

AYURVEDIC MANAGEMENT OF HEPATITIS B: A CASE REPORT

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ABSTRACT

Hepatitis B is an infectious disease caused by the hepatitis B virus (HBV) which affects the liver. It can cause both acute and chronic infections. The clinical features such as; Yellow discoloration of urine, sclera, mucous membrane and skin, are comparable to the clinical features of *Kamala* as described in *Ayurvedic lexicon*¹. Presently short and long acting interferon which boost up the immune system and improves the level of inflammation are the support of treatment, but these drugs do not cure the disease and their long term safety and efficacy is unknown. That's why; biomedical researches are inclined towards alternative resources to solve this dread of disease. The treatment of *Kamala* includes pitta pacifying *rasas* and *deepana-pachana guna*, which convert *sama-pitta* to *nirama-pitta*⁵. It plays very important role in the *samprapti vighatana* of the *Kamala* disease. The case described in this article was managed with the same guideline of *Kamala Chikitsa* as described in *Ayurvedic literatures*¹⁻⁹ and results were obtained. Although this single case is not sufficient to prove the efficacy, author has tried to explore his idea through this article to state that *Ayurvedic* management of Hepatitis B is very effective and more efficacious than the modern medicines.

Keywords: Hepatitis B, Jaundice, *Kamala*, *Sama-pitta*, Antiviral drugs, Interferon

INTRODUCTION

In the present era, Hepatitis B is the common global health problem, caused by Hepato tropic virus B of *Hepadnaviridae* family¹⁰⁻¹⁴. It is characterized by the parenchymal liver cell damage¹⁵⁻¹⁹. On the basis of clinical features, Hepatitis B can be correlated with *Kamala Roga* in *Ayurveda*¹⁹. *Kamala* is caused by increased Pitta. Ayurveda offers reference points for managing treatment decisions specific to each and every case and to project a vision or goal for a whole state of health, again unique to each and every case. *Ayurvedic* management of *Kamala* including

samshodhan and *samshaman* therapy leads to break the pathophysiology of the disease and hence provides complete cure. This case can be helpful for the *Ayurvedic* management of Hepatitis B.

CASE REPORT

A male patient of age 38 years presented with chief complaints of yellowish discoloration of urine with burning micturition and reduced appetite. He also had associated complaints like generalized weakness, nausea and mild pain in right upper abdomen.

CLINICAL EXAMINATION

Dashvidha Pariksha

Prakriti: Pitta-kaphaja

Vikriti:

Hetu: Pitta vardhak ahara vihara

Dosha: Tridosha

Dushya:Rasa, Rakta, twak, Mamsa

Prakriti:Sukhasadhya

Desha:Anup

Bhumi Anup

Rog Adhithan:Yakrit

Kaal: Adana kala and Vyakta awastha

Bala: Madhyama

Saaratah:Madhyam

Samhanan:Madhyam

Pramaantah:Sama

Satmyatah: Sarva rasa satmya

(madhur, katu rasa)

Sattwatah:Madhyam

Aahaar shakti:

Abhyaharan-Avara

Jaran-Avara

Vyayam shakti:

Vayatah:

Avara

vaya- (38 years)

Vayikarna- nearly 30 years

Astavidh Pareeksha

Naadi: 80 /min, pitta-kaphaja

Mutra:Vaikrit varna

Mala:Vaikrite

Jihwa:Niraama

Shabda: Prakrit

Sparsha: Ushna

Drik:Pitta

Aakriti: Prakrit

SAMPRAPTI GHATAK

Dosha: Tridosha

Dushya:Rasa, Rakta, Mamsa

Srotas: Anna, Rasa, Rakta, Mamsa, Mutra, Purisha

Srotodushti:Ati pravritti, Sanga, Vimarga Gamana

Aam: Sama

Agni: Mandagni

Samutthan: Amashaya

Adhishthan: Netra,

General Physical Examination

BP 110/70 mmHg

PR 80 beats/min

RR 18/min

Temperature Afebrile

General condition Poor

Decubitus Sitting

Pallor Absent

Icterus Present

Cynosis Absent

Clubbing Absent

Lymph node Not palpable

Oedema Absent

Investigations

Complete Blood Count (CBC) 25/02/16

Hb % 11.5 gm%

TLC 13400 cells/mm³

DLC N58 L39 E2 M1 B0

Liver Function Test (LFT) (28/02/16)

ALT/AST 1010/790 U/L

T.BIL/D.BIL 9.1/7.9 mg/dl

ALP 134 U/L

T.P/ALB 8.2/4 gm/dl

Renal Function Test (RFT) (28/02/16)

UREA 27 mg/dl

CREAT 0.8 mg/dl

Na⁺/K⁺/Cl⁻ 136/4.5/99 mmol/l

Viral Hepatitis Profile (02/03/16)

HBsAg Positive

Anti Hep C negative

Anti HAV IgM negative

Anti HEV IgM negative

Diagnosis – Hepatitis B

Treatment

Patient was treated with Arogyawardhini Vati 250 mg 2 tablets twice a day with Phalatrikadi Kwath 40 ml twice a day and Musta Nagarmustak Churna 5 mg with Bhumymlaki Swarasa 20 ml twice a day. Patient was kept in under observation for 10 days.

RESULTS

Patient experienced increase in appetite just within 3 days of treatment. Other complaints like yellowish discoloration of urine, nausea; icterus was reduced after 8 days of treatment. Serum Bilirubin and Direct Bilirubin was reduced from 9.1/7.9 mg/dl to 1.7/1.1 mg/dl and ALT/AST was reduced from 1010/790 u/l to 199/89 u/l after 8 days of treatment. After 10 days from starting the treatment, patient was having no complaints of abdominal pain, weakness and nausea. Yellowish discoloration of urine was disappeared and appetite was normal.

Hematological Investigations after 8 days of Treatment Complete Blood Count (CBC) (07/03/16)

Hb % 12.8 gm%

TLC 9200 cells/mm³

DLC N50.3 L37.9 E2.2 M9.6 B0.0

PLT 372000 cells/mm³

Liver Function Test (LFT) (07/03/16)

ALT/AST 199/89 U/L

T.BIL/D.BIL 1.7/1.1 mg/dl

ALP 101 U/L

T.P/ALB 8.8/4.1 gm/dl

Renal Function Test (RFT) (07/03/16)

UREA 27 mg/dl

CREAT 0.9 mg/dl

Na⁺/K⁺/Cl⁻ 139/4.6/99 mmol/l

DISCUSSION

Drugs like *Katuki*, *Kirattikta*, *Vasa*, *Kalmegha*, *Bhumyamlaki* etc proved to be very effective in the *samshamana chikitsa* of *Kamala Roga*. These drugs are substantiated by various clinical and experimental trials and have shown the actions like²⁰⁻²¹.

Pitta hara / Tridosahara Pitta rechana (Choleratic),

Yakrit uttejaka (Liver stimulant),

Hepatoprotective properties,

Dipana (Appetiser), *Rechana* (Purgative),

Sothahara (Anti-inflammatory),

Jvarahara (Anti-pyretic),

Rakta shodhana (Blood purifier),

Rasayana (Geriatric),

Sroto shodhana (Channel purifier) properties⁴⁰.

With this perspective, patient was treated with 4 drugs *Phalatrikadi Kwath*, *Arogyawardhini Vati*, *Musta Nagarmustak Churna* and *Bhumyamlaki Swarasa*.

Phalatrikadi Kwath contains 8 drugs; *Triphala*, *Vasa*, *Amrita*, *Nimba*, *Kalmegha* and *Katuki* as mentioned in the *Siddhasara Nighantu* in the treatment of *Kamala Roga*.

Triphala contains *Haritaki*, *Vibhitaki* and *Amlaki*. It has antioxidant properties. It is hepatoprotective in nature and protects liver from free radical damage.

Vasa (*Adhatoda vasica*) contains Vasicine as the major alkaloid available in the different parts of the herb. The research reveals that vasicine showed most potent anti-inflammatory effects. It also has anti-diabetic, antioxidant and hepatoprotective effects²⁰.

Amrita (*Guduchi*) (*Tinospora cardifolia*) *Tinospora cordifolia* has been studied for its actions like immunomodulatory, anti-allergic, hepatoprotective properties, neuroprotective properties²¹⁻²².

Nimba (*Azadirachta indica*) Neem leaf and its constituents have been demonstrated to exhibit immunomodulatory, anti-inflammatory, antihyperglycaemic, antiulcer, antimalarial, antifungal, antibacterial, antiviral, antioxidant properties²³⁻²⁴.

Kirattikta (*Swertia chirayita*) The bioactive constituents include the xanthone and secoiridoid glycosides consisting of mangiferin, amarogentin, amaroswerin, sweroside and swertiamarin used mainly in the treatment of infectious and inflammatory conditions like fever, skin diseases etc. and also used as a hepatoprotective and hepatostimulative agent²⁵⁻²⁶.

Katuki (*Picrorhiza kurroa*), the plant has been described as very useful in jaundice, nausea, anorexia, dyspepsia and periodic fevers. "Picroliv" mainly a glycoside constitute an important component of *Picrorhiza kurroa*. The published literature and currently on-going work show the efficacy and safety of picroliv in (1) acute viral hepatitis (2) treatment of drug-induced liver damage e.g. antituberculous

drugs and (3) long-term prophylactic use in bronchial asthma²⁷⁻³¹.

Kalmegh (*Andrographis paniculata*) Active constituent: Andrographolide. It Increases the viability percentage of the hepatocytes, stimulates hepatic regeneration and increases resistance to damage by toxins; activates reticuloendothelial system and enhances carcinogen detoxification by the regulation of antioxidant defense system and microsomal drug metabolism³⁶⁻³⁷

Musta and *Nagaramustaka* (*Cyprus rotundus* and *Cyprus eleusinoides*) is credited with antioxidant and anti-inflammatory properties that benefits the liver. It lowers the viral load on the liver and renormalizes liver functions. It has hepatoprotective activities which help in liver disorders and maintains overall liver health. It reverses the oxidative damage of hepatocytes and exerts overall hepatoprotective actions.

Bhumyamalaki (*Phyllanthus niruri*) It exhibit a hepatoprotective effect. It has ability to down regulate HBV messenger ribonucleic acid (mRNA) transcription and up-regulate HBV enhancer I activity. It also inhibit HBV polymerase activity and decreases episomal HBV DNA content³⁻³³.

Arogyawardhini Vati contains mainly *Katuki* (50%) which has choleric properties. It has anti-inflammatory and antiviral properties. This drug is extensively used in the hepatic disorders.

CONCLUSION

In modern medicine, despite of recent medical advances, even at cellular and molecular level, there are no any liver protective medications which can be used in the treatment of Hepatitis B. But in the field of *Ayurvedic* research, many fruitful medicines have been found for the treatment, prevention and cure of Hepatitis B³⁸. *Ayurveda* offers holistic approach towards each disease and specific to each person. Further the antiviral drugs which are used in the treatment of Hepatitis B, have some common side effects including fever, headache, hair loss and mental problems. These drugs are costly and their safety profile

is unknown. While the *Ayurvedic* medicines are free of these side effects, easily available and less costly than modern medicines. Thus these drugs can be used effectively in the management of Hepatitis B.

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