Journal of Ayurveda & Holistic Medicine

https://jahm.co.in

eISSN-2321-1563

Case Report

Ayurvedic management of alcoholic liver cirrhosis: A case report

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ABSTRACT:

Background: Chronic liver cirrhosis is a condition in which the normal function is replaced by scar tissue and regenerating nodules. In Ayurveda, alcoholic liver cirrhosis can be correlated with *Jalodara* in advanced stages. Ayurveda aims to improve quality of life through holistic interventions. **Clinical findings:** A 50-year-old male patient characterised by abdominal distension (abdominal girth 89 cm) with mild breathlessness, generalised weakness, bilateral pedal oedema, oliguria, low serum albumin (2.4 mg/dL), hyperbilirubinemia (14.3 mg/dL) and ultrasonography shows altered coarse liver parenchyma, dilated portal vein (17 mm), splenomegaly (11.5 cm) with moderate to severe free fluid collection. **Intervention:** This case was managed with *vardhamana pippali*, therapeutic purgation and internal medications. **Outcome:** Oedema resolved, urine output increased up to 1400 ml, dyspnoea and abdominal heaviness were alleviated in just one month of treatment. Abdominal girth decreased (23 cm) and liver function also improved as serum albumin reached up to 4.0 g/dL, and bilirubin become normal (0.6 mg/dL). Ultrasonography of abdomen shows normal liver, borderline splenomegaly (9.8 cm) with no evidence of ascites. **Conclusion:** This case highlights the potential role of individualized Ayurvedic management, including therapeutic purgation, internal medications and dietary regulation in the management of alcoholic liver cirrhosis with ascites. Significant improvement was observed in clinical symptoms, laboratory parameters, child-pugh score, and imaging outcomes. The sustained clinical recovery without adverse effects suggests that Ayurveda may offer a supportive and holistic approach in the management of advanced liver disease.

KEYWORDS: Ascites, Alcoholic liver cirrhosis, Case report, *Jalodara*, *Vardhmana pippali*

RECEIVED ON:
02-12-2025

REVISED ON:
15-12-2025; 09-01-2026

ACCEPTED ON:
10-01-2026

Access This Article Online:

Quick Response Code:

Website Link:

https://jahm.co.in

DOI Link:

https://doi.org/10.70066/jahm.v13i12.2454

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CITE THIS ARTICLE AS

Gopi G. Patel, Manali B. Chauhan, Dhaval M. Dholakiya, Shivenarian N. Gupta, Manish V. Patel. Ayurvedic management of alcoholic liver cirrhosis: A case report. Journal of Ayurveda and Holistic Medicine (JAHM) 2025; 13(12):90-100

1. INTRODUCTION

Ascites is a common complication of advanced liver disease and is associated with poor prognosis and increased mortality. Decompensated cirrhosis manifest through severe complications such as variceal haemorrhage, splenomegaly, ascites, and hepatic encephalopathy, presenting critical challenges for recovery and management. [1] Prolonged and excessive alcohol consumption continues to be a leading etiological factor in many regions. [2] The cause mentioned for *sannipataja udara* is '*Mandavisha*' (Chronic toxin accumulation), which can be interpreted as the toxin accumulation due to regular consumption of alcohol in excessive quantity. [3] Ultimately, all *udararoga* can progress into *jalodara* (ascites), considered difficult to treat. The *prakupita vata* accumulates between the *tvacha* (skin) and *mamsa* (muscle tissue) in the *udara*, leading to *shotha* (swelling) and *agnimandhya* (weak digestive fire) which plays critical role in the manifestation of *jalodara*. [4]

This case is notable for sonographic improvement in liver parenchyma and portal vein parameters which is uncommon with routine Ayurvedic management in P. D. Patel Ayurveda Hospital, Nadiad.

2. CASE REPORT

Patient Information: A 50-year-old male patient presented on 13th of February 2025 with complaints of abdominal distention, bilateral pedal oedema, abdominal heaviness, mild breathlessness, oliguria and generalized weakness also has associated symptoms of pain and a burning sensation in the epigastric region, along with constipation for the past seven months, which had worsened over the last three months. Seven months ago, he experienced pricking-type of abdominal pain with burning sensation and consulted a physician. He was diagnosed with mild ascites and was prescribed allopathic medication, which provided temporary relief in burning sensation. However, three months ago, he had an episode of hematemesis, and all symptoms worsened. At that time, he was diagnosed as a case of liver parenchymal disease with portal hypertension. He received conservative treatment i.e. furosemide 40 mg, ursodeoxycholic acid 300 mg and vitamin supplement; but did not experience significant relief. Seeking alternative treatment, the patient visited our Ayurveda Hospital.

Patient is socio-economically belonging in to poor class and was taking illicit alcohol since more than 25 years and most of the days of a week with large quantity. He discontinued alcohol consumption after the diagnosis of liver cirrhosis in August 2024. Psychological evaluation revealed mild anxiety without depressive features.

Clinical Findings: The patient initially presented with abdominal distension and heaviness, oliguria, mild breathlessness, and bilateral pedal oedema. According to Ayurveda, the patient presented with *kukshiadmana* (abdominal distension), *atopa* (gurgling in abdomen), *sopha* in feet, and *mandagni.* The *sampraptighataka* includes *tridosha prakopa*, *trimala dushti*; *rasa, rakta, mamsa, meda* and *udaka* as *dushya*; *rasavaha*, *raktavaha*, *annavaha*, *udakavaha*, and *mutravaha srotasa* affliction; *pranavata* and *apanavata dushti* evident in form of dyspnoea with generalised weakness and ascites respectively; *jatharagni* and *rasa-rakta*

dhatvagni mandhya. On examining the patient looked malnourished with visible veins over abdomen along with fullness and bulking of flanks, everted umbilicus was seen. Tenderness presents over epigastric region with fluid thrill and shifting dullness positive which confirming gross ascites. Due to presence of ascitic fluid no organomegaly was palpable. Abdominal girth was 89 cm. Icterus and Pallor were observed, suggesting hyperbilirubinemia and signs of pitting oedema (2-3 mm in depth) in the lower limbs. Patient's urine output approximately 400 mL/day. Blood pressure: 100/70 mmHg; Pulse: 68 bpm**.** Central nervous and cardiovascular system examinations were within normal limits. Respiratory system examination: Respiratory rate 21/min, chest movements reduced bilaterally in lower zones, dullness present over bilateral lower lung field on percussion, in auscultation breath sounds decreased in bilateral zone.

Timeline: The progress of the disease from the onset of symptoms till visit to our outpatient department is detailed in Table 1.

Table 1. Consolidated timeline of clinical events and treatment taken by patient

From-To	Clinical Events	Treatment taken by patient
July 2024	Appearance of symptoms Burning sensation in epigastric region, abdominal heaviness and distension.	Tab. Rabeprazole OD.
September 2024	Symptoms aggravated along with bilateral pedal oedema	Consulted physician and started Tab. Lasix 10 BD.
November 2024	Patient didn't get relief in symptoms and abdominal distension increased. Physician advised ultrasonography which shows liver parenchymal disease with moderate to severe ascites.	Continued diuretics with antacid. Added antibiotic Tab. Norflox 400 BD.
January 2025	Symptoms get worsen day by day along with oliguria	Patient stopped all the medications by himself.
13/02/2025	Patient came to our Ayurvedic hospital	

Diagnostic Assessments: Differential diagnoses considered summarized in Table 2. Based on the clinical findings and investigation report case had been diagnosed as liver parenchymal disease with portal hypertension along with moderate to severe ascites with splenomegaly (11.5 cm in length) based on ultrasonography of 11th November 2024 by physician. Baseline laboratory investigation shows total serum bilirubin 13.06 mg/dL, platelet 69000/cumm and serum albumin 2.51 g/dL. When patient came to our outpatient department the ultrasonography was not advised and patient diagnosed as *udararoga* on the basis of clinical features, examinations and previous reports.

Table 2: Differentiable diagnosis with exclusion reasons

Condition considered	Basis for consideration	Reason for exclusion
Viral hepatitis related cirrhosis	Ascites, splenomegaly, altered parenchyma	Negative HBsAg, HCV, No history of viral hepatitis
Non-alcoholic fatty liver disease	Ascites, Common in obesity, cirrhotic changes	Clinical history not suggestive
Cardiac cirrhosis	Ascites and hepatomegaly can occur in right sided heart failure	Cardiac evaluation normal, no raised Jugular venous pressure or cardiac abnormality
Malignancy related ascites	Ascites with possible liver mass	Ultrasonography shows no mass lesions

Therapeutic Intervention: After obtaining informed consent, the patient was admitted into the IPD. And given treatment listed with clinical events in Table 3. The patient had discontinued previous medications before admission and did not receive any concurrent modern medicines during the ayurvedic treatment period.

All medicines were prepared in Sundar Ayurveda Pharmacy (Teaching pharmacy, GMP-Certified) attached to the institution.

Table 3: Treatment given during IPD period and in follow ups with clinical events

From-To	Clinical Events	Days	Treatment with *Anupana*
13/02/2025	Patient came to P. D. Patel Ayurveda Hospital, Nadiad and treatment started in the IPD.		
13/02/2025 to 25/02/2025	Abdominal distension, mild breathlessness, bilateral pedal oedema, oliguria, generalised weakness	13 days	*Vardhamana krama pippali churna* starting from 1 gm BD increasing up to 5 gm BD, 5 gm continued for 5 days then taper to 1 gm BD before a meal, *shveta* parpati 500 mg BD with lukewarm camel's milk. *Punarnavadi kvatha* 40 ml BD
26/02/2025	Same as the above complaints	1 day	*Virechana* karma with (Batch no. SGS12411) *katuki churna* 5 gm, ((Batch no. SC26241) *trivrutta churna* 3 gm OD with lukewarm camel's milk
27/02/2025	Generalised Weakness increased and other complaints same as above	1 day	*Vishrama kala*
28/02/2025 To 9/03/2025	Same as the above complaints	10 days	Starts daily oral medications, 1) *Pippali churna* (Batch no. SC382425) 2 gm BD 2)*Punarnavadi kvatha* (Batch no. KV24255) 40 ml BD 3) *Shvetaparpati* (Batch no. PR01251) 500 mg BD 4)*Bhumyamalaki churna* (Batch no. SC09259) 3 gm BD 5)*Bhrungaraja churna* (Batch no.YBHG253) 3 gm + *Sarpunkha churna* (Batch no. SG42253) 2 gm BD 6)*Dugdhpheni* (Batch no. SC09812) 2 gm BD

			(*Anupana* same for all medicine was lukewarm camel's milk)
10/03/2025 to 16/03/2025	Oedema resolved, Mild abdominal heaviness, improvement in urine output	7 days	Patient discharged and advised to take oral medication at home and come for follow-up.
17/03/2025 to 09/04/2025	Mild abdominal discomfort, lower limb swelling. Improvement in Urine output. No pain at the epigastric region and no dyspnoea	24 days	Advised to continue all the oral medications.
10/04/2025 to 28/05/2025	Mild abdominal heaviness, lower limb swelling.	49 days	Advised to continue all the oral medications.
29/05/2025 to 17/10/2025	Mild weakness	141 days	Advised to continue all the oral medications.
18/10/2025	No abdominal distension, oliguria, breathlessness, oedema and weakness	Last follow up	Advised to continue all the oral medications.

Dietary intake the patient's diet was strictly limited to camel's milk throughout the treatment period and other food items along with water was also restricted. After total three months there is no obvious fluid accumulation in the patient so we started him *masura* (Red lentil) soup along with lukewarm camel's milk. Subsequently, after two-month patient was able to digest regular diet.

3. FOLLOW UP AND OUTCOME

Adherence to the therapeutic protocol was ensured through direct supervision during IPD period and regular telephonic follow-ups after discharge. Medication compliance was checked by patient self-reporting and confirmation during follow-up visits. The treatment was well tolerated with no discontinuation. No procedure related complications and adverse drug reactions were observed during the treatment and follow-up period. *Virechana karma* (therapeutic purgation) was done, and seventeen *vega* (number of purgative bouts) observed.

On admission, the patient appeared malnourished and had abdominal distension. Abdominal examination showed a positive shifting and horse shoe dullness with fluid thrill. The abdominal girth at the level of umbilicus was 89 cm. abdominal girth was 69 cm after therapeutic purgation, and 66 cm at the last follow up (18th October, 2025).

At discharge, the abdomen appeared flat and the only puddle sign was positive which turn negative after completing three months of treatment. Urine output increased to 1400 mL/day during the IPD stay. Abdominal girth showing a reduction of 23 cm. Findings at admission and discharge are shown in Figure 1 and 2.

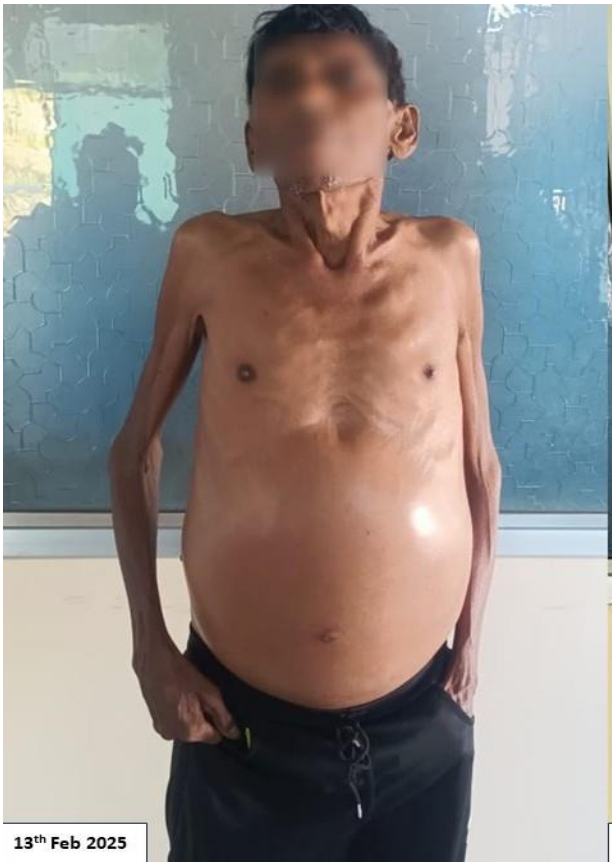

Figure 1: Clinical photograph of the patient at the time of admission showing marked abdominal distension due to ascites.

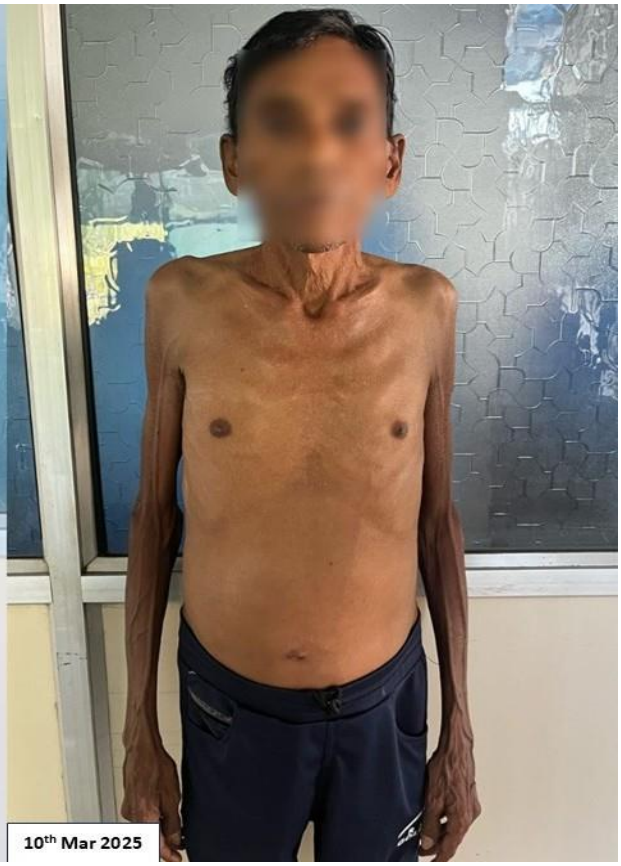

Figure 2: Clinical photograph of the patient after 26 days of treatment showing reduction in abdominal distension.

The before and after comparison of ultrasonography of abdomen presented in Figure 3 and 4.

According to the Child-Pugh grade, before starting the Ayurveda treatment, patient was belonging in to grade C, which suggesting worst prognosis. On the date of discharge, it was found as in grade A and also continue in grade A at last follow-up.

Clinical improvement was observed across all major symptoms Table 4. Laboratory tests results taken at admission, during hospitalization, and at follow up gradually improved and are presented in Table 5.

4. DISCUSSION

Alcoholic liver cirrhosis with ascites associated with poor prognosis. Conventional management including diuretics and repeated paracentesis provides only symptomatic relief and associated with recurrence, patient discomfort, and financial burden. The probable mode of Ayurvedic intervention illustrated in Diagram 1.

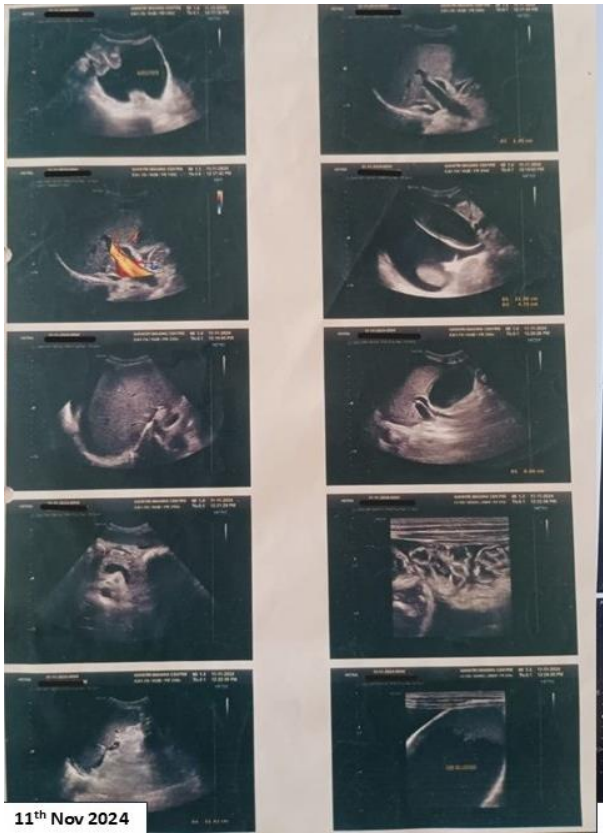

Figure 3: Ultrasonography of the abdomen before treatment showing altered coarse liver echotexture, splenomegaly, dilated portal vein, and moderate to severe ascites.

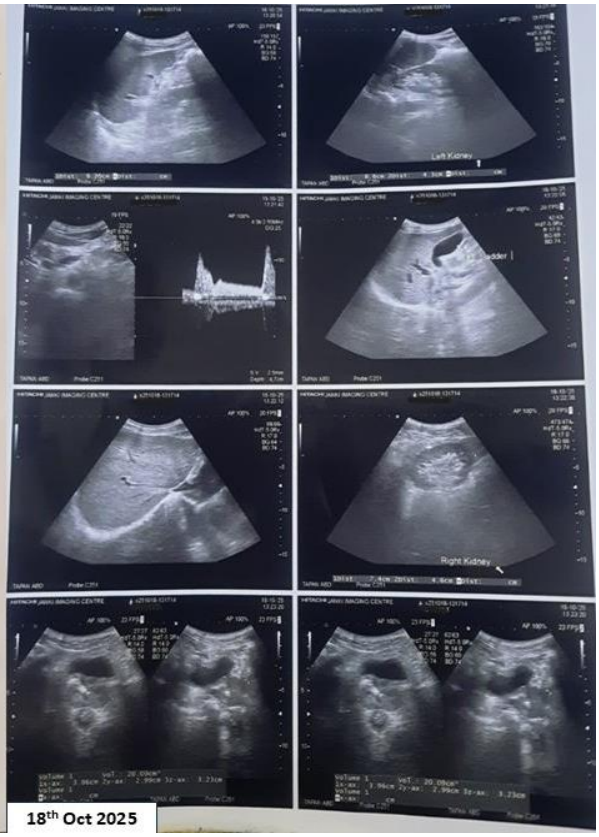

Figure 4: Ultrasonography of the abdomen after treatment showing near-normal liver echotexture, borderline splenomegaly, normal portal vein flow, and absence of ascites.

Table 4: Symptoms wise results

Date	Abdominal Distension	Bipedal oedema	Generalized weakness	Pallar	Icterus
At the time of admission 13th Feb 2025	+++	++	+++	++	++
27th Feb 2025	++	+	++	++	+
At the time of discharge 10th Mar 2025	+	-	++	+	-
Follow up					
10th Apr 2025	+	-	++	+	-
29th May 2025	-	-	+	-	-
26th June 2025	-	-	+	-	-
24th July 2025	-	-	+	-	-

21st Aug 2025	-	-	-	-	-
18th Sep 2025	-	-	-	-	-
18th Oct 2025	-	-	-	-	-

(+ Mild, ++ Moderate, +++ Severe)

Table 5: Laboratory investigations

Investigations	**13/02/'25**	**27/02/'25**	**17/03/'25**	**10/04/'25**	**29/05/'25**	**18/10/'25**
Haemoglobin	10.3	9.9	10.4	10.9	10.4	12.3
Erythrocyte sedimentation rate	18	75	38	38	24	-
Platelet count	134000	147000	139000	149000	152000	152000
Urine Albumin	Absent	Absent	Absent	Absent	Absent	Absent
Serum Protein	5.2	7.7	7.7	7.5	7.0	7.8
Serum Albumin	2.4	3.2	3.4	3.9	3.8	4.0
Serum Globulin	2.8	4.5	4.3	3.6	3.2	3.8
S. Bilirubin: Total	14.3	7.1	4.8	1.8	0.6	0.6
Direct	7.5	4.5	2.4	1.1	0.3	0.3
Indirect	6.8	2.6	2.4	0.7	0.3	0.3
SGPT	47	27	32	15	21	13
SGOT	45	33	40	27	26	15
Serum alkaline phosphates	89	143	150	114	112	86
Na^+	132	132	137	143	148	136
K^+	3.9	5.3	4.1	4.0	4.5	4.2
Cl^-	107	107	109	106	107	105
Serum calcium	8.5	8.4	8.7	8.7	8.7	8.9
Prothrombin time: Time	18.6	16.8	17.4	15.9	16.1	14.2
Control	13.5	13.5	13.5	13.5	13.5	13.5
INR	1.47	1.30	1.36	1.22	1.24	1.06

Vardhamana pippali has *pliharogahara,* immunomodulatory and hepatoprotective effect. [5] It was administered primarily for its *deepan-pachana* and *anulomana* properties rather than as *rasayana*, as prior *virechana* was not performed. *Pachana* facilitates the movement of *dosha* from *shakha* to *koshtha*. By *acharya charaka* routine administration of *nityavirechaniya dravya* is recommended to eliminate accumulated *mala* and excess *kleda*. *Virechana* helps to remove morbid *dosha* and *mala* from body which are responsible in *jalodara*. Here, *shvetaparpati* was employed as *mutravirechaniya dravya* which removes excess fluid from body and breaks the *sanga* of *dosha*, facilitated reduction of ascitic fluid. [6] *Punarnavadi*

kvatha, specially indicated for *udara roga*, reduces *shotha*, correct *pandu* (Table 5) and alleviates *shvasa*. [7] *Bhumyamalaki (Phyllanthus nururi* L.*),* [8] *Sharpunkha (Tephrosia purpurea (L.) Pers.),* [9] and *bhringaraja* (*Eclipta alba* (L.) Hassk.) [10] have diuretic and hepatoprotective properties, and helps in liver regeneration, and spleen related disorders. Combinedly used for reducing portal hypertension, as reflected by the normalization of portal vein parameters on follow-up ultrasonography with improvement in splenomegaly (Figure 4). *Dugdhapheni* (*Euphorbia thymifolia* L.) increases urine flow and remove accumulated *kleda*, prevent constipation which help in preventing hepatic encephalopathy by releasing ammonium substances. [11] Camel's milk is recommended for oedema and abdominal swelling (Table 4).

Previous Ayurvedic case reports documented improvement in ascites, liver function parameters, and quality of life with the use of paracentesis with daily therapeutic purgation, [12] internal medications and *panchakarma* interventions in alcoholic liver disease and Cirrhosis of liver. [13]

A case report on non-alcoholic liver cirrhosis with portal hypertension in male patient is managed successfully with *Arogyavardhini vati, Phalatrikadi Kwatha, Sudharashana vati, Guduchyadi Yoga* and Syrup Liv 52. [14]

In a case report on non-alcoholic cirrhosis of liver in female patient, *Vardhamana Pippali, Bhringaraja churna, Bhumyamalaki churna, Sharapunkha Churna, Shweta Parpati* and *Punarnvadi Kwatha* is used. [15]

Limitation: This is a single case report without histopathological confirmation or long-term comparative evaluation; therefore, the findings cannot be generalized.

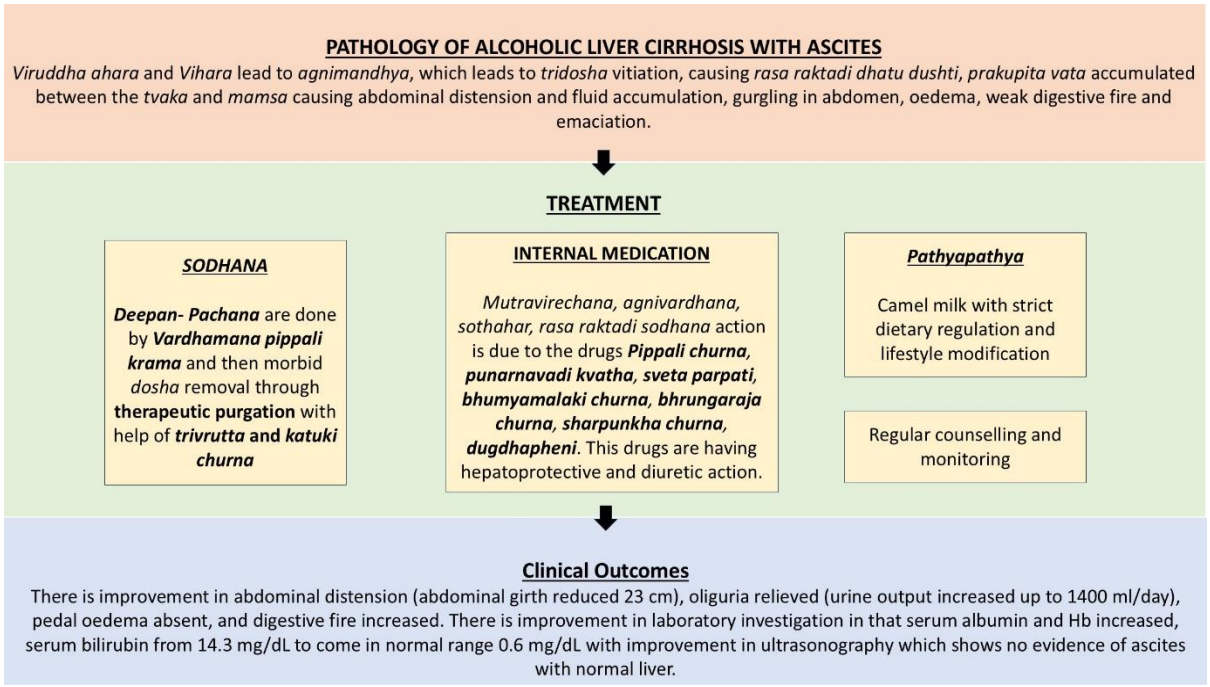

Diagram 1: Probable Mode of Action Flow Chart

5. CONCLUSION

This case report described a patient with long-standing alcoholic liver cirrhosis with ascites (chronicity more than seven months) treated through Ayurvedic interventions including *shodhana*, *shamana* with strict dietary regimen. The patient had improvement in symptoms, reduction in abdominal girth, increased urine output, child-Pugh score and improved ultrasonography findings over one month of IPD and seven months follow up treatment with no adverse effects. Individualized Ayurvedic treatment may play a supportive role in improving outcomes in alcoholic liver cirrhosis with ascites.

Acknowledgement

The authors are thankful to Dr. Vigna R. Vyas and Dr. Mansi M. Patel for their support and are also grateful to Dr. Kalapi Patel, Principal of J. S. Ayurveda Mahavidyalaya, and the staff of P. D. Patel Ayurveda Hospital, Nadiad

Declaration of Patient Consent – The authors confirm that they have acquired a patient consent form, in which the patient or caregiver has granted permission for the publication of the case, including accompanying images and other clinical details, in the journal. The patient or caregiver acknowledges that their name and initials will not be disclosed, and sincere attempts will be undertaken to safeguard their identity. However, complete anonymity cannot be assured.

Patient perspective - The patient reported that before coming to the hospital, he had abdominal distension, mild difficulty in breathing, reduced urine output, swelling of the feet, and general weakness. He stated that earlier treatment did not give significant relief and symptoms gradually worsened. After starting Ayurvedic treatment, he noticed improvement in all symptoms. The patient expressed satisfaction with the treatment.

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Writing – original draft: GGP

Reviewing & editing: GGP, MBC, DMD, MVP

Approval of final manuscript: All authors

Declaration of Generative AI

The authors declare this manuscript was written without the use of generative artificial intelligence tools. All the content, including text generation, data analysis and references was developed and reviewed by the author without assistance from AI technologies.

Conflict of Interest – The authors declare no conflicts of interest.

Source of Support – The authors declare no source of support.

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