REVIEW ARTICLE

Scope of Ayurvedic treatment in Hepatic Cirrhosis: A Review

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Abstract

Cirrhosis and Chronic liver diseases are the leading causes of death in developing countries, though the prevalence is increasing in developed countries. There is an irreversible damage to liver parenchyma; it becomes fibrotic and yellowish/ orange in color. Alcohol consumption and chronic viral Hepatitis are the common causes. There are no drugs and related treatments available for the said disease. Ayurveda is a complete and holistic system of medicine in which a number of drugs with multifold beneficial actions are available and can prove to be beneficial for the patients, though a massive research is required to prove the beneficial effects of drugs.

Keywords

Udara Roga, Alcohol, Fibrosis, Jalodara, Rasayana



Received 21/4/15 Accepted 16/6/15 Published 10/7/15

INTRODUCTION

The condition Hepatic cirrhosis (Greek word - 'Kirrhos' -yellowish / orangeand 'osis' means 'condition') is defined as the condition in which the liver changes to fibrotic and yellowish or orange in colour due to the irreversible chronic injury of hepatic parenchyma and extensive fibrosis in association with formation of regenerative nodules^{1.} The condition is more likely to affect men than women. The disease can occur at any age and often causes prolonged morbidity. The 10 year mortality rate is 34-66% being largely dependent on the cause; cases with history of the alcohol consumption has worst prognosis. The most common causes are viral hepatitis and alcohol consumption and the modern management is mainly symptomatic. Steroids and immunosuppressive drugs further worsen the condition leaving the patient prone to dangerous complications like hepatorenal syndrome and multiple organ failure. Due to inadequate efficacy of modern therapeutic agents and their overwhelming adverse effects/ toxicity, there has been increased interest to evaluate the efficacy of Ayurvedic drugs/ remedies. Even the patients have to go for repeated Paracentesis (tapping) which is bothersome procedure and gives only temporary relief and recurrences are often there. As per Ayurveda, the condition is either said to be one of the Udara roga i.e., as Yakrittdaludara and clinically represented as Jalodara and Kumbha-kamala². Ayurvedic therapies have better approach in the management of hepatobiliary disorders. A number of ayurvedic drugs and formulations properties³ are hepatoprotective having described in texts that have been used traditionally for the cure of hepatic disorders for example, Bhumyamalki, Nagarmotha, Giloya, Rohitaka, Daruharidra, Kalmegha, Amaltasa, Sanaya, Haritaki etc. These drugs Lekhana. Deepana, have Amapachana, Virechaka, Rasayana properties by virtue of which these drugs are effective in various liver disorders⁴.

Etiology

The causes of liver cirrhosis described in modern medicine are

- Alcohol
- Chronic viral hepatitis
- Non alcoholic fatty liver disorder
- Immune Primary Sclerosing Cholangitis

- Autoimmune diseases
- Biliary Primary Biliary Cirrhosis
- Cystic Fibrosis
- Genetic Alpha antitrypsin deficiency, Hemochromatosis, Wilson's disease
- Cryptogenic (Unknown)

The changes usually affect the whole liver but in biliary cirrhosis these may be patchy. There is progressive and wide spread death of liver cells associated with inflammation and fibrosis, leading to total destruction of liver architecture and loss of normal hepatic vasculature with the development of Porto-systemic vascular shunts and formation of nodules rather than lobules due to proliferation of surviving hepatocytes. The cirrhosis can be classified as Micronodular – small nodules, less than 3mm in diameter: in alcoholic cirrhosis and Macronodular – nodules larger, of various sizes.⁵.

Clinical features⁶

- Hepatomegaly (although liver may be shrunken)
- Jaundice
- Ascites
- Oedema

- Circulatory Spider telangiectasia, Palmer erythema, Cyanosis
- Endocrine Loss of libido, Impotency, Hair loss, Gynaecomastia, Testicular atrophy, in females -Breast atrophy, Irregular menses, Amennorohoea.
- Haemorrhagic tendencies-Bruises, Purpurea, Epistaxis, Variceal bleeding and Fetor hepaticus.
- Hepatic encephalopathy
- Other Pigmentation, Digital clubbing, Dyspnoea, Anorexia, Fatigue.

As per Ayurveda, the condition can be understood as one of the stages of *Udara roga* specifically *Yakrittdaludara* with *Jalodara* as main presentation or as a complication.

In Ayurveda, *Agnimandya* (weak digestive fire) is described as basic aetiological factor for development of all the *Udara Roga*. Irregular dietary habits, *Viruddha ahara* (incompatible diet regimens), *Mithya ahara (excess use of fatty, spicy, heavy, sour and pungent in nature)*, *Vegadharana*, (Supression of natural urges), *Mala- samchya* (constipation/ chronic toxicity), use of *Visha*/ toxic substances, as complication of *Panchkarma*, *Papa karma* (effect of past bad deeds/ actions) etc are the etiological factors responsible for the development of *Udara roga*⁷.

All the above causes lead to Vitiation of *Doshas* and causes *Srotosanga* (Blockage of circulatory channels).

The condition is *Tridoshaja*, involving the all the three *doshas* in pathogenesis. The Kapha dosha is responsible for Steatosis (Fatty changes) which is an important pathological condition prior to development of cirrhosis. Further, clinical features like Ascites, Oedema etc. are Kaphaja symptoms. Vata dosha is responsible for fibrotic changes. Shrunken liver, genital atrophy, dyspnoea and pain are due to Vata. Vitiated Pitta dosha is responsible for inflammatory changes and recurrent hepatitis is another important cause of liver Many important cirrhosis. symptoms indicating the active *Pitta* involvement are jaundice and hemorrhagic tendencies.

Ayurvedic principles of management for Hepatic Cirrhosis

 Nidana parivarjana : Avoiding irregular and food items as described in *nidana* (etiology) Supression of natural urges . Regular purification (*Shodhana*) of the body, maintaining good codes of conduct etc.

- Samshodhana therapy Virechana and Vasti karma – regular Koshthashodhana and use of purgatives for the expulsion of Ama, Vitiated doshas (accumulated toxins) and accumulated water from the body.
- 3. The weak persons and patients having low tolerance for purgatives *Asthapana Vasti* can be used for *Shodhana* purpose. *Anuvasana Basti* is avoided usually as it adds *Malasamchya* but can be used wisely if symptoms of *Vata prokopa*.
- Use of *Mutravirechana* drugs (Diuretics) like *Punarnava*, *Gokshura* etc.
- 5. Agni deepana and Amapachana drugs like Pippli, Mustaka etc.
- 6. *Rasayana* and Liver tonics (*Tikta Dravya*)
- 7. Symptomatic management
- 8. Use of Milk as Main diet with the treatment regimens and even long time after the relief in symptoms.
- 9. Complete follow up for at least one year and gradually substituting milk with the light diet like *Peya*, *Yusha*

before switching the patients to normal diet.

10. Paracentesis is advised if the water accumulation is very huge, in emergency conditionthe patient is not responding well or in emergency conditions

Drugs useful in Patients of Hepatic Cirrhosis

Bhumyamalaki (Phllanthus niruri). Nagarmotha (Cyprus rotundus). Daruharidra (Barberis aristata), Giloya (Tinospora cordifolia), Haritaki Termanalia chebula), Amalaki (Embelia officinalis), Bhringraja (Eclipta alba), Kalmegha (Andographis panniculata), Tulsi (Ocimum sanctum), Makoya (Solanum nigrum),Draksha (Vitis Sharpunkha vinifera), (Triphosia purpurea), Kumari (Aloe ver), Chirayita (Swertia chiryita), Patha (Cissempelos periera), Patola (Tricosanthus dioica), Senna (Cassia augustifolia), Nishotha (Operculina terpathum),Rohitaka (Tecoma undulata), Amamarga, Pippali (Piper longum), Kutaki (Picrorrhiza kurroa), Manjishtha (Rubia cordifolia), Punarnava (Boerrhavia diffusa) (Tribulus Gokshura terrestris)and Nimba (Azadiracta indica).

Ayurvedic formulations useful in patients of Hepatic Cirrhosis

Manjishthadi churna, Yavakshara, Arogyavardhini Vati, Yakrit-Palihari Loha, Kutaki Vati, Vardhmana Pippli Rasayana, Punarnava Mandura, Sharpunkha Kshara, Kshara Apamarga *Rohitakarishta*, Draksharishta, Amritarishta, Abhyarishta, Patoladi Kashayam, Punarnavadi Kwatha, Pathyadi Kwatha. Amritadi Kwatha Kumaryasva, Punarnavaswa, *Mahamanjishthadi* Kwatha, Punarnava Arka, Makoya Arka, and Mustadi Kwatha. As per Ayurveda, the above mentioned drugs produce the beneficial effects by virtue of their Agnideepana(Digestive) ,Amapachana (Bitter tonic) ,Lekhana (Antihyperlipedemic and Fibrinolytic). Koshthashodhana *Detoxification*) (Pittarechana (Choleuretic) and Rasayana (Antioxidant and immunomodulator)properties'.

SUMMARY

Hepatic Cirrhosis is a condition characterized by irreversible chronic injury of hepatic parenchyma and extensive fibrosis in association of regenerative nodules. According to The condition is more likely to affect men than Women. There are no specific dependable therapeutic agents or remedies in modern system of medicine; moreover the drugs which are used in the treatment are having overwhelming adverse effects/ toxicity. So there has been increased interest to evaluate the efficacy of ayurvedic drugs/ remedies in the patients of liver Cirrhosis. In Ayurveda, the condition is either said to be as one of the Udara roga i.e Yakrittdaludara and clinically present as Jalodara and Kumbhakamala. Ayurvedic principles of management of hepatobiliary diseases have better approach in the management of Hepatobiliary disorders. A number of ayurvedic drugs and formulations are described in have texts been used for the cure of hepatic traditionally disorders like Bhumyamalki, Nagarmotha, Giloya, Rohitaka, Daruharidra, Kalmegha, Amaltasa, Sanaya, Haritaki etc. which have proved hepatoprotective properties.

CONCLUSION

The condition of hepatic cirrhosis is represents the end stage of any chronic liver disease. Hepatitis C and alcohol are currently the main causes of cirrhosis. There is irreversible injury to liver parenchyma and number of complications like Ascites, renal failure and cardiac arrest may occur. There is no reliable remedy in modern medicine but certain herbs like *Giloya*, *Kutaki*, *Kalmegha* etc.and herbal formulations have been described to have hepatoprotective, Antioxidant and properties which are useful in regeneration of liver cell and improvement of liver functions.

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