

# Rapid Healing Of Liver Health Along With Preventing It from Converting Into Acute To Chronic Liver Disease by Ayurvedic Management in the Viewpoint of Yakrit Vikara: A CASE STUDY

## ABSTRACT:

Nowadays liver disorders are being common because of unhealthy and sedentary lifestyle, stress factors, alcohol consumption etc. Eating of spicy food, oily and sour tasty food, food of hot potency or that type of lifestyle which vitiates *Raktadhatu* (Blood) are the main etiological factors for liver disease which termed as *Yakrit vikara* in *Ayurveda* because *Yakrit* is a store house of blood. Vitiation of *raktadhatu* causes damage to liver and vice versa. This case is regarding a male patient of 49 year old who came to the Jeena Sikho Lifecare Limited Hospital, Kota, Rajasthan on 22/09/2023. He was having symptoms of liver disease like low appetite, vomiting, bloating etc. He had come with hematological report of LFT (Liver Function test). This report showed increased parameters of LFT like SGOT, SGPT, Bilirubin and Globulin. These parameters elevate in various health issues including liver cell harm. After doing all examination he underwent *ayurvedic* management along with following entire regimen and DIP (Discipline and Intelligence) diet plan. This *ayurvedic* management cures the disease rapidly just within 16 to 28 days of treatment.

**Key words:** Liver disorders, *Yakrit vikar*, *Rakta dhatu*, Vomiting, LFT, Liver cell harm, DIP diet.

## INTRODUCTION:

Liver is a spongy organ that locates in upper right quadrant of the abdomen just beneath the rib cage. Liver disease can be defined as any state that harms the liver and prevents it from functioning healthy. Etiology may include viruses, alcohol, obesity, liver harming medicines etc. Liver actively participates in digestion, metabolism and detoxification and is more prone to injuries. Over the time, conditions that damage the liver can lead to chronic conditions like cirrhosis, cancers etc which can lead to liver failure, a life threatening condition. However early diagnosis and treatment may give the time to heal the injured liver.

In *ayurveda* *Yakrit vikara*'s can be correlated with liver disease. An extensive description of hepatobiliary disorders are found in *Ayurvedic* classics. The distension of abdomen (*Udara vriddhi*) caused by the functional derangement of liver is known as *Yakrddalyudara* in *Ayurveda*. This disease has been described in the chapter of *Udara Roga* in *Ayurvedic* classics<sup>[1]</sup>. *Acharya Sushruta* termed *Yakrita* as *Raktashaya*<sup>[2]</sup>. *Rakta* means blood and *Aashaya* means store house or bladder. It means that an organ which stores the blood. Also *yakrit* is a *moolsthan* (root place) of *Raktavaha srotas*<sup>[3,4]</sup>. It means *Raktavaha Srotodushti* causes *dushti* of its *moolsthan yakrit* and vice versa. *Raktavaha srotodushti lakshan* (Symptoms) includes *Kushta* (Leprosy), *Pleehavridhi* (Splenomegaly), *Kamala* (Jaundice), *Vyanga* (Melasma), *Indralupta* (Alopecia), *Vidradhi* (Abscess) etc<sup>[5]</sup>. In these all diseases vitiation of blood occurs. *Rakta dhatu*

*dushti* causes *dushti* of *Yakrit* and again *yakrit dushti* causes *dushti* of *rakta dhatu*. *Yakrit* is also *sthan* (place) of *Ranjak pitta*<sup>[6]</sup>. So there is *pitta dushti* also found in *Yakrit vikara*. This ongoing case is of a male patient aging 49 years who visited to hospital had complains of liver disease like nausea, vomiting, burping, vertigo, low appetite and chronic constipation since many days. Diagnostic approach of this case was included *ayurvedic* criteria of examination and parameters of Liver Function Test (LFT). After treatment patient get relief by all the symptoms and all elevated LFT parameters showed reversal to normal just within 16 to 28 days of *ayurvedic* treatment.

## CASE REPORT:

Current case study is of a 49 year old male patient who had visited to the JEENA SIKHO LIFECARE LIMITED HOSPITAL, KOTA, RAJASTHAN on 22/09/2023. He was having symptoms of liver disease as given in table number 1. He had come with hematological report of LFT (Liver Function test). That report showed elevated values of LFT as shown in table no. 2.

**Table no. 1 Symptoms of patient**

Complains of	Since when
Indigestion, bloating, burping	– Since July 2023,
Vomiting, vertigo, headache–	Since August 2023
Abdomen pain	– September 2023
Chronic constipation	– Since 2 years

**Table no. 2 Investigation reports**

Particulars	Elevated values- 13/09/2023	Normal
SGOT	227.3U/L	Up to 37 U/L
SGPT	168.0 U/L	41 U/L
Globulin	3.4 gm%	2.5 to 3.0 gm%
Total Bilirubin	5.38 mg%	0.2 to 1 mg%
Direct Bilirubin	2.47 mg%	0.0 to 0.25 mg%

After observing symptoms and LFT values his general examination was did as in table no. 3. According to *ayurvedic* criteria his *Dashavidha parikshan* (10 fold examination) and *Ashtavidha parikshan* (8 fold examination) was also did as shown in table no 4& 5 respectively for the diagnosis of disease. Then he was diagnosed as *Yakrit vikara* with *Yakrit shotha* and treatment gets started.

**Table no. 3 General examination**

Parameters	Remarks
Height	5.10 ft
Weight	80 kg
BP	130/75 mm Hg
Pulse	70/min
Appetite	Low

Table no. 4Dashavidha parikshan

Parameters	Remarks
<b>Prakriti</b> (Physical constitution)	<i>Vata Kapha</i>
<b>Vikriti</b> (pathological constitution)	<i>Vata pitta &amp; Rakta dushti</i>
<b>Sara</b> (excellence of tissues)	<i>Mamsasara</i>
<b>Samhanan</b> (body compactness)	<i>Madhyam(average)</i>
<b>Praman</b> (measurements of body parts)	<i>Madhyam (average)</i>
<b>Satmya</b> (homologation)	<i>Madhyam(average)</i>
<b>Sattva</b> (mental constitution)	<i>Hina (Low)</i>
<b>Aaharshakti</b> (capacity of ingesting, digesting & assimilating the food)	<i>Madhyam(average)</i>
<b>Vyayamshakti</b> (capacity to exercise)	<i>Hina (Low)</i>
<b>Vaya</b> (age)	<i>Madhyam (middle age)</i>

Table no. 5Ashtavidha Parikshan

Parameter	Remark
<b>Nadi</b>	<i>Vata paittik</i>
<b>Mala</b>	<i>Baddhata (constipated)</i>
<b>Mutra</b> (urine)	<i>Ishatpita(Normal)</i>
<b>Jivha</b> (tongue)	<i>Sama (White coating)</i>
<b>Shabd</b> (pronunciation)	<i>Spashta (clear)</i>
<b>Sparsh</b>	<i>Anushna sheeta</i>

<i>Drika</i>	<i>Prakrita</i>
<i>Aakriti (physique)</i>	<i>Prakrita</i>

#### AYURVEDIC MANAGEMENT:

Following formulations were prescribed from day one and told to take all the medicines with lukewarm water. Similarly he was suggested for daily regimen, DIP diet with following of *Yoga asanas* and *pranayam*.

**Table no. 6 Prescribed formulations**

Course number & date	Formulation	Dose and time
<b>Course 1</b> <b>22/09/2023</b>	Cap. Liv DS	1 Cap BD after food ( <i>Adhobhukte</i> with <i>Koshna jala</i> )
	Yakrit shothahar vati	1 Tab BD after food ( <i>Adhobhukte</i> with <i>Koshna jala</i> )
	Tab. Amlapitta nashak	1 Cap BD ( <i>Pragbhukte</i> with <i>Koshna jala</i> )
	Cap. Lipi	1 Cap BD ( <i>Adhobhukte</i> with <i>Koshna jala</i> )
	Syrup liver tonic	7.5 ml syrup BD ( <i>Adhobhukte</i> with <i>samamatra Koshna jala</i> )
<b>20/10/2023</b> <b>Course 2</b>	Cap. Liv DS	1 Cap BD after food ( <i>Adhobhukte</i> with <i>Koshna jala</i> )
	Yakrit shothahar vati	1 Tab BD after food ( <i>Adhobhukte</i> with <i>Koshna jala</i> )
	Tab. Amlapitta nashak	1 Tab BD ( <i>Pragbhukte</i> with <i>Koshna jala</i> )
	Cap. Lipi	1 Tab BD ( <i>Adhobhukte</i> with <i>Koshna jala</i> )
	Syrup liver tonic	7.5 ml syrup BD ( <i>Adhobhukte</i> with <i>SamamatraKoshna jala</i> )

#### Daily regimens (*Pathya Aahar-Vihar*):

He was advised to follow daily regimens. He was also told to those things not to follow.

1. Exercise (*Asana*) regularly and do meditation (*Pranayam*) at every morning.
2. Wake up and go to bed early.
3. Whatever to eat should have after sunrise and before sunset.
4. Follow appetite time and eat whenever you feel hungry means avoid starvation to prevent acidity.
5. Eat fruits and salad daily.
6. Avoid junk food, fast food, packaged food, and dairy and bakery products.
7. Avoid day sleeping and don't wake up at night.
8. Don't have spicy, oily, hot potency and only liquid food.

9. Avoid extreme sunlight and fire exposure.

**DIP (Discipline and Intelligent) diet:** Patient was recommended to follow DIP diet plan. This diet plan is clinically proved and showed reversal in the lifestyle disorders like diabetes, hypertension, thyroid, liver diseases etc.<sup>[7]</sup>

**Fruits:** He was told to have all type of fruits especially citrus fruits including oranges, pomegranate, berries, apple etc. Amount of fruits was based on DIP diet formula as given below.

**Salad:** Salad like cucumber, tomato, beetroot, cabbage, carrot etc. was told for having before lunch and dinner as PLATE 1. There after he had to have food which includes millet diet as PLATE 2. Formula of fruits and salad along with calculated amount for this patient of weight 80kg is given below in table no. 7.

**Table no. 7 showing formula for quantity of fruit and salad as per DIP diet**

To have	Formula	Amount advised to patient
<b>Fruits</b>	Patient's weight in grams $\times 10 =$ fruits in grams	800 gm
<b>Salad</b>	Patient's weight in grams $\times 5 =$ salad in grams	400 gm

**Lunch and dinner:** It includes mainly millet diet. He suggested eating fresh and homemade food. Lunch and dinner should include barley or other millet roti (bread), *Mudga yusha* (Green gram soup), rice and all lentil and fruit vegetables. But vegetables should be prepared without spices as they have hot potency.

**Yoga Asanas and Pranayam's were to do:**

***Yogasana's*<sup>[8]</sup>–**

*Dhanurasan* (Bow pose):It stretches the abdominal region and compresses the liver. So detoxification process of liver gets stimulated.Increases blood circulation and boosts digestion.

*Gomukhasana* (Cow face pose):This helpsthe liver to energize. It increases blood circulation by getting the oxygen.

***Pranayam's* –**

*Apan mudra*(Energy *mudra*)<sup>[9]</sup>: provides energy to gall bladder and liver by elimination waste products and toxins.

*Kapalbhati* (skull shining breath)<sup>[8]</sup>: Targets overall body. It improves liver function and reduces risk of liver cirrhosis.

**RESULTS:**

*Ayurveda* plays a master role in the fast and harmless revival of damaged liver. This case of a male patient was diagnosed as *Yakrit shotha* from the presenting features (constitutional symptoms) and investigation. The patient was assessed for improvement in hematological parameters, signs and symptoms. After just 28 days, noteworthy improvement was observed in signs and symptoms as well as all altered hematological parameters were within normal limits just after 16 days. That's why; presenting this case is an evidence to demonstrate the efficiency of *Ayurvedic* treatment in managing hepatic disorders quickly.

On first day of visit (22/09/2023) patient had chief complains of liver disease like indigestion, bloating, burping, vomiting, vertigo, headache, abdominal pain and chronic constipation. After starting *ayurvedic* treatment, in first follow up (20/10/2023) he had 85% improvement in symptoms. Then for complete getting rid of these symptoms he again underwent for 2<sup>nd</sup> course of treatment. Beyond this outstanding results of this case are that, his LFT parameters get reversed to normal just after 16 days of *ayurvedic* treatment. He did LFT on 13/09/2023 but he started treatment for this on 22/09/2023. After starting of treatment he again go for LFT investigation on 08/10/2023. But to get complete relief in symptoms he continued his 2<sup>nd</sup> course of *ayurvedic* treatment till reversal to normal health and it took place after completing the course. Following table shows elevated LFT values on the first day treatment (22/09/2023) which was already investigated on 13/09/2023 and within normal limits LFT values after treatment i.e. on the 16<sup>th</sup> day of treatment.

**Table no. 8 LFT values (Before and After treatment)**

Particulars	Before treatment (1 <sup>st</sup> day)	After treatment (16 <sup>th</sup> day)
SGOT	227.3U/L	21 U/L
SGPT	168.0 U/L	19 U/L
Globulin	3.4 gm%	3.20 gm%
Total Bilirubin	5.38 mg%	0.75 mg%
Direct Bilirubin	2.47 mg%	0.20 mg%

End result of this case is patient get relief from all the symptoms and hematological parameters for LFT also comes within normal limits after *ayurvedic* management of the liver disease.

## DISCUSSION:

The liver is the largest organ in the body, contributing about 2 percent of the total body weight. Because the liver is an expandable organ, large quantities of blood can be stored in its blood vessels<sup>[10]</sup>. Same thing is mentioned by *Acharya Sushruta* that *Yakrit* is termed as *Raktashay* i.e. blood reservoir. Its normal blood volume, including both that in the hepatic veins and that in the hepatic sinuses, is about 450 milliliters, or almost 10 percent of the body's total blood volume. So any pathogenic changes in liver cells lead to pathogenic changes in blood and vice versa<sup>[10]</sup>. According to *ayurvedic* perspective also

*Raktavaha srotodushti* causes *dushti* (vitiation) in its *moolsthan* (Rootplace) and vice versa. *Acharya Sushruta* mentioned 3 *moolsthana's* of *raktavaha srotasa* and they are *Yakrit* (Liver), *Pleeha* (Spleen) and *Raktavahidhamanya* (portal blood vessels)<sup>[4]</sup>. Along with *rakta dhatu* (blood) *yakrit* is a place of *Ranjaka pitta*. It can be correlated with bile which is a fluid that is made and released by the liver.

रक्तवहेद्वे, तयोर्मूलं यक्रुत्सीहानौ रक्तवाहिन्यश्च धमन्यः ॥ (सु. शा. ९/१६)

This case of a male patient (49 years) who visited to the Jeena Sikho Lifecare Limited Hospital, Kota, Rajasthan on 22/09/2023 was about liver disease. He had symptoms like indigestion, bloating, burping, vomiting, vertigo, headache, abdominal pain and chronic constipation. His LFT parameters investigated on 13/09/2023 showed increased values of SGOT, SGPT, Globulin, Total and direct bilirubin. Then all examination and history had been taken on 1<sup>st</sup> day of visit. He had no any medical or family history. Also he had not alcoholic. But his unwholesome lifestyle may lead to these symptoms. His lifestyle was like addiction of milk tea, spicy and oily food which is heavy to digest. Addiction of milk tea is itself a toxin. He used to un follow eating time. These all etiological factors lead to above symptoms and changes in LFT parameters. From all the findings this case is diagnosed as liver disease with inflammation (*Yakrit vikar* with *yakrit shoth*).

#### **Elevated LFT parameters:**

1. **SGOT:** Also named as ALT i.e. Serum alanine transaminase i. e. It is a mitochondrial enzyme present in liver, kidney and heart tissues.<sup>[11]</sup>
2. **SGPT:** Also known as AST i.e. Serum Asparate transaminase It is as Cytosolic enzyme primarily present in the liver.<sup>[11]</sup>

Transaminase estimations are useful in the early diagnosis of disease. Serum levels of SGOT and SGPT are increased on damage to the tissues producing them.

3. **Bilirubin:** A greenish yellow pigment of liver excreted in the bile and eliminated in the feces. This is a major end product of hemoglobin degradation. By damage to the hepatic cells (which occurs in hepatitis) the rate of bilirubin formation is normal, but the bilirubin formed cannot pass from the blood into the intestines. So bilirubin level found elevated in blood test.<sup>[10]</sup>
4. **Globulin:** Liver is a major producer of globulins, a group of proteins in the blood that are important for liver and kidney functions. These are acute phase reactant proteins. The blood levels of these plasma proteins are decreased in extensive liver damage. Globulins increase rapidly after tissue injury or inflammation.<sup>[11]</sup>

LFT parameters	Possible causes of elevation <sup>[10,11]</sup>
SGOT (serum glutamic oxaloacetic	Tissue injury to liver, heart, skeletal muscle and kidney. In acute necrosis/ ischemia, myocardial infraction

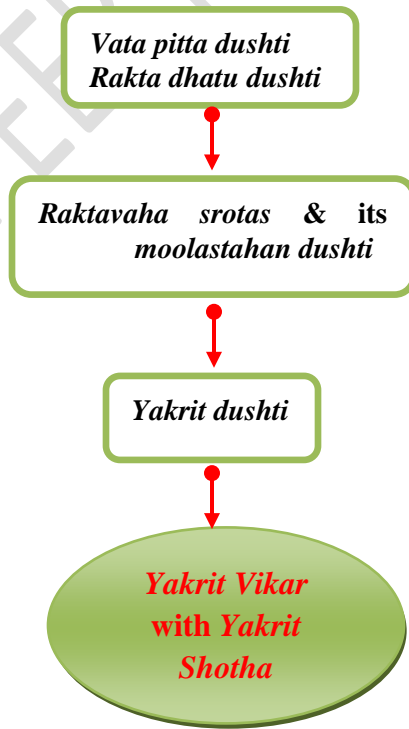


transaminase)	
<b>SGPT (Serum glutamic pyruvic transaminase)</b>	Fairly specific for liver cell injury
<b>Bilirubin</b>	In diseases of hepatocytes, obstruction to biliary excretion into the duodenum, in haemolysis, and defects of hepatic uptake and conjugation of bilirubin pigment such as in Gilbert's disease
<b>Globulin</b>	Chronic inflammatory disorders such as in cirrhosis and chronic hepatitis, renal disorders

As seen in case report patient had no any other medical history of heart disease/ kidney disease. He found symptoms of liver dysfunction like nausea, bloating, low appetite etc. in addition his hematological investigation also revealed elevation in LFT values. As mentioned in above table SGPT value increases specifically in liver cell injury. But he had no any viral infection or he was not alcoholic. So there is no possibility of Viral Hepatitis or alcoholic liver syndrome. He had not shown symptoms of jaundice. So the case was diagnosed as liver disease with inflammation of liver (*Yakrit vikar with Yakrit shotha*).

***Dosh–dushya included in Yakrit vikar with Yakrit shotha:***

After the detail study *Dosh-dushya* means pathogenic factors responsible in this case are as follows –





### Ayurvedic management:

After all examination he opted for the *Ayurvedic* treatment for better cure and support.

In material and method pattern of *ayurvedic* treatment which was suggested to the patient is given. But according to *ayurveda* in each disorder first step towards treatment is *Nidan-parivarjan* that is avoidance of etiological factors which helps to prevent newly pathogenesis of the disease <sup>[12]</sup>. So patient was told to skip his etiological factors like spicy and hot food, missing of meals, late night waking up etc. After this *ayurvedic* management was included DIP diet, practicing *Yogasana*'s and *Pranayam*, following daily regimen along with *ayurvedic* medicines. DIP diet helps to reverse the disorders caused by unhealthy routine and thereby it improves overall body health. *Yogasana* and *Pranayam* were advised to increase circulation around liver and recovers liver tissues. At last oral *ayurvedic* medicine were suggested as given in table no. 6. Ingredient herbs, their botanical names and indications are given below:

#### 1) Cap. Liv DS

**Ingredients:** *Bhumyamalki* (*Phyllanthus niruri*), *Kasmard* (*Cassia occidentalis*), *Hinsra* (*Capparis sepiaria*), *Punarnava* (*Boerhavia diffusa*), *Guduchi* (*Tinospora cordifolia*), *Kakmachi* (*Solanum nigrum*), *Arjun* (*Terminalia arjuna*), *Zabuk* (*Tamarix gallica*), *Vidang* (*Embelia ribes*), *Chitrak* (*Plumbago zeylanica*), *Kutaki* (*Picrorhiza kurrooa*), *Haritaki* (*Terminalia chebula*), *Bhringraj* (*Eclipta prostrata*)

**Indications:** Liver disease, GIT, GERD, loss of appetite

#### 2) Yakrit shothahar vati

**Ingredients:** *Punarnava* (*Boerhavia diffusa*), *Marich* (*Piper nigrum*), *Pippali* (*Piper nigrum*), *Vidang* (*Embelia ribes*), *Devdaru* (*Cidrus deodara*), *Kushtha* (*Saussurea lappa*), *Haridra* (*Curcuma longa*), *Chitrak* (*Plumbago zeylanica*), *Haritaki* (*Terminalia chebula*), *Bibhitaki* (*Terminalia bellirica*), *Aamalki* (*Emblica officinalis*), *Danti* (*Baliospermum montanum*), *Chavya* (*Piper retrofractum*), *Indrayava* (seeds of *Holarrhena antidysenterica*), *Pippali mula* (root of *Piper longum*), *Musta* (*Cyperus rotundus*), *Krushn jeerak* (*Carum carvi*), *Kayphal*, *Kutaki* (*Picrorhiza kurrooa*), *Trivrutta* (*Operculina turpethum*), *Shunthi* (*Zingiber officinale*), *Karkatshringi* (*Pistacia integerrima*), *Ajmoda* (*Apium graveolens*), *Mandoor bhasma*

**Indications:** Liver dysfunction, spleen disease, anti-inflammatory, renal dysfunction, jaundice, liver failure, diuretic, oedema, anemia

#### 3) Tab. Amlapitta nashak

**Ingredients:** *Yashtimadhu* (*Glycyrrhiza glabra*), *Pudina* (Mint leaves), *Hingu* (*Ferula asfoetida*), *Chitrak* (*Plumbago zeylanica*), *Jeerak* (*Cuminum cyminum*), *Vidang* (*Embelia ribes*), *Ajmoda* (*Apium graveolens*), *Marich* (*Piper nigrum*), *Pippali* (*Piper longum*), *Shunthi* (*Zingiber officinale*), *Aamalki* (*Emblica officinalis*), *Bibhitaki* (*Terminalia bellirica*), *Haritaki* (*Terminalia chebula*), *Shankh bhasma*

**Bhavna dravyas** - *Yashtimadhu* (*Glycerriza glabra*), *Vidang* (*Embelia ribes*), *Marich* (*Piper nigrum*), *Shunthi* (*Zinziber officinale*), *Lavang* (*Syzygium aromaticum*)

**Indications:** Indigestion, acidity, abdominal discomfort, nausea, vomiting

#### 4) Syrup Liver tonic

**Ingredients:** *Rakta Punarnava* (*Boerhaavia diffusa*), *Shweta Punarnava* (*Boerhaavia erecta*), *Bala* (*Sida cordifolia*), *Atibala* (*Abutilon indicum*), *Patha* (*Cissampelos pareira*), *Guduchi* (*Tinospora cordifolia*), *Kakoli* (*Roscoe purpurea*), *Chitrak* (*Plumbago zeylanica*), *Vasa* (*Adathoda vasica*), *Musta* (*Cyperus rotundus*), *Ajmoda* (*Apium graveolens*), *Shunthi* (*Zingiber officinale*), *Maricha* (*Piper nigrum*), *Lavang* (*Syzygium aromaticum*), *Methika* (*Trigonella foenum-graecum*), *Shweta Jeerak* (*Cuminum cyminum*), *Rohitak* (*Tecoma undulate*), *Twaka* (*Cinnamomum zeylanicum*), *Patra* (*Cinnamomum tamala*), *Laghu Ela* (*Elettaria cardamomum*), *Bruhat Ela* (*Amomum subulatum*), *Jatiphala* (*Myristica fragrans*), *Nagkehsar* (*Mesua ferrea*), *Kankol* (*Piper cubeba*), *Yashtimadhu* (*Glycerrhiza glabra*), *Moha* (*Madhuka indica*)

**Indications:** Liver disease, GERD, GIT, loss of appetite, hepatomegaly, hepatitis

#### 5) Capsule Lipi

**Ingredients:** *Arjun* (*Terminalia arjuna*), *Guggulu* (*Commiphora mukul*), *Resin* (*Shorea robusta*), *Haridra* (*Curcuma longa*), *Bhumyamalki*, *Bibhitaki* (*Terminalia bellirica*), *Haritaki* (*Terminalia chebula*), *Aamalki* (*Emblia officinalis*), *Guduchi* (*Tinospora cordifolia*), *Shunthi* (*Zingiber officinalis*), *Maricha* (*Piper nigrum*), *Pippali* (*Piper longum*), *Yashtimadhu* (*Glycerriza glabra*), *Punarnava* (*Boerhaavia diffusa*), *Jatamansi* (*Nordostachys jatamansi*), *Rasona* (*Allium sativum*), *Akik pisthi*, *Mukta pishti*, *Abhrak bhasma*, *Shankha bhasma*

**Indications:** Dyslipidemia, CAD, Lipoma, cyst, PCOD

All above formulations were advised to take with lukewarm water. Doses and time of medicine were mentioned in table no. 6. These combinations were preferred by keeping *dosh-duhsyaghatak* (Pathogenic factors) and LFT parameters in the mind. They perform following functions to reverse the liver disease.

1) **Deepan and Pachana** (appetizer and which boosts digestion): these herbs increase the appetite which lowers in liver disease. Because liver plays a key role in digestion and metabolism which get disturbed after liver tissue injury.

For e.g. *Jeeraka*, *Chitrak*, *Shunthi*, *Rasona*, *Maricha*, *Pippali*, *Hingu*, *Shankha bhasma* etc.

2) **Raktashodhana** (Blood purifier): it pacifies the vitiation of *Rakta dhatu*. As *rakta dhatu dushti* diminishes its *aashay* (Store house) i.e. liver improves. Also it helps to pacify *raktavaha srotodushti*.

For e.g. *Guduchi*, *Manjishta*, *Sariva*, *Vidang*, *Jatamansi*, *Musta*, *Vasa*, etc.

3) **Vata dosha pacifying herbs:** regulation of *vata dosha* is needed as there is no any system or channel in the body which works without *prakrit vata dosha*. As *raktavaha*

*srotas* is also a channel so it need *prakrit vata dosha* for its regulation. *Acharya Sharangdhara* mentioned that without interference of *Vata dosha*, *Kapha* and *Pitta dosha* along with *Mala* (Urine and stool) and *Dhatu* (Blood, fat, adipose tissue, bone etc.) are *pangu* that means handicapped incapable in doing self functions). He compared this with example of wind and rain in the nature. Where wind takes away to the rain, at that place it rains.<sup>[13]</sup>

“पित्तपंगुकफः पंगुपंगवोमलधातवः।  
वायुनायत्रनियन्तेतत्रगच्छन्तिमेधवत्॥”शा. पू.

These herbs and their formulations also cure constipation due to their *Anuloman* property.

For e.g. *Cap Amlapittanashaka*, *Haritaki*, *Methika*, *Jeerak*, *Kutaki* etc.

- 4) **Rasayana karma:** drugs which act as liver tonic. They help to improve liver health, boosts immunity and thereby prevents converting of liver disease from acute to chronic condition.

For eg. Syrup liver tonic from above medicines includes *Yashtimadhu*, *Patha*, *Maticha*, *Bala*, *Jeerak*, *Guduchi*, *Ela* etc.

#### NEED FOR FURTHER STUDY:

Vast study with same cases is necessary to collect verified data. It will be beneficial to all for successful liver disease treatment without causing adverse effects. Also clinical trials in chronic condition of liver diseases with *ayurvedic* intervention are needed to avoid liver transplant procedure for them who are not capable to afford that treatment and who are not able to undergo operative procedure.

#### CONCLUSION:

This case presentation demonstrates that early detection of liver disease and prompt *Ayurvedic* management can restore liver function effectively, as evidenced by both clinical and biochemical improvements. Objective liver function tests revealed a remarkable recovery within 16 days: SGOT decreased from **227.3 U/L to 21 U/L**, SGPT from **168.0 U/L to 19 U/L**, Total Bilirubin from **5.38 mg% to 0.75 mg%**, Direct Bilirubin from **2.47 mg% to 0.20 mg%**, while Globulin levels remained stable (3.4 gm% to 3.20 gm%).

Alongside these biochemical changes, the patient experienced nearly **85% symptomatic relief**—with significant reduction in indigestion, bloating, burping, vomiting, vertigo, headache, abdominal pain, and chronic constipation within the first follow-up. This underscores that *Ayurvedic* treatment not only normalizes pathological parameters but also ensures holistic well-being.

The study further emphasizes that for sustained hepatoprotection, medication should be supported by adherence to daily regimen and lifestyle modifications. Negligence in these aspects

may allow acute conditions to progress into chronic liver disease with serious complications. Therapeutic formulations designed with **Deepan, Pachan, Anulomak, Rakta Shodhan, and Rasayan Karma** proved to be rapid, safe, and highly effective in reversing liver dysfunction and enhancing overall health.

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## INVESTIGATION REPORT:

**Report 1:** Before treatment

**Report 2:** After treatment

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**Report 1:** Before treatment

# Gastrocare Diagnostic Centre

71, Shastri Nagar, Near Alreha College, Kots  
1<sup>st</sup> floor, 20190

Date 13/07/2023  
Reg. No 719

by Dr. GASTRO CARE HOSPITAL ( )  
Age 40 Yrs

## HEMATOLOGY EXAMINATION

ARTICULARS	RESULT	NORMAL VALUE
Prothrombin Time		
Test	15.3 Sec.	±2 Sec. of Control
Control	13.0 Sec.	(Control 11 - 15 Sec.)
INR	1.21	

## BIO-CHEMISTRY EXAMINATION

ARTICULARS	RESULT	NORMAL VALUE
Urea	204.8 U/L	Male < 270.0 U/L, Female < 240.0 U/L
Alkaline Phosphate	227.3 U/L	Upto 37 U/L
SGOT	168.0 U/L	Upto 41 U/L
SGPT	7.2 gm%	6.0 - 7.5 gm%
Total Protein	3.8 gm%	3.5 - 5.0 gm%
Albumin	3.4 gm%	2.5 - 3.0 gm%
Globulin	1.11:1	1.5 : 1 - 3 : 1
A/G Ratio		
Bilirubin		0.2 - 1.0 mg%
Total	5.38 mg%	0.0 - 0.25 mg%
Direct	2.47 mg%	

PATHOLOGIST / TECHNO


... of sensitivity and specificity of individual assay procedures. Isolated laboratory ... and other related investigations

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Report 2: After treatment




**Radha Krishna Critical Care  
& General Hospital** 


**1-C-12, Sheela Choudhary Road, Talwandi, Kota - 324008 (Raj.)**  
Ph. : 0744-2433800, Mob.: 80786-10317

Name: \_\_\_\_\_ Date: 08/10/2021  
Ref. by Dr. \_\_\_\_\_ Reg. No. 1571  
Age: 47 Yrs

**BIO-CHEMISTRY EXAMINATION**

PARTICULARS	RESULT	NORMAL VALUE
Total Cholesterol	200.0 mg%	130 - 250 mg%
HDL Cholesterol	48.0 mg%	35-65 mg%
LDL Cholesterol	134.0 mg%	Upto 150 mg%
VLDL Cholesterol	18.0 mg%	Upto 80 mg%
Triglycerides	50.0 mg%	30 - 150 mg%
Alkaline Phosphate	90.0 U/L	Adult 53 - 128 U/L Child(1-12yr) 54-369 U/L
SGOT	21.0 U/L	Upto 37 U/L
SGPT	19.0 U/L	Upto 41 U/L
Total Protein	7.00 mg%	6.0 - 8.3 mg%
Albumin	3.80 mg%	3.5 - 5.0 mg%
Globulin	3.20 mg%	2.5 - 3.4 mg%
A/G Ratio	1.18:1	1.5 : 1 - 3 : 1
S Bilirubin		
Total	0.75 mg%	0.2 - 1.2 mg%
Direct	0.20 mg%	0.0 - 0.25 mg%
Indirect	0.55 mg%	0.25 - 0.75 mg%

PATHOLOGIST / TECHNOLOGIST  


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