	1
Agitation	0-None/1-Somewhat/4-Fidgety/7-Panic around, Trashing	4	1	1
Tactile disturbance	0-None/1-Mild itching, pins and needles, burning, numbness/4-Moderate/5-Severe/7-Constant	4	1	0

Auditory hallucination	0-None/1- Mild/4- Moderate frightening/6- Severe/7-Constant	1	0	0
Visual disturbance	0-None/1-Mild/4- Moderate/6- Severe/7-Constant	1	0	0
Headache	0-None/1-Mild/4-Moderate/6-Severe/7-Continuous	6	1	0
Orientation	0-Fully orientation/1-Cannot to addition and/or is uncertain about day/date/2-Disoriented by \leq 2days/3-Disoriented by \geq 2days/4-Disoriented to place and/ or person	1	0	0

CIWA score Interpretation:

0 to 9 points - Very mild withdrawal

16 to 20 points - Modest withdrawal

21 to 67 points- Severe withdrawal

Outcome of the Treatment:

When the patient was admitted, overall score was 33 indicating he was suffering from serious alcohol withdrawal according to CIWA-Ar. After treatment of 30 days the scores is 6 and follow up after 15 days shows the score is 3 which shows that there is significant improvement in Alcohol Withdrawal Symptoms. The patient shows improvement in sleep, appetite, tremors, visual disturbance.

Consent of patient: The patient has given his consent for the clinical information to be reported in the journal.

Follow up and Outcome: By using CIWA-Ar Scale, the condition of the patient was assessed. It was observed that all the symptoms got significantly reduced after 30 days of treatment. After 45 days, the patient feels comfort and relieved from almost all signs and symptoms of alcohol withdrawal syndrome with normal appetite, bowel and sleep. His generalized weakness has changed. There is overall improvement in the functional capacity of the patient

Discussion: Alcohol Withdrawal syndrome (AWS) can be challenging, but Ayurveda offers holistic approach. According to the assessment, the symptoms of the patient was well managed by the ayurvedic protocol. Ayurvedic management protocol of internal medicine and external treatment pacify the vata and kapha dosha and helps in srotosodhana. Panchakarma was adopted on the principle of santrapana and brimhana chikitsa. Yoga, meditation, pranayama helps in reliving mental stress and brought up stability and mental well- being by improving satva guna

As the symptoms of AWS such as loss of appetite, weakness, tired, mental exhaustion is well managed by Haritaki churna with milk, it acts as deepaniya, rasayana, brimhana, grahi, lekhanitya, medhya. Milk is a rasayana and it is specially mentioned in ayurvedic texts for the management of madhtayaya. Purnavadhi ghrita also detoxify and promotes the liver function. The ingredients of chavayadi churna as digestive and detoxifying properties. Brahmi vati balances vata and pitta. These drugs are useful for anxiety, tactile hallucination and in insomnia which is a great task to deal with AWS patient. Liv 52 act as hepato protective and balances vata and pitta. Drakashasava is mixed with water and given for digestive impairment and weakness and to increase abhyavaharana shakti and jarana shakti. It is also prescribed to replace alcohol to control withdrawal symptoms.

External ayurvedic procedures also helps along with the internal medicine in the management of AWS. Abhyangam (oil massage) helps in reduces pulse rate and encourages patient in the treatment process. The balaaswagandha taila used for abhyangam gived nerve, muscles, bone strengthening properties and enhances circulation. Swedana with dasamoola Kashaya helps in deep toxin cleaning and promotes relaxation, enchancing the absorption of medicinal substance. Shirodhara with brahmi taila helps in reliving anxiety and makes patient feel calm, pleasant and energetic, it acts as vasodilation, tranquilizing effect due to increase in brain circulation,

congnition, improved memory and sleep, it also relives irritability and stress. Pratimarsha Nasya with Jatamansi taila, each nostril 4 drops acts as Neuroprotective, stimulant effect to nervous system and gives mental clarity. Padaabhyanga with Tila taila helps in reduce the stress and improves overall well-being.

Conclusion: This is a case report of the successful management of alcohol withdrawal syndrome. During the management, the patient shows improvement in the total score of the CIWA-Ar Scale and satisfactory results. The combination of internal medication and external therapies along with yoga and pranayama helps to balance the tridhosa and tri guna in the condition of Madatyaya (AWS). The medication used for the management of AWS are easily available and cost effective without known adverse effects. As the treatment protocol has given promising results, it can be adopted in future similar cases. Further research is required on the area for conclusive remarks.

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