



ISSN 2456-3110

Vol 7 · Issue 11

December 2022

Journal of
**Ayurveda and Integrated
Medical Sciences**

www.jaims.in

JAIMS

An International Journal for Researches in Ayurveda and Allied Sciences



Maharshi Charaka
Ayurveda

Indexed

Case of Alcoholic Liver Disease treated with classical Ayurveda medicines - A Case Report

Vivek Singh¹, Supriya Singh²

¹PhD Scholar, Assistant Professor, Dept of Rachna Sharir, Ram Krishna College of Ayurveda, Bhopal, Madhya Pradesh, India.

²Assistant Professor, Dept of Shalaky Tantra, Ram Krishna College of Ayurveda, Bhopal, Madhya Pradesh, India.

ABSTRACT

Alcoholic Hepatitis is a disease affecting millions of people across the globe. It is one of the common causes of liver cirrhosis and hepatocellular carcinoma and there is no specific treatment available. In *Ayurveda*, such conditions can be managed in line of *Kamala* (~jaundice). A 27-year-old male patient with jaundice and abnormal liver functions (high transaminases and hyper bilirubinaemia) USG s/o medical liver disease/liver cirrhosis and fatty liver. The patient was elsewhere diagnosed to be suffering from liver cirrhosis and visited to the clinic with reports suggesting Alcoholic Liver Disease (ALD). He was administered *Ayurvedic* medications along with dietary advices for 6 months. There was a significant improvement in clinical findings, reduction in liver transaminases, and fatty infiltration during the treatment. The patient had clinical improvements and reduction in bilirubin levels and transaminase and fatty liver indicate a possible role of *Ayurvedic* therapy in hepatic injury in ALD. This case report also warrants further study of *Ayurvedic* therapy in other liver conditions.

Key words: Alcoholic liver diseases, Ayurveda, Kamala, Kumbh Kamala, Hyper bilirubin

INTRODUCTION

Hepatobiliary disorders are one of the major concerns in current gastrointestinal specialty practice owing to a poor lifestyle of the people and increasing use of alcohol from a very young age. Chronic consumption of alcohol leads to a condition termed alcoholic liver disease (ALD). Even though the prevalence of this condition is seen more in western developed countries, but it is also alarmingly increasing in countries such as India and Japan where traditionally there is a low prevalence of the disease.^[1] The three most widely

recognized forms of ALD are alcoholic fatty liver, alcoholic hepatitis, and alcoholic cirrhosis. Alcoholic hepatitis may be presented in the form of increased level of bilirubin in the blood and are characterized by symptoms of jaundice. Alcoholic hepatitis can vary in different form, from mild elevation of liver enzymes to even liver failure. Alcoholic Liver Disease (ALD) involves the liver involvement of alcohol overconsumption, including fatty liver, alcoholic hepatitis, chronic hepatitis, and liver cirrhosis.^[2] Alcoholic Liver Disease is the most common cause which accounts for 20%-50% of the prevalence of liver cirrhosis.^[3]

Address for correspondence:

Dr. Vivek Singh

PhD Scholar, Assistant Professor, Dept of Rachna Sharir, Ram Krishna College of Ayurveda, Bhopal, Madhya Pradesh, India.

E-mail: drviveksingh123@gmail.com

Submission Date: 12/10/2022 Accepted Date: 27/11/2022

Access this article online

Quick Response Code



Website: www.jaims.in

Published by Maharshi Charaka
Ayurveda Organization, Vijayapur,
Karnataka (Regd) under the license
CC-by-NC-SA

CASE REPORT

A 27-year-old male patient with average body built presented on April 04, 2021, at *Ayurvedic* Clinic with complaints of yellow-coloured urine and eyes, loss of appetite, generalized weakness, mild ascites with pain in abdomen in epigastric region for 30 days, followed by mild itching all over the body and cough for eight days. The onset was gradual without any history of fever, vomiting, myalgia, or diarrhoea. The patient was a chronic alcoholic for the past 10 years and had also been a smoker and also smoked weed. He had no

history of diabetes or hypertension but had a history of sedentary lifestyle. Neither history of blood transfusion nor vaccination against hepatitis B was given by the patient.

On examination, his respiratory, cardiovascular, and central nervous systems were found normal. Per Abdomen examination - swelling in the abdomen, umbilicus centrally placed, no visible venous prominence, mild local tenderness (Grade I) on the right hypochondrium and epigastric region with hepatomegaly 3 fingers palpable, and bowel sounds were audible. There was pulse rate of 78 beats/min, regular rhythm, resting blood pressure of 130/78 mmHg, body weight of 60.9 kg, body mass index of 24.5 kg/m², afebrile, icterus-present, absence of pallor, cyanosis, clubbing, lymphadenopathy, oedema and tongue coating. There was no history of epidemic outbreak of jaundice in the patient's residential area. He consulted a physician and was diagnosed to be suffering from mild hepatomegaly with changes of cirrhosis of the Liver and advised bed rest along with conservative treatment. However, his symptoms aggravated with the treatment and he discontinued them. He was advised to take *Ayurveda* treatment therefore he came to me. He was conscious, oriented, and co-operative. He had *Kapha* dominant *Pitta Prakriti*; *Madhyama Koshta*; *Rakta Sara*; and *Satva* and *Samhanana* were *Madhyama*.

Clinical investigations

The baseline laboratory investigations revealed normal hemogram (differential white blood cell count [neutrophil: 76%, eosinophil: 4%, lymphocyte: 19%, and monocyte: 1%], total leukocyte count: 7100/mm³, total platelet count 260,000/mm³, and random blood sugar: 135 mg/dl), hyperbilirubinemia (total Bilirubin - 22.3 mg/dl), high transaminases level (serum glutamic pyruvic transaminase: 189 IU/L and serum glutamic oxaloacetic transaminase: 65 IU/L), elevated alkaline phosphatase (388 IU/L), negative hepatitis B surface antigen (HBsAg), hepatitis B envelope antigen (HBeAG) and immunoglobulin G (IgG) anti-HBc, increased HVB viral load, negative for HCV, elevated alpha-fetoprotein, and increased prothrombin time.

His baseline abdominal ultrasonography showed mild hepatomegaly with changes of cirrhosis of the Liver.

Timeline

Patient was prescribed with formulation after thorough examination for a period of 15 days for 2 months in the outpatient department (OPD) setting and followed up for 12 months. Apart from the drugs, the patient was advised to adhere to the prescribed dietary regime. Initially, the patient was given with *Patola Katurohinyadi Kashaya*^[4] and a decoction was prepared from equal quantities of *Guduchi* (*Tinospora cordifolia* [Willd.] Miers), *Nimba* (*Azadirachta indica* A. Juss.), *Bhumyamalaki* (*Phyllanthus fraternus* G. L. Webster), *Bhringaraja* (*Eclipta alba* [L.] Hassk.), *Haridra* (*Curcuma longa* L.), and *Triphala* (*Terminalia chebula* Retz., *Terminalia bellirica* [Gaertn.] Roxb., and *Phyllanthus emblica* L.) for one month to counter aggravated *Kapha* and *Pitta* and also to check alkaline phosphatase levels. 500 mg of *Arogyavardhini Vati*^[5] twice daily, *Kaalmegh Ghan Vati*^[6] 500 mg twice daily and *Bhumyamalaki Ghan Vati*^[7] 500mg twice daily was also given after food during this period. Then, the patient was advised to continue the same medication for the period of three months and during this period the patient was asked to repeat the Liver Function test every 15 days.

Table 1: Timeline of the management

Period/Dates	Relevant Health Events and Interventions
7/3/2021	Insidious onset of general weakness, loss of appetite, yellow coloration of eyes and urine, with hepatomegaly.
15/3/2021	Developed mild Ascites with abdominal pain and consulted a medicine specialist, diagnosed as viral hepatitis after routine liver function tests, advised absolute bed rest and treated with Pantoprazole and Domperidone Capsule, and Dextromethorphan. L-ornithine-l-aspartate (500 mg)
27/3/2021	Found Sr Bilirubin levels, prothrombin levels were high and USG suggested of having medical liver disease/ liver cirrhosis., and prescribed with Ursodeoxycholic acid (300 mg)

	by physician and advised to consult Gastroenterologist
04/04/2021	Took allopathic medicines for seven days and patient discontinued all medicines from 8th day onwards as there was no relief and the symptoms worsened and visited <i>Ayurvedic</i> Clinic.

Follow Up and Outcome

The patient was assessed through changes in signs and symptoms, liver functions, and ultrasound (USG) reports. Occurrences of any adverse events were also noted on each visit. The renal function tests were also performed at the end of two months of therapy. The patient was subsequently followed up at fortnightly intervals for eight consecutive visits. At the end of treatment, a significant improvement in his clinical features and biochemical

parameters were noticed. Progressively decrease in bilirubin level, transaminases, and normal gamma-glutamyl transferase shows the efficacy of the *Ayurveda* intervention in managing

liver injury and improvement in general well-being. USG study reports with normal liver size with mildly altered echo-texture demonstrate the effectiveness of *Ayurveda* treatment in ALD. No adverse reactions were noticed during the treatment apart from one adverse event in the patient had 4 bouts of haematemesis and had to get admitted for the treatment which included blood transfusion. No significant abnormalities were found in liver or renal function tests inferring safety of *Ayurveda* drugs.

Timeline of the management

04/4/2021 - (1st visit) Yellow discoloration of urine and eyes, loss of appetite, irregular bowels, generalized weakness, mild pruritus & dry cough, mild hepatomegaly.

1. 20 ml *Patola Katurohinyadi Kashaya* with 80 ml water, twice daily before food.
2. 500 mg *Kalmegh Ghan Vati* with lukewarm water twice daily after food.

3. 500 mg *Arogyavardhini vati* with lukewarm water, twice daily after food.
4. Advised to avoid oily and spicy food, non-vegetarian diet.

25/4/2021 - (2nd visit) Normal urine, loss of appetite, normal bowels, no pruritis, no cough, mild hepatomegaly, had a new complaint of sleeplessness.

1. Added *Manasmitra Vati* 2 tab with water at night.
2. Remaining same medicines continued

09/5/2021 - (3rd visit) a better feeling was reported, normal urine, reduced pruritis, normal bowels. Marked improvement in the Bilirubin levels. Same treatment was continued.

25/7/2021 - (4th visit) Patient missed a follow-up; however, he had continued taking the medicines. Overall improvement was seen in the colour of eyes, normal appetite, pruritus-absent

1. 500 mg *Kalmegh Ghan Vati* with lukewarm water twice daily after food.
2. 500 mg *Arogyavardhini Vati* with lukewarm water, twice daily after food.
3. 500 mg *Bhumyamaliki Ghan Vati* with Lukewarm water twice daily after food
4. Advised to avoid oily and spicy and encouraged to take bitter vegetables and green tender leaves

03/09/2021 (5th visit) overall improvement was seen in the colour of eyes, appetite was normal, pruritus absent. But patient had 4 bouts of Haematemesis, for which he was advised to seek emergency medical attention.

20/02/2022 - Patient visited after five months. Taking same medications and Overall improvement was noticed. Was advised to take medication for another 1 month and then stop and advised to follow strict dietary precautions.

DISCUSSION

Ayurveda has a unique understanding of human physiology and pathology that offers a different perspective in diagnosis and the treatment. In

Ayurveda, the condition is either said to be as one of the types of the *Udara Roga* i.e. *Yakrittdaludara* and clinically present as the symptoms of *Jalodara* and *Kumbhakamala*. Alcohol causes Vitiating of *Doshas* (*Vata*, *Pitta* and *Kapha*) and *Srotosanga* (Blockage of circulatory channels). The condition is *Tridoshaja*, involving the all the three *Doshas* in pathogenesis. The *Kapha Dosh* vitiating is responsible for Steatosis (Fatty changes) which is an important pathological condition prior to development of cirrhosis. Further, clinical features like Ascites, Oedema, Pruritis etc. are *Kaphaja* symptoms. *Vata Dosh* vitiating is responsible for fibrotic changes. Shrunken liver (Atrophy of the Liver cells), genital atrophy, dyspnoea and pain are due to *Vata*. *Pitta Dosh* vitiating is responsible for inflammatory changes and recurrent hepatitis is another important cause of liver cirrhosis. Many important symptoms indicating the active *Pitta* involvement are jaundice and haemorrhagic tendencies. Although patients living with ALD are mostly treated with strategies to encourage abstinence from alcohol. Alcohol is a toxin in higher doses and when it is associated with polyunsaturated fatty acids (PUFA) induces oxidative stress & hepatotoxicity. *Ayurvedic* treatment also involve cleansing of GI tract and *Rasayana* herbs which has property of regeneration of liver tissues and cells. These therapeutic uses have now been confirmed by studies and with regards to its liver protective properties researchers have found that they are able to shield liver cells and protect them against harmful toxins, *Trataka* and *Yognidra* decreases the stress and stabilise proper parasympathetic outflow with adequate metabolic effect.

The patient was diagnosed to be suffering from medical liver disease/ liver cirrhosis and visited to the OPD with reports of suggesting chronic ALD with sign of liver cirrhosis. These pathologies, if left untreated, it leads to *Vata Prakopa* and *Sushkata* (~steatosis/fibrosis/cirrhosis) of the liver and can cause *Udara Roga* (~ascites) eventually due to dryness that develop as the disease progresses. As the patient was already in the *Udara Roga* state things were progressing very rapidly and needed attention. The

treatment principles of *Kamala* (~jaundice) include *Mridu Virechana* (~mild laxative) using *Tikta Rasa* (~bitter taste) drugs.^[8] Based on *Doshas* (*Pitta* and *Kapha*) and *Dhatu*s (~body tissues) involved, *Kapha Pitta Hara* treatment and subsequently *Pitta Haram* (~drugs that alleviate *Pitta*), *Visha Haram* (~antitoxins), and *Rakta Shodhakam* (~blood purifying) treatment was planned. Drugs bitter in taste owing to *Pitta* and *Kapha* alleviating property, *Ruksha* (~dry), *Mridu vireka* drugs, and formulations were selected for the conservative management. *Patola Katurohinyadi Kashaya*^[10] was given at the starting stage for removal of *Mala Sanchaya* and *Margavarodha* due to *Kledarupa Kapha*, as it is *Pitta Kapha Shamana* which in turn will be useful to detoxify liver. Due to the presence of *Katuka* (*Picrorhiza kurrooa* Royle), it is mild laxative and good for *Madhyama Koshta* persons for the elimination of *Dosha*. The formulation also removes *Visha* (~toxins/virus) and is effective in *Kamala*. *Ratha kk et al* has suggested that *Arogyavardhini Vati*^[11] is *Yakrit Prasadana* and it is helpful in *Pachanam* (~correcting the metabolism) of *Amavisha* (~virus and postdigestive toxin-like substances) and corrects the formation of vitiating *Dosha*. It also has *Kutki* which again works as mild laxative and helpful for *Madhyam Koshta* person. Raman Sharma et al and Thyagrajan et al.^[11,12] has suggested that *Bhumyamalaki* is the future drug for Hepatitis B infection as it is hepato protective, reduces the HBV DNA and also reduces the oxidative stress on liver due to various toxins. Chua L.S.^[13] has concluded in his research paper about *Kalmegh* (*Andrographis paniculata*) that it can be considered as a comprehensive therapy for liver inflammation. Sivraj et al.^[14] has mentioned that the aqueous leaf extract of *A.paniculata* could protect the liver against ethanol induced liver toxicity by possibly reducing the rate of lipid peroxidation and increasing the antioxidant defence mechanism in rats.

CONCLUSION

The case report infers the usefulness of *Ayurveda* treatment approaches in decreasing elevated Bilirubin/SGOT/SGPT levels or delay the hepatocyte damage in Chronic Alcoholic liver disease and other liver diseases. This report is a lead from a single-case

study and to arrive at a certain conclusion, clinical trials with an adequate sample size is recommended.

DECLARATION OF PATIENT CONSENT

Authors certify that they have obtained informed patient consent form, where the patient has given his consent for reporting the case along with the images and other clinical information in the journal. The patient/ caregiver understands that his name and initials will not be published and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

REFERENCES

- Walsh K, Alexander G. Alcoholic liver disease. *Postgrad Med J* 2000; 76:280-6.
- Asrani SK, Devarbhavi H, Eaton J, Kamath PS. Burden of liver diseases in the world. *J Hepatol* 2019; 70:151-71.
- Singh SP, Panigrahi S, Mishra D, Khatua CR. Alcohol-associated liver disease, not hepatitis B, is the major cause of cirrhosis in Asia. *J Hepatol* 2019; 70:1019-38.
- Murthy SK, editor. *Astaghridaya of Vagbhata, Chikitsa Sthana*. 5th ed., Vol. 2., Ch. 16., Ver. 1. Varanasi: Chaukhamba Surbharati Prakasan; 2003. p. 449.
- Anonymous. *The Ayurvedic Pharmacopoeia of India Part - II (formulations) Volume - II, Appendix 6*. 1st ed. Delhi: The Controller of Publications; 2008. p. 43.
- Chaturvedi GN, Tomar GS, Tiwari SK, Singh KP. Clinical studies on kalmegh (*andrographis paniculata* nees) in infective hepatitis. *Anc Sci Life*. 1983;2(4):208-15.
- Raman Sharma et al: Clinical Evaluation of Bhumyamalaki Ghana Vati in The Management of Kamala with Special Reference to Hepatitis B. *International Ayurvedic Medical Journal* {online} 2021 {cited May, 2021}
- Murthy SK, editor. *Astaghridaya of Vagbhata, Sutra Sthana*. 5th ed., Vol. 1., Ch. 15., Ver. 18. Varanasi: Chaukhamba Surbharati Prakasan; 2004. p. 202.
- Shastri HS, editor. *Ashtanga Hridayam of Vagbhata. Sutra Sthana*. Ch. 15., Ver. 15. Varanasi: Chaukhamba Surbharati Prakashan; 2002. p. 235
- Ratha KK, Barik L, Panda AK, Hazra J. A single case study of treating hypertrophic lichen planus with Ayurvedic medicine. *Ayu* 2016; 37:56-61.
- Raman Sharma et al: Clinical Evaluation of Bhumyamalaki Ghana Vati in The Management of Kamala with Special Reference to Hepatitis B. *International Ayurvedic Medical Journal* {online} 2021 {cited May, 2021}
- Thyagarajan SP, Subramanian S, Thirunalasundari T, Venkateswaran PS, Blumberg BS. Effect of *Phyllanthus amarus* on chronic carriers of hepatitis B virus. *Lancet* 1988; 2:764-6.
- Chua, L. S. (2014). Review on Liver Inflammation and Anti-inflammatory Activity of *Andrographis paniculate* for Hepatoprotection. *Phytotherapy Research*, 28(11), 1589-1598. doi:10.1002/ptr.5193.
- Sivaraj, A. et al. (1970) Hepatoprotective potential of *Andrographis paniculata* aqueous leaf extract on ethanol induced liver toxicity in albino rats | Semantic Scholar. (Accessed: November 29, 2022).

How to cite this article: Vivek Singh, Supriya Singh. Case of Alcoholic Liver Disease treated with classical Ayurveda medicines - A Case Report. *J Ayurveda Integr Med Sci* 2022;11:250-254.

Source of Support: Nil, **Conflict of Interest:** None declared.
