



AYURVEDIC MANAGEMENT OF LIVER CIRRHOSIS WITH PORTAL HYPERTENSION

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ABSTRACT

Liver cirrhosis is one of the leading causes of death worldwide especially if complicated by portal hypertension. A case of Liver cirrhosis with portal hypertension is discussed in this paper. A case of 61 yrs approached with the complaints of Abdominal distention, Bilateral lower limb edema, difficulty in breathing, loss of appetite and generalized weakness with USG impression of Changes of diffuse liver parenchymal disease, cirrhosis with portal hypertension. This chronic condition is co-related to the classical disease entity *Yakratulyodara* in *Ayurveda*. After describing the symptomatology of *Plihodara* it has been mentioned that the causes, symptoms and treatment of *Yakratulyodara* are same as that of *Plihodara*. Based on the treatment guidelines mentioned in classical texts, oral administration of single and compound herbal preparations are planned with appropriate dietary regimens. The treatment was continued for 4 months, and outcome was assessed. After the *Ayurvedic* intervention, there was a complete remission of symptoms with USG report of normal echotexture of Liver with no cirrhotic changes.

Key words: Liver cirrhosis, non-alcoholic cirrhosis, portal hypertension, *Yakriddalyudara*, hepatoprotective drugs

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INTRODUCTION

Cirrhosis is a condition that is defined histopathologically and has a variety of clinical manifestations and complications, some of which can be life threatening. Liver cirrhosis is one of the leading causes of death worldwide especially if complicated by portal hypertension. In cirrhosis chronic alcoholic use can produce fibrosis and there is disruption of architecture of liver and leads to liver cirrhosis, other than alcohol there are many causes for liver cirrhosis which include nonalcoholic steatohepatitis, autoimmune hepatitis, biliary cirrhosis, cardiac cirrhosis, Wilson's disease, cirrhosis due to alpha antitrypsin deficiency, cystic fibrosis etc. The clinical course of patients with advanced cirrhosis is often complicated by a number of important sequelae that can occur regardless of the underlying cause of the liver disease. These include portal hypertension and its consequences of gastro esophageal variceal hemorrhage, splenomegaly, ascites, hepatic encephalopathy, spontaneous bacterial peritonitis (SBP), hepatorenal syndrome, and hepatocellular carcinoma^[1]. Portal hypertension is defined as the elevation of the hepatic venous pressure gradient (HVPG) to > 10 mmHg and cirrhosis is the most common cause of portal hypertension^[2]. This chronic

condition is co-related to the classical disease entity *Yakratulyodara* in *Ayurveda*. After describing the Symptomatology of *Plihodara* it has been mentioned that the causes, Symptoms and treatment of *Yakratulyodara* are same as that of *Plihodara*. In *Sushruta Samhita*, we get a specific nomenclature as *Yakratulyodara* and brief description about the disease^[3]. But in *Bhavaprakasha* a special chapter has been dedicated to liver diseases i.e. 33rd chapter- "*Plihayakritadhikar*" The common Symptoms of *Yakratulyodara* are *Dourbalya, Arochaka, Varcho-mutragraha, Pipasa, Kasa, Shwasa, Mridu Jwara, Anaha, Agnisada* etc^[4]. Hepatomegaly (*Yaktritapi Dakshina Parshwasya Kuryata*) may occur as the result of a general enlargement of the liver. Ascites (*Jalodara- Vardhayeta Tadevambu Swasthanat Udaraya Tou*) is the presence of free fluid in the peritoneal cavity. Small amounts of fluid in the peritoneal cavity is asymptomatic, but with larger accumulation of fluid there is abdominal distention, fullness in the flanks etc.

In Conventional medicine the expensive management involves high costs for health care approach and liver transplantation is the last option, but it is highly unaffordable for patients. Whereas implementation of

Ayurvedic treatment works like a “magic bullet” in patients with critical condition. Hence here an attempt has been made to share the efficacy of *Ayurvedic* treatment in condition of liver cirrhosis complicated with portal hypertension.

CASE REPORT

A 61yrs male patient residing in Gujarat visited the OPD of Kashiba Ayurvedic hospital, Savli. He was having following chief complaints- abdominal distention, bilateral lower limb edema, difficulty in breathing, loss of appetite and generalized weakness in the past 15 days. Patient also complained that he had episode of hematemesis, with no h/o HTN/DM/Thyroid disorders/RTA. No family history is present related to this disease.

On history taking he has abdominal distention with exertional dyspnea. No relief was found with conventional medicine and gradually his condition was worsened. USG abdomen showed changes of diffuse liver parenchymal disease, cirrhosis with portal hypertension. Patient is non-alcoholic and no other specific history regarding diet and habits.

General Examination:

PR- 64bpm

BP- 96/60 mm Hg

RR- 22cpm

Pallor- Present

Icterus- Absent

Edema- B/L Pedal edema present.

Systemic examination:

Respiratory system - Crepitations present at lung base.

Cardiovascular system - NAD

Central nervous system- NAD. Conscious well oriented with time and place.

Abdominal examination - Abdomen distended and mildly painful, fluid thrill present, shifting dullness present and skin over abdomen is glossy.

Asthavidha Pariksha

Nadi - 64 bpm

Mala – *Vibandha, Gadha Mala*

Mutra - *Ksheena*

Jihva - *lipta*

Shabda – *Ksheena Svara*

Sparsha - *Anushnashita*

Drik - *Prakrit*

Akriti - *Krishna*

INVESTIGATION

USG Abdomen (21/08/2018):

Impression: Changes of diffuse liver parenchymal disease, cirrhosis with portal hypertension.

Samprapti Ghataka:

Dosha: Prana Vata, Samana Vata, Apana Vata,

Pachaka Pitta,

Dushya: Rakta, Mamsa

Agni: Jatharagni

Aam: Jatharagnimandhyajanya

Srotasa: Raktavaha, Svedavaha and Udakavaha

Srotodusthi Prakara: Sanga

Vyadhi Udbhavasthana: Amashaya

Vyakta Sthana- Yakrita and Udara

Sancharasthana: Tvakamamsantara Agamya

Vyadhi Svabhava: Chirakari

Treatment Given:

1. Tab *Arogyavardhini Rasa*, 1tid (after food)
2. *Phalatrikadi Kvatha*, 40ml twice (before food)
3. *Sudarshana Vati*, 2 tid (before food)
4. *Guduchi Churna-1gms*
Kiratatika Churna-1gms
Bhumyalaki Churna-1gms
Punarnava Churna-1gms

Sudarshana Churna-1gms. The whole mixture 1tsf tid before food.

5. Syrup Liv 52 DS 10ml thrice (before food)

The above-mentioned medicines were continued for 3 months. Thereafter only no. 2 and 5 is continued twice per day till 10th January 2019.

Results:

Ascites and lower limb edema were completely resolved. Patient has shown improvement in doing his normal routine, weakness and dyspnea has reduced. After a regular follow-up of 4 months, it was found that there were no cirrhotic changes in liver echotexture.

Table 1- Effect of therapy on signs and symptoms

Signs and symptoms	BT	AT
Abdominal distention	++	Absent
Lower limb edema	++	Absent
Difficulty in breathing	+	Absent
Loss of appetite	++	Absent
Generalized weakness	++	Absent
Hematemesis	+	Absent
Fluid thrill	++	Absent
Shifting dullness	++	Absent

Table 2- Effect of therapy on Liver Function Test (15/08/2018)

LFT	BT (19/08/2018)	AT (10/01/2019)
Total Bilirubin	1.18 mg/dl	1.06 mg/dl
Direct Bilirubin	0.38 mg/dl	0.24 mg/dl
Indirect Bilirubin	0.8 mg/dl	0.82 mg/dl
S.G.P.T (ALT)	19.82 IU/L	20.34 IU/L
S.G.O.T (AST)	36.22 IU/L	28.26 IU/L
Alkaline Phosphatase	113.80 IU/L	89.12 IU/L
Total protein	5.82 gm/dl	6.5 gm/dl
S. Albumin	2.79 gm/dl	3.6 gm/dl
Globulin	3.03 gm/dl	2.9 gm/dl

Table 3- Effect of therapy on Sonography

USG	BT (21/08/2018)	AT (16/01/2019)
USG whole abdomen	<p>Liver shows shrunken right lobe with coarse parenchymal echogenicity. No evidence of any focal lesion. Portal vein appears dilated, 12 mm. No evidence of dilatation of intrahepatic biliary radicles.</p> <p>Impression: Changes of diffuse liver parenchymal disease, cirrhosis with portal hypertension.</p>	<p>Liver is normal in size and shows normal homogenous echotexture. No intrahepatic mass or dilatation of IHR/CBD seen. Portal vein normal.</p> <p>Impression: Mild splenomegaly Liver/gall bladder normal, Both kidneys, Urinary bladder-normal.</p>

DISCUSSION

The line of treatment of *Yakridaludara* in above case is *Srotoshodhana*, *Mridushodhana*, *Yakrit Uttejaka*, *Pittavirechaka*, and *Madhura-Tikta Rasa dravya*.^[5]

Phalatrikadi kwath

This formulation contains 8 drugs which are mainly useful in the treatment of Hepatocellular jaundice, Cirrhosis, Alcoholic liver diseases, Fatty liver etc. The preparation contains *Haritaki* (*Terninalia Chebula*), *Vibhitaki* (*Terninalia Bellarica*), *Amalaki*

(*Emblica Officinalis*), *Amrita* (*Tinospora cordifolia*), *Katuki* (*Picrorhiz kurroa*), *Nimba* (*Azadirachta indica*), *Kiratatikta* *Swertia Chirayata* and *Vasa* (*Adhatoda vasica*). The above mentioned drugs are mainly *Pittahara*, *Yakritauttejaka*, *Deepana*, *Pachana*, *Shothahara*, *Kamalahara*, *Panduhara* and *Rasayana* in nature^[6].

Arogyavardhini Rasa

Arogyavardhini Rasa is one of the most effective *Kharaliya Rasayana* used in the

treatment of *Jwara*, *Kustha* and *Yakritavikara*. A previous study suggests the significant effect of ARV on cytoprotection and recovery of the liver function and hepatoprotective effect against CCI-4 induced liver injury. It is proven safe on liver through previous studies. ARV is a commonly used preparation in poor-liver functioning patients^[7].

5. Sudharshanadi Yoga^[8]

Table No.4- Rasapanchaka and Karmukata of Formulation

Dravya	Rasa	Guna	Virya	Vipaka	Karma
<i>Guduchi</i> (<i>Tinospora Cordifolia</i>)	<i>Tikta</i> <i>Kashaya</i>	<i>Guru</i> <i>Snigdha</i>	<i>Ushna</i>	<i>Madhura</i>	<i>Tridosahara</i>
<i>Kiratatikta</i> (<i>Swertia Chirayata</i>)	<i>Tikta</i>	<i>Laghu</i> <i>Ruksha</i>	<i>Ushna</i>	<i>Katu</i>	<i>Tridosahara</i>
<i>Punarnava</i> (<i>Boerhavia diffusa</i>)	<i>Madhura</i> <i>Tikta</i> <i>Kashaya</i>	<i>Laghu</i> <i>Ruksha</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kapha-Vata shamaka</i>
<i>Bhumyamalaki</i> (<i>Phyllanthus Niruri</i>)	<i>Tikta</i> <i>Kashaya</i> <i>Madhura</i>	<i>Laghu</i> <i>Ruksha</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Kapha-Pitta shamaka</i>
<i>Sudarshana Churna</i>	<i>Tikta</i> <i>Katu</i> <i>Kashaya</i>	<i>Laghu</i> <i>Ruksha</i>	<i>Ushna</i>	<i>Katu</i>	<i>Tridosahara</i>

Syrup Liv-52

This preparation is commonly in viral hepatitis, alcoholic liver diseases, cirrhotic

conditions etc. Syrup Liv-52 acts by arresting the process of liver cirrhosis. As this preparation diminishes lipotropic effect it

prevents the pathogenesis of fatty liver. It mainly acts by protecting the functioning capacity of liver and it promotes hepatocellular regeneration. The protective effect of Liv 52 is attributed to the diuretic, anti-inflammatory and immunomodulating properties of the component herbs [9].

CONCLUSION:

Ayurvedic treatment shows wonderful results, as they protect liver from oxidative stress, promotes liver regeneration and immunomodulatory in nature. *Ayurvedic* treatment is potentially safe and effective against both non-alcoholic and alcoholic liver disease than modern treatment.

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CITE THIS ARTICLE AS

Vasant Patil, Madhuri Rodd. Ayurvedic management of Liver Cirrhosis with Portal Hypertension, *J of Ayurveda and Hol Med (JAHM)*.2021; 9(3): 73-79

Source of support: Nil

Conflict of interest: None Declared