Role of Ayurveda in the conservative management of hepatitis B: A case report

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Abstract

Ayurveda is the one of the country traditional health care system, in Ayurvedic classical literature many formulations have been given to manage Kamala roga and in the current study Phalatrikadi ghan vati which is used to treat the Hepatitis B contains drugs which are hepatoprotective and antiviral in nature. A young male patient of age 22 years presented in S.S. Hospital B.H.U. with positive hepatitis B surface antigen (HBsAg) and HBeAg along with high HBV-DNA reports. He was treated with ayurvedic drug Phalatrikadi ghan vati for period of 3 months and investigations HBV-DNA and HBsAg, HBeAg were repeated, HBV-DNA was not detected and HBeAg is below the normal range of assay. There were no side effect of drugs was observed and it was concluded that drug is safe with special reference hepato and renal aspects.

Keywords: hepatitis B, Ayurveda, Phalatrikadi ghan vati, kamala, HBV-DNA

Introduction

Hepatitis refers to an inflammatory condition of the liver, which can be caused by viral infection, non viral infection, metabolic disease, drugs, toxin and ischemia. Infective hepatitis is one of the chief culprits of Liver related morbidity and mortality. It is emerging as a tough challenge in the series of global health problems after HIV. It is the leading killer among all infectious agents. It is estimated that approximately 2 billion people are infected with HBV, among which approximately 350 million people are chronic carriers worldwide, and of these more than 250,000 die from liver related disease each year. It is estimated that the seriousness of this infection is evidenced by the fact that “…about twenty-five percent of adults who become chronically infected during childhood later die from liver cancer or cirrhosis caused by the chronic infection.” According to WHO this virus is fifty to one-hundred times more infectious than the HIV or AIDS virus. It is also known to be a serious. One among Every Three on the Earth has been exposed to either or both (HBV and HIV) viruses; (http://www.hiv and hepatitis.com/ 2010 conference) [2]. Infective hepatitis is the 10th leading cause of death and HCC (Hepatocellular Carcinoma) is the 5th most common cancer in the world and is responsible for 500,000 to 1.2 million deaths globally every year. Occult or silent HBV infection is a common culprit/cofactor/ innocent bystander in patients of Hepatocellular carcinoma (HCC) and occupational hazard for many health workers in regions where this disease is prevalent.

Hepatitis may be of viral or non-viral in origin. Viral Hepatitis may be manifested as acute or chronic form. In majority of cases HBV HCV HDV responsible for chronic form of disease and HAV, HAE are manifested as acute form of disease [3]. Ayurvedic formulations are widely use for hepatitis, hepatitis commonly manifested as yellow discoloration of urine, sclera, mucous membrane and skin is known as jaundice. In ayurvedic literature same clinical features are mentioned in context of Kamala. So on the basis of clinical feature Kamala can be correlated with jaundice. Ayurveda has explained epidemic and contagious diseases in the context of Janapadodhwamsa and Upasargika Roga (Infectious diseases), where infection occur and microbes are responsible for the pathogenesis of the disease, All the infections are coined under term “Sankramika Rogas”. Sushruta has mentioned that diseases (Upasargika Rogas) like kushta (skin disorder), Jwara (fever), Sosha (tuberculosis), Netrabhishyanda (conjunctivitis) etc. are the infectious disorders which spread from one person to the another [4]. The exposure or contact can be a simple association, touch, inhalation of other’s expired air, eating together,
sleeping & lying together and wearing other’s clothes, using cosmetics of others etc. things. Even sexual contact with an infected person can give rise to so many sexual transmitted diseases, therefore etiology, signs and symptoms of Hepatitis B can be compared with Upasargika Rogas. Hepatitis caused by Viruses is one of the most important causes of liver related morbidity and mortality. In modern literature there is no specific treatment necessary for acute viral hepatitis and the care is aimed at maintaining comfort and adequate nutritional balance and plenty of fluids. Under the complementary system of medicine ayurveda stand first in providing the complete, reliable and successful outcome among the patient of Hepatitis B with or without symptoms or complications like persistent jaundice, cirrhosis, ascites and liver cancer. In modern medicine, treatment of Hepatitis B is aimed to suppressing viral load and boosting the patient’s immune response with immunotherapeutic interventions are required for better prognosis. The management of Hepatitis B depends upon a number of important factors viz- HBsAg status, HBV viral load, ALT level, liver biopsy results and a person’s readiness to take medication exactly as prescribed which is based on American Association for the study of Liver diseases. The dual immunomodulatory and antiviral agent interferon (IFN)-alpha has been a mainstay in the treatment of chronic hepatitis since it was licensed for this indication in the early 1990s. These are short and long acting interferon which boost up the immune system and improves the level of inflammation, but these drugs do not cure the disease. IFN were first recognized in 1957 for their ability to interfere with viral activity, these are naturally occurring cytokines with immunomodulatory, antiproliferative antiviral properties. Unfortunately, complete eradication of HBV is scarcely achieved with the currently available treatment option for chronic hepatitis B and treatment with PEG-IFN is expensive and is associated with considerable side effects; so biomedical researchers are inclined towards alternative resources to solve this dread of disese [5]. In Ayurveda, treatment is of two types: Bio-purificatory methods (Samshodhana) and Internal Medicine (Samshamana) indicated for the complete eradication of doshas and eliminate the disease. Hence Ayurveda plays an important role in the management liver disorders.

A young male aged 22 yrs reported Kayachikitsa OPD of S.S. Hospital B.H.U. diagnosed as hepatitis B since 1year. Along with complaints of indigestion and incomplete bowel evacuation since one month and based on previous investigations he was diagnosed as a case of chronic Hepatitis B. On examination he was presented with no abnormality over general functions. On Physical examination as Blood pressure -110/70mmHg and Pulse Rate as 78/minute with regular in nature. Pallor, Icterus, Clubbing, Cynosis and Odema was absent. Temperature was afebrile, appetite was reduced, bowel was Incomplete bowel evacuation once per day however micturition were 4 to 5 times/day and sleep was Adequate On examination of Systemic Examination per abdomen no abnormality detected was found and body weight was 65 kilograms

**Investigations reports**

1. HBsAg positive with titre – 6430
2. HBeAg – Positive
3. HBV DNA (Quantitative)- 71075 IU/ml (16 march 2017)
4. LFT, RFT - Within normal limit

Hence treatment was planned with Phalatrikadi ghanvati was advised with dosage of two gm/day. 1 tablet = 250 mg and 4 tab BD after meal with luke worm water for a period of 1 month.

Patient came to S.S. Hospital regularly after 1 months for consecutive 3 months and medications were continued for 3months. Routine investigations were repeated, like LFT, RFT, CBC after every 1 months interval and no significant abnormality was detected in LFT,RFT and CBC these are within normal range. During whole period of treatment patient was put on strict vegetarian diet with less spicy and oily food, with adequate amount of sleep 8-10 hours per day, and less physical exercise for better recovery. After a period of 3-1/2 months HBV- DNA and HBsAg were repeated and HBV- DNA was not detected (25/8/17) HBeAg was less than detection limit. HBsAg positive but titre was less than before. Measuring range was 50-1.0*10 8 IU/ml, with these treatment c/o indigestion and incomplete bowel evacuation was also relieved and appetite of patient were also improved. Clinical observation revealed no toxic effects.

![Fig 1: Demonstration the changes over the viral load before and after treatment](image-url)
**Discussion**

Hepatitis B is chronic condition is often followed by liver carcinoma with grave prognosis of our ancient acharyas have recommended a fair no herbal and compound preparation for the treatment of kamala. Phalatrikadi ghan Vati was mentioned in sharanaghar samhita madhayam khand 6 for the treatment of kamala, therefore Phalatrikadi ghan vati appears to be useful remedy for the treatment of Hepatitis B. According to caraka samhita in 16th chap of cikitsa shtana acharya clearly mentioned “kamali tu virecanama”, virecanama is the best treatment for kamala roga 7. The trial drug contains 8 herbal drugs as mentioned in sharangadhara samhita in context of pandu kmala, drugs: Amalaki [8], Bibhitaki [9], Haritaki [10], Guduchi [11], Vasa [12], Kiratika [13], Nimba [14], Kutaki [15], these drugs possess the properties like pitta- kapha shamaka, recana, dipana, yakriduttejaka. According to modern researchers above mentioned drug can be hepatoprotective on the basis of choleratic and cholegogue action, antioxidant effect, antiviral effect (Picrorhiza kurroa), immunomodulator action. If the antigen persists in the blood for then 3 months CLD is probable in such cases Phalatrikadi ghan vati is very useful. Measurement of HBeAg may also be used to monitor the effectiveness of the HBV treatment since successful treatment should lead to no HBeAg in the blood. The results of this case study recommend continued evaluation of this drug for further management of chronic Hepatitis B.

**References**