



ORIGINAL RESEARCH PAPER

Ayurveda

AN AYURVEDIC VIEW ON LIVER DISORDERS

KEY WORDS:

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ABSTRACT

Liver disease is defined as any disturbance that cause functional derangement ultimately leading to progressive destruction of lung parenchyma followed by fibrosis and cirrhosis. It is a broad term which covers various conditions based on its etiology, severity, duration, pathophysiology. In Ayurveda, yakrt vikaras /liver diseases are scattered in various prakaranas. Only few descriptions are available the direct involvement of yakrt In pathogenesis of disease condition such as pandu, Kamala, yakrtudara, yakrtvidardi, raktapitta, jwara etc...

INTRODUCTION

Liver disease is a major health concern in the world. Approximately 2 million death occur per year worldwide due to liver disease. Among this 1 million death occur due to cirrhosis(where healthy tissue is replaced by scar tissue)and remaining can be attributed to hepatocellular carcinoma and viral hepatitis. According to WHO, liver disease is the 10th common cause of death in India and cirrhosis is the 11th most common cause of death globally. The high rate of mortality can be attributed to increased incidence of alcoholic liver disease, hepatitis A, hepatitis C, obesity. Delayed diagnosis and inadequate treatment are the main factors for the poor survival of liver diseases in India.

Causes of liver disease :

1. Infections
2. Genetic predisposition factors
3. Alcohol intake
4. Vascular abnormalities.
5. Immune compromised factor
6. obesity

As there are over 100 diseases that can affect the liver, there is a wide variety of signs and symptoms. People with chronic liver disease are often asymptomatic and presents its symptoms only at its advanced stage.

Important clinical features in liver disease:

1. Jaundice: Indicated by yellowish discoloration of skin, cornea and mucus membrane.
2. Weakness, anorexia, nausea and vomiting
3. Abdominal pain and discomfort
4. Oedema, ascitis,
5. Flapping tremors (common in hepatic encephalopathy)
6. Hepatomegaly and splenomegaly
7. Fever
8. Oliguria, dyspnoea
9. Clubbing, spidernavie, Caput medusa

In Ayurveda yakrt is considered as one of the major organ that performs all the major functions. It is considered as organ of pitta dosha, which has important role in digestion of food, blood formation, synthesis of various proteins, enzymes and excretion of various malabhavas from the body. Any disturbance in these functions may result in yakrtvikaras. Constant and excessive use of pitta prakopa nidanas results in altered function of yakrt. Yakrtvikaras are comprehensively elaborated in samhitas where the structural and physiological integrity of liver is affected. In liver disorders, srotodushti occurs at the level of atipravrtti, sanga, or vimargagamana of dushya bhavas.

KAMALA:

In Ayurveda, liver disorders are viewed through the concept of Kamala which can be equated to jaundice which means

yellowish discoloration of body parts. According to Charaka, a person suffering from pitta pradhana pandu indulges in pitta prakopanidanans results in rakta and mamsadushti leading to Kamala.

In pittolbana /SahajaKamala, there is no specific cause like infection, alcohol, environmental toxins. It shows the signs and symptoms of pittabhava alone with raised serum bilirubin, impaired LFT and sometimes jaundice. Conditions of liver disease due to hereditary defects in bilirubin conjugation are 1. Criggnajjar syndrome (type 1 and 2) 2. Gliberts syndrome.

In such conditions, correcting the paittika level in body through aharaviharas, virechana as shodana, samana kashayas and ghrita yogas can be administered.

Based on the pathogenesis and clinical presentation, 2 variants are explained, Koshtasraya and sakhasrayakamala. Koshtasraya Kamala is bahupitta Kamala. Major groups of liver diseases are coming under this category. In koshtasraya kamala pathological conditions related to koshtanga and yakrt is playing a major role. The various types of hepatitis ,alcoholic hepatitis, drug induced hepatitis comes under this category. In this group, the patient presents with both constitutional and liver specific symptoms. Among constitutional symptoms fatigue is the most important one. Durbalendriya is a cardinal feature which is exemplified by the frog like appearance of patient in later stage. Other features include indigestion, loss of appetite, anorexia, excessive thirst etc.

sakhasraya Kamala is alpa pitta Kamala because of kaphapradanadosha. In this the pathology is not in the pittasthana or yakrt but is in the occasional areas with an obstructive nature due to kaphaja factors. It comprises of all cholestatic jaundice associated with increased level of alkaline phosphatase.

If Kamala is untreated, the patient may develop Sopha and this condition is called kumbha kamala characterized by Krishna- peetavarches, sotha, rakta chardi and aruchi. Pathophysiology of liver disorder mainly non alcoholic and alcoholic liver diseases progresses to pre-cirrhotic and cirrhotic stages if untreated leading to portal hypertension, ascites, oedema, and ultimately oesophageal varices and gastrointestinal bleeds.

Halimaka is the variety of Kamala where vatapitta dominant features like jwara, trshna, angamarda are seen and can be correlated to hyperbiliverdenimeia

Pandu: The word pandu means yellowish white, a condition marked with paleness of body. It manifests in the early stages of liver diseases. It is the predisposing factor contributing to

Kamala. Hence both diseases are interconnected where functioning of agni is impaired. It can be correlated to anemia. In chronic liver disease, anemia is a frequent occurrence. The etiology of anemia is

pecially in cirrhotic patient is complex and multi factorial as liver performs major role in iron homeostasis.

Udara: In this condition, dushti of ambu and swedavahasrota occurs due to pittapradhana tridoshakopana along with the vitiation of rasa, rakta, mama dushti leading to mala sanjaya and accumulation of fluid. Yakrtudara is one among 8 udara where there is direct involvement of organ is mentioned. Both alcoholic and non alcoholic fatty liver diseases leads to pre cirrhotic and cirrhotic stage. This will lead to portal hypertension as initial change leading to release of vasodilators. The ultimate effect is free water accumulation, sodium retention (dilutional hyponatremia).

Raktapitta: In this condition, there is pitta pradhana doshakopa occurs associated with vitiation of raktadhatu. The conditions like urdwaga and adhogaraktapitta can be correlated to upper and lower GI bleeding. Upper GI bleeding is a major complication in liver. Main complications related to upper GI bleeding in chronic liver disease are portal hypertension oesophageal varices and portal gastropathy. Lower GI bleeding is less commonly seen in liver disorders and most important causes are portal hypertensive colopathy, colorectal varices and haemorrhoids. The general management of raktapitta involves sodhana, samana, pathyaahara and vihara.

Jwara: In acute infectious conditions of the liver diseases like viral hepatitis the principles of jwara chikitsa is to be adopted. Hepatitis A, Hepatitis B, Hepatitis C, Hepatitis D, Hepatitis E etc are the common infectious diseases of liver presented with jwara along with liver specific manifestations. The first line of management in jwara is langhana in order to pacify amavastha of body and to correct agni. In the same way the management of acute infectious hepatitis also begins with amapachana. Also sodhana and samanachikitsa can be adopted based on proper roga and rogipareeksha.

Swasa: It is a less specific symptom of liver disease. Often it is seen as a complication associated with chronic liver diseases, cirrhosis of liver etc. Among the pulmonary complications, shortness of breath is the cardinal feature. According to vagbhata, swasa is the disease in which the udbhavasthana is amasaya. Liver forms the important part of digestion and according to ayurveda, amasaya also have the similar function in digestion. Yakrt had physiological connection with amasaya and hence diseases of both organ shares common symptom and swasa is one among it. Yakrtvikara manifests as panduroga. Swasa is a upadrava of pandu. In this condition, swasachikitsa along with underlying pathology has to be corrected.

Yakrtvidradi: Vidradi is characterized by sheekravidaaha (rapid inflammation). Yakrt is one of the location of antarvidradi. This can be correlated with amoebic, pyogenic abscess. An abscess in liver is identified by the classical clinical sign of breathlessness.

Stages and grading of liver disorders:

Grading refers to the means of assessment of liver diseases whether it is chronic or acute, mild, moderate or severe. Serum aminotransferase levels are used disease activity. Liver biopsy is the most accurate means of assessing the disease as early or advanced pre-cirrhotic and cirrhotic. Elastography is used for measuring the fibrosis and amount of fibrosis. In ayurvedic view, stages of yakrtvikaras are as follows:

1. Kamala/pandu
2. Kamala/pandu/sopha
3. Kamala/pandu/Sopha/udara

4. Kamala/pandu/Sopha/udara/raktapitta.

Diagnostic imaging

1. Ultrasound and CT imaging -for assessing mass, staging of tumors.
2. Magnetic resonance cholangiopancreatography-for visualizing biliary tree.
3. Doppler ultrasound and MRI for assessing hepatic vascularity.
4. Hepatic elastography for monitoring fibrosis.

Diagnostic tests:

1. Liver function test
2. Anti HAV IgM-Hepatitis A
3. HBsAg and Anti HDV-Hepatitis B acute
4. HBsAg, HBV DNA-hepatitis B chronic
5. Anti HCV – Hepatitis c
6. Anti HEV-hepatitis E
7. Mitochondrial antibody- primary biliary cirrhosis.
8. Elevated alpha fetoprotein level >500- hepatocellular cancer.
9. Reduced alpha 1 antitrypsin level in Alpha 1 antitrypsin disease.

Management of liver diseases in general

Management approach towards liver disease is decided on the basis of etiological, pathological basis, staging and grading of the disease.

Considering all the sampraptighatakas, the principles of management of kamala is strong enough for the management of liver diseases. In the later stages, where the liver diseases is complicated with pandu, sopha, udara, raktapitta. The principles of management of all these conditions are incorporated to the management of liver diseases. The management strategies include samsodhana, samsamana, nidanaparivarjana, pathyaaharavihara.

Yakrt vikaras and probable correlation.

1. Koshtasraya Kamala- Hepatocellular jaundice
2. Sakhasraya Kamala-obstructive jaundice
3. Kumbha Kamala-portal hypertension
4. Jalodara- ascitis with portal hypertension
5. Yakrtvidradi-amoebic, pyogenic liver abscess.

CONCLUSION:

The current strategy for the management of liver disease is prevention and early detection. Delaying of detection hinders the available intervention including both therapeutic and surgical care. Patients with multiple co morbidities and poor economic status largely depends on alternate medical systems like ayurveda. Ayurveda system of medicine has great role in management of liver diseases if practised systematically and scientifically. Ayurveda proposes many dietary, herbal and herbomineral interventions to prevent and manage such conditions.

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