

## PRAGMATIC VIEW ON AYURVEDIC MANAGEMENT OF KUMBHAKAMALA THROUGH SHAMANA CHIKITSA -A CASE STUDY

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### ABSTRACT

**Introduction:** Alcoholic liver disease (ALD), is a major health issue worldwide ranging from simple steatosis to cirrhosis and hepatocellular carcinoma. Alcoholic liver Cirrhosis is characterized by progressive destruction and degeneration of liver parenchyma leading to diffuse fibrosis and nodule formation. The underlying pathology involves liver tissue damage caused by inflammation triggered by acetaldehyde. This leads to hepatocyte necrosis and the activation of hepatic stellate cells, which promote fibrosis and progressive scarring of the liver. Alcoholic liver cirrhosis may be interpreted as a manifestation of *Kumbhakamala* in Ayurveda, considering the similarities in clinical presentation and associated complications.

**Materials And Methods:** The present study is a case of a 38-year-old male patient, with history of Chronic alcohol consumption reported to the Kayachikitsa department of SDMIAH, Bengaluru, with complaints of *Haridra Netra* and *Mutra*, *Agnimadya*, *Sarvanga kandu*, *Dourbalya*, *Aruchi*, *Atisara* (7-8 episodes), *Padashotha*, *Udarashoola*, *Udara Adhmana* (Distended abdomen) and *Udaraguruta* in the past 3 months.

He was diagnosed as *Kumbhakamala* on the basis of clinical examination and investigation. He was managed according to treatment principles of *Kamala* based on the *Avastha* (treated with *shamanoushadhi* aiming at *Agnideepana*, *Pachana*, *Pittasthana Prachodaka*, *Nityarechana*, *Srotoshodana*, *Shotahara*, *Yakrut Uttejaka* and *Rasayana*.) **Result:** Significant

improvement was noted in *lakshana* of *vyadhi* in subsequent follow up. There was also substantial reduction in the levels of LFT value and Changes in USG finding and hence improved the quality of life of the patient. **Discussion:** This case study documents the challenges in managing alcoholic liver cirrhosis manifested due to chronic alcohol use with parenchymal tissue death, understanding and managing the condition in terms of *Kamala Chikitsa*. Photographs were taken before and after treatment for records with consent.

**KEYWORDS:** *Ayurveda*, *Kumbhakamala*, Liver cirrhosis, Liver function test, *Shamana* & *Rasayana*.

## INTRODUCTION

Alcoholic liver disease (ALD), involves the liver manifestation of alcohol overconsumption, a major health issue worldwide. Liver diseases and cirrhosis contribute to 23.59% of mortality and ranks 27<sup>th</sup> as a major cause of death in world, while in India, 2.74%.<sup>[1]</sup>

Alcoholic liver cirrhosis is a chronic condition characterized by the progressive destruction and degeneration of liver parenchyma, leading to widespread fibrosis and the formation of nodules, which severely disrupt normal liver architecture and function. Clinical presentation includes jaundice, fatigue, and general weakness, gastrointestinal manifestation (oesophageal varices), spider angioma, hepatomegaly, ascites. Complications ranging from haematemesis, Malena, ascites, fetor hepaticus, Asterix (flapping tremors), stupor, renal failure, hepatic encephalopathy, coma and ultimately death.<sup>[2]</sup>

The primary pathogenic mechanism in the development of alcoholic cirrhosis involves liver tissue damage caused by inflammation triggered by acetaldehyde, this leads to activation of stellate cells which increases fibrosis through production of myofibroblast & obstructs hepatic blood flow. Additionally, the phagocytic cells of the liver the Kupffer cells also mount an immune response. The activation of Kupffer cells is a key contributor to early ethanol-induced liver injury, ultimately leading to hepatocyte necrosis. This cellular damage initiates the progression of alcoholic liver disease and promotes the development of fibrosis, or scar tissue, within the liver.<sup>[3]</sup>

In terms of *Ayurveda*, Liver cirrhosis can be interpreted as *Kumbhakamala* (*Avasthabeda /Vikara prakriti*) considering the similarities in clinical presentation and associated complications. *Kumbhakamala* is *Raktapradosaja vyadhi* where *dushita pitta* and *Rakta* takes

*sthana samshraya* in *Yakrit* which is the site of *agni* leads to *agnidushti* and *amaotpatti* exhibiting *lakshana* like *Krishnapeeta Shakrunmutra*, *Nashtagni*, *Aruchi*, *Shota* (*Padashotha*), *Sarakta Akshimukhachardi Vitmutra*, *Daha*, *Anaha*, *Kandu*, *Dourbalya*, *Moha* and *Tama*.<sup>[4]</sup>

In conventional medicine, diagnosing alcoholic liver disease can be challenging, as it encompasses a broad spectrum ranging from simple steatosis to advanced cirrhosis. Management primarily involves complete abstinence from alcohol, lifestyle modifications, and symptomatic treatment using non-steroidal anti-inflammatory drugs (NSAIDs), antiviral agents, and corticosteroids. In severe cases, liver transplantation may be considered; however, it remains limited by strict eligibility criteria, potential complications, and its long-term outcomes. Hence treatment that targets the root cause and provides symptomatic relief is required which can be achieved through *Agnideepana*, *Pachana*, *Pittasthana Prachodaka*, *Nityarechana*, *Srotoshodana*, *Shotahara*, *Yakrut Uttejaka* and *Rasayana*.

In the present case, 38-year-old male diagnosed with Liver cirrhosis (*Kumbha Kamala*) was treated successfully through *Ayurveda*.

## CASE REPORT

A 38-year-old male, known case of Type 2 Diabetes Mellitus (6 months) with history of Chronic alcohol consumption(12yrs) and history of Hepatocellular jaundice (1 year back), under irregular medical advice presented to Kayachikitsa department SDMIAH, Bengaluru with manifestation *Haridra Mutra* and *Netra*, *Agnimandya*, *Aruchi*, *Padashotha*, *Udarashoola*, *Udara adhmaana*, *Udaraguruta*, *Angamarda*, *Dourbalya* in the last 3 month. He also had complaints of *Kandu* all over body and *Atisara* (7-8 episodes/day) for 1 month.

Approximately one year ago, a patient with a documented history of chronic alcohol consumption spanning 12 years presented with a gradual onset of yellowish discoloration of the sclera and urine, accompanied by anorexia and generalized weakness. On evaluation by a gastroenterologist, the patient was diagnosed with hepatocellular jaundice and managed conservatively. Six months following the initial presentation, the patient began to experience progressive unintentional weight loss and increased nocturnal frequency of urination. Subsequent routine investigations revealed new-onset Type 2 Diabetes Mellitus, for which oral hypoglycaemic agents were initiated.

Three months ago, the patient gradually developed *Haridra Mutra* and *Haridra Netra* (yellowish discoloration of urine and sclera), accompanied by *Agnimandya* (reduced appetite). This was followed by *intermittent Padashotha* (pedal oedema), *Udarashoola* (abdominal pain), *Udara Adhmana* (abdominal distension suggestive of ascites), *Udaraguruta* (heaviness in the abdomen), and *Dourbalya* (generalized weakness). Despite these symptoms, the patient neglected medical attention and continued his regular daily routine.

After about a month, the patient gradually developed pruritus (itching sensation) across the entire body, which was intermittent in nature. This was accompanied by *atisara* (frequent loose stools, approximately 7–8 episodes per day) and *aruchi* for this concern patient consulted gastroenterologist based on routine investigation diagnosed with Chronic Parenchymal liver disease prescribed with oral medication. However, the patient discontinued the prescribed medications within three days due to difficulty in adhering to the treatment regimen. Subsequently, his symptoms progressively worsened over time.

#### HISTORY OF PAST ILLNESS

- H/O Chronic alcohol consumption (12 yrs) (Stopped in the last 6 months)
- K/C/O Type 2 Diabetes Mellitus for 6 months
- Hepatocellular Jaundice 1 year back

#### CURRENT MEDICATIONS

- |   |   |  |
|---|---|--|
| <ul style="list-style-type: none"> <li>• Tab.Glycomet GP1 1-0-1 B/F</li> <li>• Tab.Udiliv 300mg 1-0-1</li> <li>• Tab.Pan D 40 mg 1-0-0 B/F</li> </ul> | } | Patient Took medicine for 3<br>days and discontinued later as<br>he was finding difficulty |
|---|---|--|

#### ASSESSMENT

After the assessment, the patient was found to be *Vata-Pittaja prakriti* with *Avarabala* and *Madyama koshta*. The *dosha* involved in the *vyadhi*; is *Pitta pradhana tridosha* does the *dushana* of *Rakta* leading to the *lakshana*. Patient is assessed based on Improvement in the clinical signs and symptoms, changes in biomarkers and USG finding in subsequent follow up.

Table No. 1: Showing Physical Examination of patient.

Physical examination
• General appearance - ill look
• Built -Moderate built (Wt-68 kg)
• Pallor – Present
• Icterus - Present in Sclera
• Cyanosis - Absent
• Clubbing - Present
• Lymphadenopathy - Absent

Table No. 2: Showing Ashtasthana Pariksha and Dashavidha Pariksha.

Ashtasthana Pariksha	Dashavidha Pareeksha
• Nadi – Manda, Vata Pitta	• Prakriti – Vata Pitta
• Mala – Drava mala pravrutti (Loose stools 7-8 episodes/day)	• Vikruti 1. Hetu - Madya 2. Dosha - Pitta Kapha 3. Dushya - Rasa, Rakta, Mamsa 4. Kala – Vyaktavasta 5. Vyadhibala - Pravara
• Mutra – Peeta varnata (yellowish discolouration)	• Sara – Madhyama
• Jihwa – Saama (coated)	• Samhanana – Madhyam
• Shabda (sound) – Prakruta	• Satva –Madhyama
• Sparsh – Anushna Sheeta (normal temperature)	• Satmya – Madhyama
• Drik – Netra peetata (yellowish sclera)	• Vyayama shakti – Avara
	Aharashakti • Abhyavaharana Shakti - Avara • Jarana Shakti - Avara

Table No. 3: Systemic examination of the patient.

ABDOMINAL EXAMINATION	
INSPECTION	Shape-Globular, Shiny, Distended abdomen Umbilicus-Inverted No visible veins, scar mark.
PALPATION	Smooth, Shiny surface texture Mild tenderness in Rt hypochondrium and epigastric region Hepatomegaly ++
AUSCULTATION	Tympanic sound, Bowel sounds-9-10/ min
PERCUSSION	Fluid thrill -Present Shifting dullness-Positive
Central Nervous System – conscious and well oriented Respiratory System – Normal vesicular breath sound Cardiovascular System – S1 and S2 heard	

Appetite-Reduced  
Bowel- Loose stools (7-8 episodes/day)  
BMI-23.5 kg/m<sup>2</sup>

**Table 4: CLINICAL INVESTIGATIONS - Baseline laboratory investigations.**

* Haemoglobin	<b>6.6 gm/dl</b>
* Total leukocyte count:	7100/mm <sup>3</sup>
* Total platelet count	2,60,000/mm <sup>3</sup>
* Random blood sugar	145 mg/dl,)
* Direct bilirubin	<b>16.2mg/dl</b>
* Total bilirubin	<b>20.8mg/dl</b>
* Serum glutamic pyruvic transaminase (SGPT)	<b>127 IU/L</b>
* Serum glutamic oxaloacetic transaminase (SGOT)	<b>165 IU/L</b>
* Alevated alkaline phosphatase (ALP)	<b>130 IU/L</b>
* Bile salts and pigments	Present
* Hepatitis B surface antigen (HBsAg)	Negative
* Abdominal Ultrasound (USG)	Chronic parenchymal liver disease with Hepatomegaly, Small umbilical hernia with omental fat as content, Moderate to Gross Ascites with Right sided Pleural effusion.

**TIMELINE OF THE MANAGEMENT****Table No. 5: Showing Relevant Health Events and Intervention**

DATE OF VISIT	PRESENTATION DURING DIFFERENT VISITS	INTERVENTION
<b>1<sup>st</sup> Visit</b>	<i>Haridra Netra and Mutra, Atisara, Agnimandya, Padashota, Udaraguruta, Dourbalya and Kandur</i> * Appetite-Reduced * Bala-Avara * Abdominal girth -102 cm * O/E- Mild Hepatomegaly	1.Tab.Nirocil 1-1-1 A/F 2.Syp.Liv 52 4tsp TID A/F 3.Strict Diet instructions (Milk and Rice Diet) 4.Abstinence from Alcohol Review after 1 week
<b>2<sup>nd</sup> Visit</b>	<i>Kandur &amp; Atisara reduced (2-3 episode/day)</i> <i>Haridra Netra and Mutra reduced slightly</i> <i>Udaraguruta, Padashota, Aruchi, Hrillasa persisted</i> * Appetite –Reduced * Icterus and Oedema-Present	1.Tab.Gomutra Haritaki 1-0-0 Early morning empty stomach 2.Tab.Nirocil 1-1-1 A/F 3.Syp.Liv 52 4tsp-4tsp-4tsp A/F Review after 15 days
<b>3<sup>rd</sup> visit</b>	<i>Padashota, Haridra mutra and Netra, Udaraguruta reduced</i> <i>Mukhapaka, Daha +</i> * Appetite Improved * Icterus and Pedal oedema -Absent * Abdominal Girth-96 cm	1.Amalaki churna -25 + Madhuyashti 20 gm Mix -1/2tsp-1/2tsp-1/2tsp (20 min before food) 2. Chandraprabha Vati -1-1-1 A/F 3.Kumaryasava 3tsp-0-3tsp AF Review after 15 days



<p><sup>th</sup> <b>4 Visit</b></p>	<p>Overall improvement was seen in the colour of eyes and urine, pedal oedema, Pruritis.</p> <ul style="list-style-type: none"> <li>* Appetite-Normal</li> <li>* <i>Deha Bala</i> -Improved</li> <li>* Bowel- Normal</li> <li>* Abdominal girth – 86 cm</li> </ul>	<p>1.Amalaki churna -25 gm +Madhuyashti 20 gm Mix -1/2tsp-1/2tsp-1/2tsp (20 min before food) 2.Arogyavardhini Rasa -1-1-1 AF 3.Kumaryasava 3tsp-0-3tsp AF</p> <p>Review after 21 days</p>
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## OBSERVATION AND RESULTS

Patient was treated for a period of 60 days. Patient was assessed based on reduction in clinical signs and symptoms, as well as changes in biomarkers. After one week of intervention, an improvement in the patient's *Bala* was observed. *Kandu* reduced approximately 50-60 % & the frequency of loose stools reduced (2-3 episode/day), *Haridra Netra* and *Mutra* showed about 30 % reduction. However, symptoms such as *Udaraguruta*, *Padashota* (Pedal oedema), *Hrillasa* persisted. The patient also continued to report *Aruchi* and *Agnimandya*.

At the next follow-up, the patient showed marked improvement in *Agnibala*, reflected by enhanced *abhyavaharana shakti* and *jaranashakti*. A noticeable improvement in *dehabala* was also observed. *Atisara* (loose stools 1-2 episodes/day) and *Kandu* (itching) showed an 80% reduction, while *Padashotha* (pedal oedema) and *Udaraguruta* were significantly reduced. *Haridra Netra* and *Haridra Mutra* had completely resolved. During the course of treatment, there was also marked improvement in abdominal girth, along with notable normalization of liver biomarkers, indicating a positive therapeutic response.

At the end of the treatment period, the patient exhibited significant clinical improvement, with complete resolution of *Haridra Mutra*, *Haridra Netra*, *Atisara*, and *Kandu*. There was a marked reduction in *Udaragaurava* and *Padashotha* (pedal oedema), improvement in the patient's *Dehabala* and *Agnibala*, additionally a remarkable reduction in abdominal girth was observed. Importantly, the **Child–Turcotte–Pugh (CTP) score<sup>6</sup>**, used for Evaluation of severity of Cirrhosis, **improved from 11 to 7**, after treatment indicating a shift from a more severe to a less severe disease state.

Significant improvement was noted in *lakshana* of *vyadhi* in subsequent follow up. There was also substantial reduction in the levels of LFT value along with notable changes in ultrasonography (USG) findings, indicating regression of hepatic pathology. These improvements collectively contributed to an enhanced quality of life for the patient.



IMAGE 1: BEFORE TREATMENT



IMAGE 2: AFTER TREATMENT

Table No. 6: Laboratory investigation and USG finding during follow-up.<sup>[5]</sup>

LABORATORY PARAMETERS	16/05/24	18/06/24	28/06/24
Direct Bilirubin (mg/dl)	16.2 mg/dl	2.9 mg/dl	1.75 mg/dl
Total Bilirubin (mg/dl)	20.8 mg/dl	4.2 mg/dl	2.31 mg/dl
SGOT (IU/L)	165 IU/L	131 IU/L	113 IU/L
SGPT(IU/L)	127 IU/L	76 IU/L	47 IU/L
Alkaline phosphatase(g/dl)	279 g/dl	115 g/dl	120 g/dl
Total proteins (g/dl)	4.5 mg/dl	4.2g/dl	4.8 g/dl
Albumin (g/dl)	2.0 g/dl	2.0g/dl	1.5 g/dl
Bile salts and Pigments	Present	-	-
HIV and HBsAg	Negative	-	Negative
Prothrombin time	27.4 sec	-	-
International normalized Ratio	2.32 sec	-	1.68 sec
Hb %	6.66 gm/dl	-	8.2 mg/dl

USG ABDOMEN AND PELVIS	
BEFORE TREATMENT (10/06/2024)	AFTER TREATMENT (27/08/2024)
<ul style="list-style-type: none"> <li>Chronic parenchymal liver disease with Hepatomegaly</li> <li>Small umbilical hernia with omental fat as content</li> <li>Moderate to Gross Ascites with Right sided Pleural effusion.</li> </ul>	<ul style="list-style-type: none"> <li>Chronic Liver Parenchymal changes</li> <li>Moderate Ascites</li> <li>Right side Mild Pleural Effusion</li> </ul>

Table No. 7: Child Turcotte Pugh Scale for Evaluation of severity of Cirrhosis.<sup>[6]</sup>

PARAMETERS	BEFORE TREATMENT	AFTER TREATMENT
Ascites	3	2
Hepatic Encephalopathy	1	1
Total Bilirubin(mg/dL)	3	1
Serum Albumin (g/dL)	1	1
International Normalized Ratio (INR)	3	1
<b>Total Score /Points</b>	<b>11 (Most severe)</b>	<b>7(Moderately Severe)</b>



Child-Turcotte-Pugh Class and liver disease severity obtained by adding score for each parameter (Total Points)

**Class A**-5 to 6 (least severe), **Class B**-7 to 9 (Moderately severe), **Class C**-10 to 15 (Severe)

## DISCUSSION

In the present case, the *aharaja* and *viharaja nidana* of patient like *Ati Madyasevana* i.e Alcohol overconsumption, *Ati amla*, *lavana*, *kshara sevana*, *ushna*, *tikshna ahara* (Chips and fried food), *virudha ahara*, *diwaswapna*, *ratrijagarana*, *vegadharana* and *manasika nidana* like *bhaya*, *chinta*, *krodha* have led to *jataragnimandya* causing formation of *ama*, *pitta pradhana dosha dushti* and *rakta dushti*. *Dushita rakta dhatu* and *pitta pradhana tridosha* takes *sthanasanshraya* in *yakrut* which is *sthana* of *jataragni*. This leads to further *dooshana* of *rakta dhatu* and causes features like - *Peeta Netra* and *Mutra*, *Agnimandya*, *Atisara*, *Dourbalya*, *padashotha*, *udaraguruta* and *udarashoola*.

In this case patient was treated on the basis of *Avastha* of *roga* and *rogi* based on the line of *Kamala chikitsa*.<sup>[7]</sup> After assessment, the patient was found to have *avara agnibala* and *dehabala* and *agnisthana yakrut* severely being affected. Hence *Avastha anusara chikitsa* was adopted, in the initial phase with Tab. Nirocil containing primary ingredient *Bhumyamalaki* with *Tikta*, *Kashaya rasa*, *rochana*, *agnideepana*, *yakrututtejaka*, *kandughna*, *pittarahara*, *sangrahi* and *vishaghna* properties was prescribed.

Syp.Liv 52 contains ingredients with *deepana*, *pachana*, *srotoshodana*, *anulomana* and *shothahara* properties. *Deepana*, *Amapachana* both in terms of *jataragni* and *dhatwagni janya ama*, *srotoshodhana* line of approach improved the *agni* of the patient. *Pachana* of *dhatugata ama* helps in reducing the *kandu*.

During the follow up *Agnibala* and *Dehabala* showed improvement. However, other *lakshana* were persisting considering the *avastha*, *Gomutra Haritaki* was recommended in addition to the previous medications. *Gomutra Haritaki* contains ingredients with properties such as *srotoshodhana*, *mutrala*, *shothaghna*, *udarahara* and *vatanulomaka* acts as *Nityavirechana*<sup>[8]</sup> which helped in alleviating *kandu*, *padashotha* and *udaraguruta* in the patient.

As the disease has reached a chronic course involving *dooshana* of *dhatu* and affecting the *Agnisthana Yakrut*, it is essential to focus on *dhatupushti* through *Rasayana* and

*Yakrututtejaka karma*. Hence *Amalaki churna* and *Madhuyashti churna*<sup>[9]</sup> with *tridosahara*, *pittahara*, *raktapittagna*, *rasayana* and *vayasthapaka* and *Chandraprabha vati* with *kledahara*, *srotoshodhaka*, *raktaprasadaka*, *kamalahara*, *kandughna* and *rasayana* properties were advised which helps in reducing the *padashotha*, *kandu* and *Haridra Mutra* and *Netra* acts as *Balavardhaka*, *Yakrututtejaka* and *Rasayana* to support overall recovery and balance. Any *Dushana* of *srotas* either directly or through its *dhatu dushti* leads to *Dushti* of its *srotomula*. Hence by correcting the *srotomula*<sup>[10]</sup> of the *dhatu*, *dhatu pradoshaja vikara* can be treated effectively. In Present case *Yakrut*, *pleeha* and *raktavahini dhamani* are involved in the *Samprapti* i.e *moolasthan* of *raktavaha srotas*. Thus, *srotomula chikitsa* was adopted with *Arogyavardhini rasa* and *Kumaryasava* having *deepana*, *Amapachana*, *srotoshodhaka*, *Raktashodhaka*, *anulomana*, *malashuddhikara* properties.

At the end of 60 days complete relief from the *Haridra Mutra*, *Netra*, *Atisara*, *Kandu*, *Dourbalya* and *Aruchi*. Marked reduction in *Udaraguruta* and *Padashotha* were observed. At the end of treatment *dehabala* of the rogi, *Agni* in terms of both *Jarana* and *Abhyavarana Shakti* and remarkable improvement in abdominal girth was observed. *Pathya sevana* in terms of both *ahara* and *vihara* was maintained throughout the treatment along with absolute abstinence from alcohol consumption.

## CONCLUSION

*Samprapti vighatana* and *Avasthanusara chikitsa* based on *Kamala chikitsa sutra* was the treatment protocol adopted in the present case. *Agnideepana*, *Pachana*, *Pittasthana Prachodaka*, *Nityarechana*, *Srotoshodana*, *Shotahara*, *Yakrut Uttejaka* and *Rasayana* modalities have yielded remarkable improvement in signs and symptoms and substantial reduction in biomarkers along with Abdominal USG changes. *Haridra Netra* and *Mutra*, *Kandu*, *Atisara*, *Dourbalya* relieved with a significant reduction in the laboratory parameters. Marked improvement was noticed in *Padashotha*, *Udaraguruta*, *Klama*, *Aruchi* and *Hrillasa*. Patient *agni* was improved and significant improvement in the quality of life of patient.

**INFORMED CONSENT-** Informed Consent has been taken from the patient.

**CONFLICT OF INTEREST-** None.

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