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# Holistic Ayurvedic Management of Yakrit Vikar: A Case-Based Study on Chronic Liver Disease

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## ABSTRACT

This case study highlights the therapeutic value of *Ayurvedic* treatment in managing Chronic Liver Disease (CLD) in a 65-year-old male patient with comorbid hypertension and coronary artery disease (CAD). The treatment approach included dietary and lifestyle modifications, *Panchkarma* therapies, and *Ayurvedic* formulations. The patient reported significant symptomatic improvement in fatigue, dyspnea, pedal edema, gastric disturbances, itchiness, and sleep irregularities. Fibro Scan results showed a reduction in liver fat content (CAP decreased from 261 to 207) and a notable decline in liver stiffness (from 18 to 14.3 kPa), indicating regression in hepatic fibrosis. *Ayurvedic* herbs like *Amalaki* (*Emblica officinalis*), *Guduchi* (*Tinospora cordifolia*), *Punarnava* (*Boerhavia diffusa*), *Haritaki* (*Terminalia chebula*), and *Neem* (*Azadirachta indica*) were instrumental due to their hepatoprotective, detoxifying, and immunomodulatory properties as explained through their *Rasapanchaka* characteristics. The *Ayurvedic* interventions appeared effective in improving liver function and quality of life in CLD, emphasizing *Ayurveda's* potential as a complementary approach in chronic hepatic disorders.

**Keywords:** Ayurveda, chronic liver disease, hepatoprotection, liver fibrosis, Panchkarma, Fibro scan.

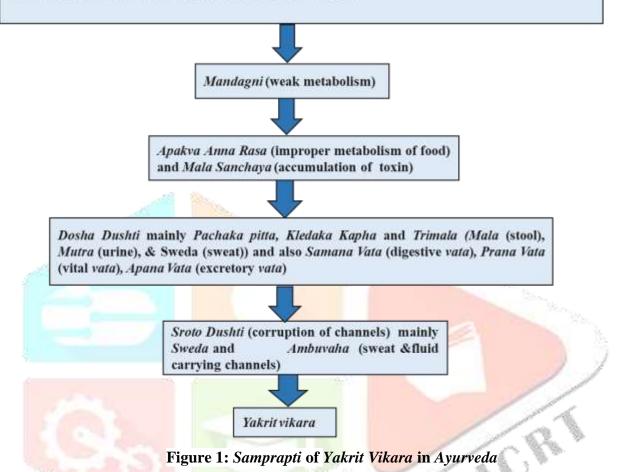
# INTRODUCTION

Liver cirrhosis is the end stage of many chronic liver diseases. It has compensatory and decompensatory phases. Compensated phase lasts for several years.<sup>[1]</sup> Decompensated cirrhosis leads to major complications including jaundice, variceal hemorrhage, ascites or encephalopathy. [2] Ascites is the most common presentation 50% of compensated cirrhosis develop ascites in 10 years. [3] Ascites treatment requires hospitalization, can lead to lifethreatening complications, and needs liver transplantation. The development of ascites marks the onset of a worsened prognosis and increased mortality. Cirrhosis within the first year of diagnosis causes death in 15% and 40% will die in the first 60 months. [4] 10 years mortality is 34% to 66%. Alcohol consumption, viral hepatitis B & C, and metabolic syndrome related to obesity are the most common causes of cirrhosis. Around 1,472,000 deaths worldwide were attributed to liver cirrhosis in 2019, making up roughly 2.4% of all fatalities worldwide. [5] Liver disease frequency is increasing and a huge increase in the liver disease burden is expected. The global economic burden of liver cirrhosis is estimated to exceed 100 billion USD annually, including direct healthcare costs and productivity losses. Hepatic cirrhosis incidence in India could be high due to the high prevalence of Hepatitis B & C, fatty liver disease and even increasing trends in alcohol intake, including high prevalence of non-alcoholic disease even in children. The costs of hepatic cirrhosis on quality of life, loss of productivity and medical expenses are high.<sup>[6]</sup> Treatments are being tried to stop the progression from compensated to the decompensated stage. Liver transplantation is the only treatment for end-stage liver disease. Liver transplantation has high costs, high mortality and has scarcity of organ donors. In Ayurveda, liver is referred to as Yakrit (liver), governed primarily by Ranjaka Pitta (the subtype of Pitta responsible for coloring the blood), responsible for blood formation and metabolic transformation. Chronic liver disorders (Yakrit Vikara) are seen as the result of Pitta Dushti (vitiation of the Pitta Dosha), Ama accumulation (build-up of undigested toxins), and imbalance in Rasa and Rakta Dhatus (nutritive plasma and blood tissues, respectively). Classical texts like the Charaka Samhita and Ashtanga Hridaya describe conditions such as Kamala (jaundice), Halimaka (chronic jaundice with systemic complications) which correlate with modern liver diseases, including hepatitis and cirrhosis.<sup>[7]</sup> Avurvedic management of Yakrit Vikara involves a holistic approach combining Shodhana (detoxification therapies), especially Virechana (therapeutic purgation), with Shamana (pacifying) therapies using hepatoprotective herbs like Bhumyamalaki (Phyllanthus niruri), Kalmegh (Andrographis paniculata), Guduchi (Tinospora cordifolia), and Bhringraj (Eclipta alba).[8] Formulations such as Arogyavardhini Vati and Punarnavadi Mandura are commonly used to restore Agni (digestive/metabolic fire), purify blood (Rakta Shodhana), and rejuvenate liver tissues (Yakrit Rasayana).

# Samprapti Ghataka of Yakrit Vikara in Ayurveda [9]

- *Dosha Samaan Vata* (Subtype of *Vata*), *Pachak Pitta* (Subtype of *Pitta*).
- Dushya (Pachakagni (Digestive fire), Ras (Plasma) Rasdhatu (Nutrient Fluid).
- Adhisthaan (location of disease) Amashaya (Stomach), Grahani (Small intestine).
- *Strotas* (*Annavah*) The disease involved *Amashaya*, *Grahani* and *Pakwashaya* (large intestine). *Srotas* seem to be the main concern but *Rasavah Strotas* (Plasma channels), which is the first *Ama* (toxin) produced due to *Agni* (digestive fire) may get involved.
- *Dushtiprakar* (Type of Disease) *Sanga* (Obstruction)
- *Agni* (Digestive fire) *Mandagni* (Weak Digestion)
- *Marga* (Pathway): *Abhyantra rogamarga* (Internal pathways of disease)

Nidana Pittprokpa (Excessive Kshara (alkaline substances), Amla (sour foods), Lavana (Salty food), Viruddha (incompatible food combinations) Anna, Vidagdha Anna (putrefied or stale food), Asatmya Bhojana unsuitable or unwholesome diet, Nishpava (flatulent legumes), Masha (black gram), Pinyaka (oil cake), Tila Taila (sesame oil), Ativyayama (excessive physical exertion), Atimaithuna (excessive sexual activity), Diwaswapna (daytime sleep), Kama (excessive desire), Chinta (anxiety), Bhaya (fear), Krodha (anger), Vegadharana (suppression of natural urges)



# CASE REPORT

A 65-year-old male, a known case of chronic liver disease (CLD), hypertension, and coronary artery disease (CAD) for the past 11 years, visited Jeena Sikho Lifecare Limited Hospital, Derabassi, Punjab, India, on 23/07/2023. The patient presented with complaints of weakness, knee pain, fatigue, dyspnea on exertion, pedal edema, indigestion, generalized itching, and disturbed sleep. He was admitted to the hospital from 24/07/2023 to 30/07/2023 for evaluation and management.

#### Vitals on the initial visit

1. Blood Pressure: 130/70mmHg

Pulse Rate: 78/min
 Weight: 73kg
 Height: 5'7"

Table 1: Asthvidha Priksha on the first-day visit of the patient

Parameters	Findings	
Nadi (Pulse)	VataPittaj	
Mala (Stool)	Abadh (loose)	
Mutra (Urine)	Ishatpeeta (Normal)	
Jiwha (Tongue)	Saam (Coated)	
Shabda (Speech)	Spashta (Clear)	
Sparsha (Touch)	Anushna Sheeta (Normal temp.)	
Drika (Eyesight)	Avikrit (Normal)	
Akriti (Body shape)	Madhyam (Normal)	

# **INTERVENTIONS**

# **Treatment Plan**

**I** Ahara Krama: The dietary guidelines provided by Jeena Sikho Lifecare Limited Hospital included the following:

# a. Do's and Don'ts:

- 1. Avoid eating after 8 PM.
- 2. Take a small bite of solid food and chew it 32 times to aid proper digestion and nutrient absorption.
- 3. Do not consume wheat, refined food, milk, milk products, coffee, tea, and packed food.

# b. Jala Sevan (Water intake):

- 1. Take small sips of water.
- 2. Drink about 250ml of alkaline water 3 to 4 times a day.
- 3. Consume Herbal tea 300ml twice daily. To prepare 300 ml of Herbal tea, combine 2 cloves (*Trifolium pratense*), 2 cardamom pods, 10 black pepper seeds (*Piper nigrum*), 5 gm cinnamon sticks (*Cinnamomum verum*), and a half tea spoon of fennel *seeds* (*Foeniculum vulgare*) with hot water.
- 4. Drink Red juice made up Beetroot, Pomegranate and Carrot (100-150 ml).
- 5. Green juice composed of *Neem (Azadirachta indica)*, *Tulsi (Ocimum tenuiflorum)*, *Paan (Piper betle)*, *Karela (Momordica charantia)*, *Jamun (Syzygium cumini)*, *Sadabahar (Vinca rosea)* taken in quantities of 10 gm each, 200 ml water added, ground in a mixer grinder, filtered, and consumed in a quantity of (100-150 ml).
- 6. Living water: The approach involves a three-tiered filtration system using clay pots, each serving a specific purpose to purify and energize the water: Top Pot: Fill this pot with a mixture of small and large river stones, followed by charcoal made from burning wood. This layer acts as an initial filter, removing larger impurities. Middle Pot: Place a similar mix of stones here. Additionally, add *Moringa* seed powder (also known as drumstick or "Sahjan" powder), a silver vessel, a copper vessel, and Rudraksha (Elaeocarpus angustififolium). Moringa seeds are known for their natural water-purifying properties,

while silver and copper are believed to enhance the quality of water. Bottom Pot: This pot remains unaltered and serves as the collection chamber for the purified water. Advised to drink as per the need.

7. Boil 2 liters of water to reduce it to 1 liter and consume.

# c. Aim to drink 1 liter of alkaline water daily (Procedure as follow):

- 1. Setup the Glass Jug: Fill a clean jug with fresh drinking water.
- 2. Add Copper Vessel: Place a copper vessel or glass inside the jug.
- 3. Infuse Flavors: Add slices of carrot, cucumber, and lemon to the water.
- 4. Add Herbs: Include ginger slices, mint leaves, and coriander leaves.
- 5. Optional Spice: Add a slice of green chili for added flavor.
- 6. Let it Sit: Allow the mixture to sit for 12 hours.
- 7. Add *Amalaki (Emblica officinalis)* and Basil (*Ocimum tenuiflorum*): After 6 hours, add 3–4 pieces of *Amalaki* and a handful of Basil leaves. Let it infuse for 6 hours.
- 8. Ready to Drink: 3 to 4 times a day in divided portions

# d. Shooka Dhanya Sevan:

- 1. Incorporate five types of millet into diet: (*Priyangava*) Foxtail (*Setaria italica*), (*Śyāmākā*) Barnyard (*Echinochloa esculenta*), (*Kodrava*) (*Paspalum scrobiculatum*) and Browntop (*Urochloa ramose*).
- 2. Use only steel cookware for preparing the millets. Cook the millets only using mustard oil.

e. Ayurvedic and Disciplined & intelligent Person's diet (DIP) includes:

Time	Meal	Items Included
5:45 AM	Early Morning	Herbal tea, curry leaves (1 leaf per minute, up to 5 leaves), raw ginger, turmeric
9:00 – 10:00 AM	Breakfast	Steamed seasonal fruits (weight × 10 grams), <i>mugda yusha</i> , fermented millet shake (4–5 types)
11:00 AM	Morning Snack	Red juice (150 ml), ingredients include Carrot ( <i>Daucus carota</i> ), Beetroot ( <i>Beta vulgaris</i> )
12:30 – 2:00 PM	Lunch	Plate 1: Steamed salad (weight × 5 grams) Plate 2: Millet recipe
4:00 – 4:20 PM	Evening Snack	Green juice (100–150 ml), ingredients include Coriander leaves ( <i>Coriandrum sativum</i> ), Mint leaves ( <i>Mentha spicata</i> ), Spinach leaves ( <i>Spinacia oleracea</i> ), Curry leaves ( <i>Murraya koenigii</i> ), Tulsi leaves ( <i>Ocimum tenuiflorum</i> )

6:15 –	Dinner	Plate 1: Steamed salad (weight $\times$ 5
7:30 PM		grams), chutney, soup
		Plate 2: Millet khichdi

# f. Fasting:

1. One-day fasting per week.

# g. Special Instructions:

- 1. Express gratitude to the divine before consuming food or drinks.
- 2. Sit in *Vajrasan* (a yoga posture) after each meal.
- 3. 10-minute slow walk after every meal.

# h. Diet Types:

- 1. The diet comprises low-salt solid, semi-solid, and smoothie options.
- Suggested foods include herbal tea, red juice, green juice, a variety of steamed fruits, fermented millet shakes, soaked almonds, and steamed salads.

# II. Jeevana Vidhi:



# Panchkarma Therapy

Panchkarma therapies were administered to patients from 24/7/23 to 30/7/23

# 1. Matra Basti with Punarnava and Brahmi Oil [11]

Procedure: Warm Punarnava and Brahmi oil was administered rectally in a 90ml dose, with retention for enhanced absorption.

# 2. *Udar lepam* [12]

**Procedure:** After the patient was in a comfortable supine position, the abdomen was evenly covered with a warm paste. Depending on the purpose of the treatment, the paste was either left to dry entirely or partially. The paste was carefully removed after 30 minutes, then a warm water rinse was performed. To maximized the effects, it was advised to rest and eat a light, easily digested diet after therapy.

# 3. Shirodhara with Brahmi oil [13]

**Procedure:** The procedure began with the patient lying in a supine position, followed by the continuous pouring of warm *Brahmi* oil over the forehead from a *Shirodhara* pot from height of 6 inches. The oil flowed in a rhythmic stream over the Ajna (third eye) chakra for 45 minutes. This procedure was administered on alternate days, using 1 litre of oil maintained at 40°C.

# 4. Udar Basti with Punarnava oil [14]

**Procedure:** The patient lay comfortably in the supine position, and *Punarnava* oil was warmed and applied to the abdominal region to relax the muscles and prepare the area for treatment. A dough barrier was formed around the navel to create a well that could hold the oil in place. The warmed *Punarnava* oil, maintained at 45°C, was then gently poured into the dough reservoir and retained for 15–30 minutes.

**Table 3: Medications Administered During Treatment** 

Medicine Name	Ingredients	Therapeutic Effects as per ayurvedic litreature
Volumit Chatle II	Dungang and (Dogadanie Jiece V 17-19 - 1	<u> </u>
Yakrit Shoth Har		Supports Yakrit Vikar Shaman, (Liver Disorder
vati	(Piper nigrum), <b>Pippali</b> (Piper longum), <b>Vidang</b> (Embelia ribes), <b>Devdaru</b> (Cedrus deodara),	, ,
		Pacification) aids in <i>Pliha</i>
	Haldi (Curcuma longa), Chitrak (Plumbago	Vikar Nivarana (Relief from
	zeylanica), <b>Vibhitaka</b> (Terminalia bellirica), <b>Amalaki</b> (Emblica officinalis), <b>Danti</b>	spleen disorders), possesses
	33 //	Shothahar Guna (anti-
	(Baliospermum montanum), Chavya (Piper	inflammatory property),
	retrofractum), <b>Indrayava</b> (Holarrhena	assists in Vrikk Vikar Shaman
100	antidysenterica), <b>Black cumin</b> (Nigella sativa),	(alleviation or management of
	Kaiphal (Myrica esculenta), Kutki (Picrorhiza	kidney disorders), helps in
10 m	kurroa), Nishoth (Operculina turpethum),	Kamala Rog Shaman
	Saunth (Zingiber officinale), KakadSinghi	(alleviation of jaundice),
	(Pistacia integerrima), Ajwain (Trachyspermum	supports Yakrit Kshaya
	ammi)	Nivarana (management of
		liver degeneration), acts as a
4		Mutral, diuretic aids in Shoth
4	and the same of th	Shaman (anti-inflammatory
		action), balances <i>Pandu Rog</i>
A 1 D'44 II.	Mid'(Cl. 1: 11 ) M. d. (M. d.	(Anemia)
Amal Pitt Har	Mulethi (Glycyrrhiza glabra), Mentha (Mentha	Enhances Agni Deepan
Powder	piperita), <b>Hing</b> (Ferula asa-foetida)	(Digestive fire stimulation)
100		provides Shaman
		(Alleviation), and supports
700		Sukha Prapti (Attainment of
Amagra Vati	Lab Phague (Ivan Agh) Abbugh Phague (Mica	well-being)
Arogya Vati	Loh Bhasm (Iron Ash), Abhrak Bhasm (Mica Ash), Tamra Bhasm (Copper Ash), Amalaki	Promotes Cell Regeneration acts as a Rasayan
	(Emblica officinalis), <b>Vibhitak</b> (Terminalia	
	bellirica), <b>Haritaki</b> (Terminalia chebula),	(Rejuvenation) and enhances
		Vyadhikshamatva (Immunity)
	Chitrak (Plumbago zeylanica), Kutki (Picrorhiza kurroa), Nimbu Patra (Citrus limon	
	leaves)	
GE-LIV Forte	Bhringraj (Eclipta prostrata), Kachri	Supports Yakrit Vikar
	(Hedychium spicatum), <b>Kalmegh</b> (Andrographis	Shaman, enhances
syrup	paniculata), <b>Kutki</b> (Picrorhiza kurroa), <b>Vidanga</b>	Vyadhikshamatva (Immunity),
	(Embelia ribes), <b>Nishoth</b> (Operculina	aids in Annavah Srotas
	turpethum), <b>Daruharidra</b> (Berberis aristata),	Poshana (Nourishment of the
	Chitrak mool (Plumbago zeylanica), Amalaki	Digestive Channel), helps in
	(Emblica officinalis), Sudarshan (Crinum	Amla Pitta Shaman
	latifolium)	(Alleviation of Hyperacidity)
Udar vikar Janya	Amalaki (Emblica officinalis), Guduchi	Supports <i>Udara Rog Shaman</i>
Rog Churan	(Tinospora cordifolia), Bhumi Amla	(Treatment of Abdominal
Avg Churan	(Kaempferia rotunda), <b>Sarpunkha</b> (Tephrosia	Disorders), aids in Shool
	(Exactiple in Founda), Surputation (Tephrosia	Disorders), and in shoot

	•	<u> </u>
	purpurea), <b>Vibhitak</b> (Terminalia bellirica), <b>Kutki</b> (Picrorhiza kurroa), <b>Haritaki</b> (Terminalia chebula)	enhances <i>Agni Deepan</i> (Digestive stimulant), helps in <i>Aadhmaan Shaman</i> (Relief from abdominal distension) and balances <i>Amla Pitta</i>
Blood Purifier Syrup	Khadiraristha, Mahamajisthadi Kwath, Devdarvyadi, Takraristha	Boosts Vyadhikshamatva (Immunity) and supports Twak Poshana (Skin nourishment)
LIV-DS Capsule	Bhumi Amla (Kaempferia rotunda), Kasani (Cichorium intybus), Himsra (Capparis spinosa), Punarnava (Boerhavia diffusa), Guduchi (Tinospora cordifolia), Kakmachi (Solanum nigrum Linn.), Arjun (Terminalia arjuna), Biranjasipha (Achillea millefolium), Kasamard (Cassia occidentalis Linn), Vidang (Embelia ribes), Chitrak (Plumbago zeylanica), Kutki (Picrorhiza kurroa), Haritaki (Terminalia chebula), Bhringraj (Eclipta prostrata)	Boosts Agni Deepan and promotes Pakvashaya Poshana (Large intestine nourishment)
Rakt stambhan vati	Shudh Parad (Purified Mercury), Shudh Gandhak (Purified Sulphur), Hiradokhi (Daemonorops draco), Semal (Bombax ceiba)	Use for management of <i>Arsha</i> (hemorrhoids), <i>Raktameha</i> (hematuria), <i>Vidradhi</i> (abscess), <i>Urdhva Raktapitta</i> (hemoptysis), and <i>Asrigdara</i> (menorrhagia) due to its styptic, wound-healing, and anti-inflammatory properties
JS-PLATOJEE Cap	Papaya (Carica papaya), Guduchi (Tinospora cordifolia), Sudarshan (Crinum latifolium), Arogyavardhini, Amalaki Rasayan classical ayurvedic medicine, Neem (Azadirachta indica)	Supports Jwara Shaman (Fever Reduction), aids Vridhi
Vish Har Ras Syrup	Neem (Azadirachta indica), Guduchi (Tinospora cordifolia), Kalmegh (Andrographis paniculata), Papaya (Carica papaya), Wheatgrass (Triticum aestivum Linn.), Punarnava (Boerhavia diffusa)	Supports Shwasa Rog Shaman (Respiratory Disorder Management), aids in Prakritik Shodhan (Natural Detoxification), and boosts Vyadhikshamatva (Immunity)
Sama vati	Gokshura (Tribulus Terrestris), Shatavari (Asparagus racemosus), Kaunch (Mucuna pruriens), Amalaki (Emblica officinalis), Shunthi (Zingiber officinale), Jaiphal (Myristica fragrans), Ashwagandha (Withania somnifera), Vidarikand (Pueraria tuberosa), Beej band lal (Sida cordifolia), Akarkara (Anacyclus pyrethrum), Talmakhana	Supports Yakrit Vikar Shaman (Liver Disorder Management), enhances Agni Deepan-Pachan (Appetite and Digestion Stimulation), aids in Vibandh Nivarana (Constipation Relief), boosts Vyadhikshamatva (Immunity),

	(A , 1 1 'C 1' ) M 1' (C11 1 ,	1 1 1 ' 4 1 ' 01
	(Asteracantha longifolia), Musli (Chlorophytum	-
	borivilianum), Swarn makshik, Shilajit	(Loss of Appetite
	(Asphaltum punjabicum)	Management)
Sanjeevani capsule	Sanjeevani vati classical ayurvedic medicine,	Supports Jwara Shaman
	Bhumiamla (Phyllanthus niruri), Ajwain	(Fever Reduction), aids in
	(Trachyspermum ammi)	Yakrit Poshana (Liver
		Nourishment), and helps in
		Krimi Rog Nivarana
		(Parasitic Disease Prevention)
Divya Shakti	Trikatu (Zingiber officinale, Piper nigrum, Piper	Boosts Ojas (vitality) and
Powder	longum), <b>Triphala</b> (Phyllanthus emblica,	energy levels and Daurbalya
	Terminalia chebula, Terminalia bellirica),	(weakness).
	Nagarmotha (Cyperus rotundus), VayVidang	
	(Embelia ribes), <b>Chhoti Elaichi</b> (Elettaria	
	cardamomum), <b>TejPatta</b> (Cinnamomum tamala),	
	Laung (Syzygium aromaticum), Nisoth	
	(Operculina turpethum), Sendha Namak,	
	Dhaniya (Coriandrum sativum), Pipla Mool	
	(Piper longum root), <b>Jeera</b> (Cuminum cyminum),	
	Nagkesar (Mesua ferrea), Amarvati classical	
	ayurvedic medicine, Anardana (Punica	
and the second	granatum), <b>Badi Elaichi</b> (Amomum subulatum),	Sec.
	<b>Hing</b> (Ferula asafoetida), <b>Kachnar</b> (Bauhinia	No. of
P	variegata), <b>Ajmod</b> (Trachyspermum ammi),	War.
	Sazzikhar (Seidlitzia stocksii), Pushkarmool	The state of the s
	(Inula racemosa), <b>Mishri</b> (Saccharum	
3	officinarum).	
Puroderm-G syrup	Neem (Azadirachta indica), Guduchi (Tinospora	Supports Blood Purification
Turoucrin-G syrup	cordifolia), <b>Manjistha</b> (Rubia cordifolia), <b>Sariva</b>	L 11
	(Hemidesmus indicus), <b>Khadir</b> (Acacia catechu),	Purification).
1 000	Chopchini (Smilax china), Bakuchi (Psoralea	Turrication).
	corylifolia)	
Maha charam Rog		Promotes Vrana Ropana
Har vati	subulatum), <b>Dalchini</b> (Cinnamomum verum),	•
Hai vau	Tejpatra (Cinnamomum tamala), Nagkesar	
	(Mesua ferrea), <b>Guduchi</b> (Tinospora cordifolia),	•
	Haritaki (Terminalia chebula), Vibhitak	
	(Terminalia bellirica), <b>Amalaki</b> (Emblica	`
	( )	
	officinalis), <b>Bhangara</b> (Eclipta alba), <b>Shunthi</b>	
	(Zingiber officinale)	action), helps in <i>Sandhi Shool Nivarana</i> (Joint Pain Relief),
		` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `
		and balances <i>Vatarakta</i> (Gout
	W d' (D' 1' 1 ) D	and Rheumatism)
Cirro Care Capsule	Kutki (Picrorhiza kurroa), Punarnava	Beneficial in Yakrit Vikara
	(Boerhavia diffusa), Makoy (Solanum nigrum),	(liver disorders) by supporting
	Patol (Trichosanthes dioica), Ajwain	Yakrit Shuddhi (liver
	(Trachyspermum ammi), Sounf (Foeniculum	detoxification), enhancing
	vulgare), Pudina (Mentha spicata), Nisoth	Agnideepana (metabolism),
	(Operculina turpethum) Kampillak (Mallotus	and promoting Ama pachana
	philippinensis), Gokhru (Tribulus terrestris),	(toxin elimination) for
	arjuna), Aloe vera, and Rohitak (Tecoma	health.
	undulata)	
	,	improved liver and digestive health.

LIV Balance	Bhumi Amla (Phyllanthus niruri), Punarnava	Supports Yakrit Vikar Shaman
Capsule	(Boerhavia diffusa), <b>Makoy</b> (Solanum nigrum),	(Liver Disorder Relief),
	Mandoor bhasam (iron ash), Guduchi	enhances Annavah Srotas
	(Tinospora cordifolia), <b>Haritaki</b> (Terminalia	Poshana (Nourishment of
	chebula), <b>Bhringraj</b> (Eclipta prostrata), <b>Kasani</b>	Digestive Channels), aids in
	(Cichorium intybus), <b>Dhania</b> (Coriandrum	Yakrit Vriddhi Shaman (Liver
	sativum)	Enlargement Management),
		helps in <i>Medorog Nivarana</i>
		(Obesity Control), supports
		Agnisandhukshana
		(Improvement of Digestive
		Fire), and aids in Pitta
		Ashmari Shaman (Relief from
		Pitta-related Urinary Stones)
KanthSudhar Vati	khairsar (Senegalia catechu), Kapoor	Supports Mukh Pak Shaman
	(Cinnamomum camphora), <b>Supari</b> (Areca	(Oral Ulcer Relief), aids in
	catechu), <b>Jaiphal</b> (Myristica fragrans),	Durgandhata Nivarana (Bad
	Sheetalmirch (Piper cubeba), Elaichi (Amomum	Odor Removal), promotes
and the second	subulatum)	Mukh Rog Shamana (Oral
	patients.	Disease Management), helps
	A CONTRACTOR OF THE STATE OF TH	in <i>Vrana Ropana</i> (Wound
pt 2		Healing), and balances
		Tundikeri Shaman (Cold
		Sensation Relief)

Table 4: Medicine advised after discharge (30/7/23)

Medicine	Dosage with Anupaan
Arogyavati Tablet	2 Tablet BD (Adhobhakta with koshna jala) (After meal
	with Lukewarm water)
LIV-DS Capsule	2 Cap. BD (Adhobhakta with koshna jala)
Divya Shakti powder	Half a teaspoon HS (Nishikala with koshna jala) (At bed
	time with lukewarm water)

Table 5: Follow-up Medicine's (23/8/23) to (15/10/23)

Medicine (23/8/23)	Dosage with Anupaan	Medicine (15/10/23)	Dosage with Anupaan
Arogyavati	1 Tablet BD	Arogya vati Tablet	1 Tablet BD
Tablet	(Adhobhakta with		(Adhobhakta with
	koshna jala)		koshna jala)
<b>GE-LIV Forte</b>	20ml BD (Adhobhakta	<b>GE-LIV Forte syrup</b>	20ml BD (Adhobhakta
syrup	with sam matra koshna		with sam matra koshna
	jala)		jala)
Udar vikar	One teaspoon BD	LIV-DS Capsule	1 Cap. BD (Adhobhakta
Janya Rog	(Adhobhakta with koshna		with koshna jala)
Churan	jala)		
LIV-DS	1 Cap. BD (Adhobhakta	JS-PLATOJEE Cap	1 Cap BD (Adhobhakta
Capsule	with koshna jala)		with koshna jala)
Yakrit Shoth	2 Tablet BD	Amal Pitt Har Powder	One teaspoon BD
Har vati	(Adhobhakta with		(Pragbhakta with koshna
	koshna jala)		jala)

<b>Amal Pitt Har</b>	One teaspoon BD
<b>Powder</b>	(Pragbhakta with koshna
	jala)

**Table 6:Follow-up Medicine's (11/11/23) to (12/1/24)** 

Medicine	Dosage with Anupaan	Medicine	Dosage with Anupaan
(11/11/23)		(12/1/24)	
Arogyavati	2 Tablet BD	Arogyavati Tablet	2 Tablet BD
Tablet	(Adhobhakta with		(Adhobhakta with
	koshna jala)		koshna jala)
Puroderm-G	20ml BD (Adhobhakta	Puroderm-G syrup	15ml TDS (Adhobhakta
syrup	with sam matra koshna	_	with sam matra koshna
	jala)		jala)
JS-PLATOJEE	2 Cap BD (Adhobhakta	JS-PLATOJEE Cap	2 Cap BD (Adhobhakta
Cap	with <i>koshna jala)</i>	_	with koshna jala)
Divya Shakti	Half a teaspoon HS	Kanth Sudhar vati	1 Tablet QID
powder	(Nishikala with koshna		
	jala)		
Maha charma	2 Tablet BD	Sanjeevani capsule	1 Tablet BD
roghar vati	(Adhobhakta with	A CONTROL OF THE PARTY OF THE P	(Adhobhakta with
400	koshna jala)		koshna jala)
10000		GE-LIV Forte syrup	20ml BD (Pragbhakta
			with sama matra koshna
			jala)

**Table 7: Follow-up Medicine's (19/2/24) to (17/3/24)** 

Medicine	Dosage with Anupaan	Medicine	Dosage with Anupaan
(19/2/24)		(17/3/24)	
Arogyavati	2 Tablet BD	Arogyavati Tablet	2 Tablet BD
Tablet	(Adhobhakta with		(Adhobhakta with
	koshna jala)		koshna jala)
Puroderm-G	20ml BD (Pragbhakta	LIV Balance Capsule	1 Cap. BD (Adhobhakta
syrup	with sam matra koshna		with koshna jala)
1986	jala)		100
LIV-DS	1 Cap. BD (Adhobhakta	<b>GE-LIV Forte syrup</b>	20ml BD (Pragbhakta
Capsule	with <i>koshna jala)</i>		with sam matra koshna
			jala)
Sanjeevani	1 Cap. TDS	<b>Amal Pitt Har Powder</b>	One teaspoon BD
capsule	(Adhobhakta with		(Pragbhakta with koshna
	koshna jala)		jala)
Yakrit Shoth	2 Tablet BD	Grahni Har Vati	2 Tablet BD
Har vati	(Adhobhakta with		(Pragbhakta with koshna
	koshna jala)		jala)
Amal Pitt Har	One teaspoon BD		
Powder	(Pragbhakta with koshna		
	jala)		

Table 8: Follow-up Medicine's (16/4/24) to (30/5/24)

Medicine	Dosage with Anupaan	Medicine	Dosage with Anupaan
(16/4/24)	2 osugo winitinopouno	(30/5/24)	2 osugo winizinopumo
Arogya vati	2 Tablet BD	Arogya vati Tablet	2 Tablet BD
Tablet	(Adhobhakta with		(Adhobhakta with
	koshna jala)		koshna jala)
Sama vati	2 Tablet BD	JS-PLATOJEE Cap	2 Cap BD (Adhobhakta
	(Adhobhakta with		with koshna jala)
	koshna jala)		
<b>GE-LIV Forte</b>	20ml BD (Adhobhakta	Divya Shakti powder	Half a teaspoon HS
syrup	with koshna jala)	_	(Nishikala with koshna
			jala)
Blood Purifier	20ml BD (Adhobhakta	Cirro Care Capsule	2 Cap. BD (Adhobhakta
Syrup	with sam matra koshna		with <i>koshna jala)</i>
	jala)		
		Rakt Stambhak Vati	2 Tablet BD
			(Adhobhakta with
			koshna jala)

**Table 9: Follow-up Medicine (18/7/24) to (24/8/24)** 

	vieuicine (16/7/24) (		50.
Medicine	Dosage with	Medicine	Dosage with Anupaan
(18/7/24)	Anupaan	(24/8/24)	
Arogya vati	2 Tablet BD	Arogyavati Tablet	2 Tablet BD (Adhobhakta with
Tablet	(Adhobhakta with	A 20.0	koshna jala)
	koshna jala)		
JS-PLATOJEE	2 Cap BD	<b>GE-LIV Forte syrup</b>	20ml BD (Adhobhakta with sam
Cap	(Adhobhakta with		matra koshna jala)
	koshna jala)	1967	
Syrup Blood	20ml BD	Udar vikar Janya	Half a teaspoon BD (Adhobhakta
Purifier	(Adhobhakta with	Rog Churan	with koshna jala)
	koshna jala)		
LIV DS Capsule	2 Cap. BD	Yakrit Shoth Har	2 Tablet BD (Adhobhakta with
70	(Adhobhakta with	vati	koshna jala)
The state of the s	koshna jala)		
Vish Har Ras	20ml BD	Amal Pitt Har	2 Tablet BD (Adhobhakta with
Syrup	(Adhobhakta with	Powder	koshna jala)
	sama matra	90,0000	Signature Street
	koshna jala)		
Sama vati	2 Tablet BD		
	(Adhobhakta with		
	koshna jala)		

# RESULTS

The patient, a 65-year-old man with chronic liver disease (CLD), hypertension, and coronary artery disease (CAD), reported significant improvement in his general health following the Ayurvedic treatment plan. Over time, there was a notable decrease in the frequency and intensity of symptoms such as weakness, knee pain, fatigue, dyspnea on exertion, pedal edema, gastric issues, generalized itching, and disturbed sleep. These improvements were observed after the implementation of dietary and lifestyle modifications, along with Panchkarma therapy. Following the treatment, the patient's weight decreased from 73 kg to 66 kg.

# Pedal edema Scale -

- 1. (1°: 2mm depression, barely detectable Immediate rebound)
- 2.  $(2^{\circ}: 4mm \text{ deep pit} A \text{ few seconds to rebound})$
- 3.  $(3^{\circ}: 6mm \text{ deep pit} 10 \text{ to } 12 \text{ sec to rebound})$
- 4.  $(4^{\circ}: 8mm \text{ very deep pit} -> 20 \text{ sec to rebound})$
- **Pain Scoring Scale -** (0 No pain & 10 Unimaginable pain)
- Fatigue Scoring Scale (0-10)-
  - 1. 0- No Fatigue
  - 2. 1-3: Mild fatigue
  - 3. 4-6: Moderate fatigue (affects daily functioning)
  - 4. 7-8 Severe fatigue
  - 5. 9-10 Extreme fatigue (disabling, persistent exhaustion)
- **Itching Scoring Scale** (0 No itch & 10 Worst itch)
- **Sleep Scoring Scale -**
  - 1. (0-2: Very bad)
  - 2. (3-4: Bad)
  - 3. (5-6: Disturbed sleep)
  - 4. (7 8: Good 5 to 6 hrs. sleep)
  - 5. (9-10: Very good 7 to 8 hrs. sleep)

Condition	At Admission (24/7/23)	After 7 Days (30/7/23)	
Generalized weakness	4/10	Relief (0/10)	
Fatigue	5/10	Relief (0/10)	
Dyspnoea on exertion	3/10	Relief (0/10)	
Pedal oedema	2 <sup>0</sup>	Relief (0/10)	
Gastric issues	4/10	Relief (0/10)	
Itching over body	6/10	Relief (0/10)	
Pain in knee	3/10	Relief (0/10)	
Disturbed sleep	4/10	Relief (7/10)	

Table 10: Comparison of Fibro Scan before and after treatment

Parameter	Findings Values	Normal Range		
	24/07/2023			
CAP (dB/m)	261	< 238 dB/m (No steatosis)		
E (kPa)	18.2	< 6.0 kPa (Normal liver stiffness)		
	30/05/2024			

CAP (dB/m)	223	< 238 dB/m (No steatosis)		
E (kPa)	14.3	< 6.0 kPa (Normal liver stiffness)		

The Fibro Scan results show changes in CAP (Controlled Attenuation Parameter) and liver stiffness (E[kPa]) over time, indicating the liver's response to treatment. CAP, which reflects liver fat content, decreased from 261 to 223 by May, 2024 suggesting improvement. Liver stiffness (E[kPa]), a measure of fibrosis, decreased from 18.2 to 14.3 indicating a reduction in liver fibrosis and potential treatment effectiveness.



# **DISCUSSION**

In Ayurveda, eight types of Udar Roga are mentioned out of which Yakrit Udar represent liver disorder (Yakrit Vikara) arise mainly from the vitiation of *Pitta dosha*, especially *Ranjaka Pitta* (responsible for blood coloration and metabolism). [21] Key causative factors (*Nidana*) include excessive intake of sour, spicy, oily, and heavy foods consumption of alcohol (Madya), incompatible food combinations (Viruddha Ahara) and poor lifestyle practices like daytime sleep (*Divaswapna*), stress, and late night. These habits disturb *Agni* (digestive fire), leading to the formation of Ama (metabolic toxins), which accumulates in the Yakrit (liver). This disrupts Rasa (plasma) and Rakta Dhatu (blood), causing improper blood formation and liver dysfunction. The involved channels (Srotas) are Raktavaha Srotas (blood channels) and Annavaha Srotas (digestive channels), where obstruction (Srotorodha) leads to signs like jaundice (Kamala), chronic hepatitis (Halimaka), and liver cirrhosis (Kumbha Kamala). The disease progresses from localized Pitta aggravation to systemic involvement, impairing both Jatharagni (digestive fire) and Dhatvagni (tissue metabolism). Thus, the Ayurvedic pathogenesis (Samprapti) of liver disorders involves Pitta imbalance, Ama formation, Dhatu dushti (tissue vitiation), and Srotas blockage culminating in Yakrit Vikara. Fibro Scan results showed a decrease in CAP from 261 to 223 by May 2024, indicating initial fat reduction. Liver stiffness (E[kPa]) declined from 18.2 to 14.3 suggesting fibrosis reduction. These changes reflect the liver's response to treatment, showing initial progress with minor fluctuations. Matra Basti (including Punarnava and Brahmi oil) balanced Vata dosha by promoting intestinal lubrication, facilitating bowel movements, and allowing systemic absorption through colon. It supported the cleansing of liver by enhancing Agni and aiding in the elimination of Ama. Improved peripheral blood flow, decreased inflammation, and lymphatic drainage are all benefits of *Udar Lepam*, an external abdominal paste treatment. By soothing the muscles and nerves in the abdomen, improving digestion, and reducing bloating and

fluid retention, its skin absorption enables detoxification on a deeper level. Applying *Udar Basti* (including *Punarnava* oil) externally to the abdomen enhances lymphatic drainage, blood circulation, and digestive motility. It supports hepatic and renal processes indirectly by calming the digestive tract, controlling *Vata*, and aiding in the removal of excess fluid and pollutants.

Table 11. Therapeutic effects according to the Ras panchaka of the ingredients

Ayurvedic Herbs (Botanical Name)	Included Formulations	Rasa (Taste)	Guna (Qualities)	Virya (Potency)	Vipaka (Post- digestive Taste)	Prabhava (Unique Action)	Key Therapeutic Actions
Amalaki (Emblica officinalis)	Amal Pitt Har Powder, Arogya Vati, GE-LIV Forte Syrup, LIV- DS Capsule	Sweet, Bitter, Pungent	Light, Dry	Cooling	Sweet	Rasayana, Lekhana	Rejuvenative, <i>Pitta</i> -balancing, liver detoxification, <i>Agni deepana</i> , immunity enhancement
Guduchi (Tinospora cordifolia)	Udar Vikar Janya Rog Churan, Maha Charma Roghar Vati	Bitter, Pungent	Light, Unctuous	Hot	Sweet	Tridosha- shamaka	Immunomodulatory, antipyretic, blood detoxifier, supports liver function
Punarnava (Boerhavia diffusa)	Yakrit Shoth Har Vati, GE- LIV Forte Syrup, LIV Balance Capsule	Bitter, Pungent	Light, Dry	Hot	Pungent	Mutral, Shothahara	Diuretic, anti- inflammatory, reduces edema, supports liver and kidney health
Haritaki (Terminalia chebula)	Arogya Vati, Maha Charma Roghar Vati	Pungent, Bitter, Sweet	Light, Dry	Hot	Sweet	Anulomana	Laxative, digestive regulator, detoxification, enhances liver and gut health
Neem (Azadirachta indica)	Blood Purifier, Vish Har Ras Syrup, Puroderm-G Syrup	Bitter, Astringent	Dry, Sharp	Hot	Pungent	Krimi- Nashaka, Rakta- Shodhaka	Antimicrobial, anti- inflammatory, blood purifier, manages skin and systemic infections

# NEED FOR FURTHER RESEARCH

- 1. **Lack of Clinical Evidence:** More robust clinical trials are needed to validate the efficacy of *Ayurvedic* formulations in chronic liver disease.
- 2. **Standardization Issues:** Herbal formulations require standardization to ensure safety, potency, and consistency.
- 3. **Mechanism of Action:** Scientific studies are needed to elucidate how key herbs like *Guduchi* and *Punarnava* exert hepatoprotective effects.
- 4. **Integration with Modern Medicine:** Research is required on combining *Ayurvedic* and allopathic treatments for better liver disease management.
- 5. **Long-Term Safety:** The long-term safety and possible herb-drug interactions of *Ayurvedic* treatments must be evaluated.

#### CONCLUSION

A 65-year-old male patient with Chronic Liver Disease (CLD), Hypertension, and Coronary Artery Disease (CAD) presented with classical symptoms of Yakrit Vikara. Following just 7 days of Ayurvedic treatment, significant clinical improvement was observed across all parameters. Symptom scores showed marked reduction: generalized weakness improved from 4/10 to 0/10, fatigue from 5/10 to 0/10, dyspnea on exertion from 3/10 to 0/10, itching from 6/10 to 0/10, and disturbed sleep improved from 4/10 to 7/10. Additionally, pedal edema reduced from Grade 2° to 0, and other associated complaints such as gastric discomfort and joint pain resolved completely. These outcomes reflect the effectiveness of the integrative Ayurvedic intervention in delivering rapid and comprehensive symptomatic relief in a patient with multiple comorbidities. Vital signs were stable throughout treatment, though mild elevations in blood pressure and fatigue were noted initially. Diagnostic evaluation via FibroScan showed a CAP score (reflecting hepatic steatosis) initially at 261 to 223 over the course, indicating fat reduction. Liver stiffness (E[kPa]) 18.2 dropped to 14.3, suggesting a marked improvement in fibrosis and overall liver function. Ayurvedic management focused on correcting Pitta Dushti, Agni Mandya, and Ama accumulation, using Panchkarma therapies like Matra Basti, Udar Lepam, Shirodhara, and Udar Basti alongside potent formulations including Yakrit Shoth Har Vati, Amal Pitt Har Powder, and LIV-DS Capsule. Ayurvedic Herbs such as Amalaki, Guduchi, Punarnava, Haritaki, and Neem supported Raktashodhana, Agni Deepana, and Yakrit Rasayana, reflecting classical Ayurvedic principles.

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