INTERNATIONAL
AYURVEDIC
MEDICAL JOURNAL

IAMJ

Review Article ISSN: 2320 5091 Impact Factor: 4.018

AYURVEDIC MANAGEMENT OF HEPATITIS B: A CASE REPORT

Minal. S.Vaidya[1], PravinG.Jagtap[2]

[1]Professor & HOD, [2]Assistant Professor,
Department of Kayachikitsa, Y.M.T. Ayurvedic Medical College, Kharghar, Maharashtra, India

Email: drminalsvaidya@gmail.com

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 *Hepadanavirideae* family[10-14].It is characterized by the parenchymal liver cell damage[15-19].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 Adhisthan: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 Bhumyamlaki 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 like[20-21].

*Pitta hara / Tridoshahara 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) properties[40].

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 effects[20].

Amrita (*Guduchi*) (Tinospora cardifolia)Tinospora cordifolia has been studied for its actions like immunomodulatory, anti-allergic, hepatoprotective properties, neuroprotective properties[21-22].

Nimba (Azadirachta indica) Neem leaf and its constituents have been demonstrated to exhibit immunomodulatory, anti-inflammatory, antihyperglycaemic, antiulcer, antimalarial, antifungal, antibacterial, antiviral, antioxidant properties[23-24].

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 agent[25-26].

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 asthma[27-31].

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 metabolism[36-37]

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 content[3-33].

Arogyawardhini Vati contains mainly *Katuki* (50%) which has choleretic 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 B[38]. 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.

REFERENCES

1. Charaka Samhita, Part II. Satya Narayana Shastri, editor, 1st ed. Varanasi: Chaukhambha Bharti Academy; 2011. Panduroga chikitsa, 16/34.p.491.
2. Sushruta Samhita (Uttar Tantra). Yadavji Trikamji Acharya, editor. 2nd ed., Varanasi: Chaukambha Orientalia; 2009. Pandu Roga Pratisedha, 44/4-5. p.729.
3. Vagbhata. Ashtanga Hridaya. Ashtavaidyan Vaidyamadhom Cheriya, editor. 1st ed.
4. Varanasi: Chaukambha Krishnadas Academy; 2007. Nidan Sthana, Pandwadi nirnayaya Adayaya, 13/15-19. p.274-75.
5. Ram Harsh Singh, editor. Kaya Chikitsha, Part II. 1st ed. Varanasi: Chaukambha Sanskrit Pratishthan, 2004; 374.
6. Madhav. Madhav nidanam. Yadunandan Upadhayaya, editor. 1st ed. Varanasi: Chaukhambha Bharti Academy; 2009. Panduroga-kamala-kumbhkamaladi Nidana, 8/19-20. p.262.
7. Govindadasa. Bhashjyaratnavali, Vol.- 1. Shastri Ambika dutta, editor. 1st ed. Varanasi: Chaukhambha Sanskrti Sansthan; 2006. Panduroga, 12/147-155. p.737.
8. Gopal Krishn Bhatta. Rasendra Sara Sangraha. Ghananand Pant, editor. 1st ed. Delhi: Vedic Press, 1949; 590.
9. Vagbhata. Rasaratna Samucchya. Tripathi ID, editor. 3rd ed. Varanasi: Chaukhambha Sanskrit Bhawan; 2006. Jalodarpandusothadi Chikitsa, 19/ 102-106., p.241.
10. 10.Sarri G, Westby M, Bermingham S, et al; Diagnosis and management of chronic hepatitis B in children, young people and adults: summary of NICE guidance. BMJ. 2013 Jun 26; 346: f3893. doi: 10.1136/bmj.f3893.
11. Hepatitis B, NICE Quality Standards (July 2014).
12. Hepatitis B; Public Health England.
13. Hepatitis B Fact sheet; World Health Organization, August 2008.

14. Hepatitis B (chronic): Diagnosis and management of chronic hepatitis B in children young people and adults; NICE (Jun 2013).
15. Aspinall EJ, Hawkins G, Fraser A, et al; Hepatitis B prevention, diagnosis, treatment and care: a review. Occup Med (Lond). 2011 Dec; 61(8): 531-40.
16. Cooke GS, Main J, Thursz MR; Treatment for hepatitis B. BMJ. 2010 Jan 5; 340: b5429.doi: 10.1136/bmj.b5429.
17. Management of chronic hepatitis B virus infection; European Association for the Study of the Liver (2012)
18. Hepatitis B; NICE CKS, August 2010.
19. Nayak, S., Management of Shakhashrita kamala vis-a-vis hepatitis B, Ayurmedline-Hepatitis, 2002; 194.
20. Journal of Advanced Pharmacy Education & Research, 2011; 1: 12-44.
21. Nagarkatti DS, Rege NN, Desai NK, Dahanukar SA. Modulation of Kuffer cell activity by Tinospora cordifolia in liver damage. Indian drugs, 1984; 21: 544-555.
22. Rege, N. et al., Immunotherapy with Tinospora cordifolia: a new lead in the management of obstructive jaundice, Indian J. Gastroenterol., 1993; 12: 5.
23. Asian Pacific Journal of Tropical Biomedicine, July 2013; 3(7): 505-514.
24. Journal of Pharmacy Research, May 2013; 7(5): 459-462.
25. Food and Chemical Toxicology, December 2011; 49(12): 3367-3373.
26. Jayaram S, Thyagarajan SP, Subramaniam S. In vitro inactivation of HBsAg by certain medicinal plants. Biomed, 1989; 9: 25-29.
27. Chturvedi GN, Singh RH. Treatment of jaundice with an indigenous drug Picrorhiza kurroa Royale(A clinical and experimental study). Curr Med Pract, 1965; 9: 451-461.
28. Rajalakshmi S, Sivanandam G, Veluchamy G. Effect of Kadurohini (Picrorhiza kurroa) in the treatment of viral hepatitis – a double blind study with placebo control. J Res Ayur Siddha, 1992; 13: 27-34.
29. Vaidya, A.B. et al., Picrorrhiza kurroa Royle ex Benth as a hepatoprotective agent experimental and clinical studies, J. Postgrad. Med., 1996; 42: 105.
30. Anandan, R., Prabhakaran, M., and Devaki, T., Biochemical studies on the hepatoprotective effect of Picrorrhiza kurroa on changes in liver mitochondrial respiration and oxidative phosphorylation in D-galactosamine induced hepatitis in rats, Fitoterapia, 1999; 70: 548.
31. Rastogi, R., Srivastava, A.K. and Rastogi, A.K., Long term effect of aflatoxin B1 on lipid peroxidation in rat liver and kidney: effect of picroliv and silymarin, Phytother. Res., 2001; 15: 307.
32. Jayaram, S. and Thyagarajan, S.P., Inhibition of HBsAg secretion from Alexander cell line by Phyllanthus amarus, Indian J. Pathol. Microbiol., 1996; 39: 211.
33. Lee, C.D. et al., Phyllanthus amarus down-regulates hepatitis B virus mRNA transcription and replication, Eur. J. Clin. Invest., 1996; 26: 1069.
34. Thygarajan, S.P. et al., In vitro inactivation of HBsAg by Eclipta alba Hassk and Phyllanthus niruri Linn., Indian J. Med. Res., 1982; 76: 124.
35. Xin-Hua, W. et al., A comparative study of Phyllanthus amarus compound and interferon in the treatment of chronic viral hepatitis B, J. Trop. Med. Public Health, 2001; 31: 140.
36. Handa, S.S. and Sharma, A., Hepatoprotective activity of andrographolide against galactosamine and paracetamol intoxication in rats, Indian J. Med. Res., 1990; 92: 284.
37. Trivedi, N. and Rawal, U.M., Effect of aqueous extract of Andrographis paniculata on liver tumor, Indian J. Pharmacol., 1998; 30: 318.
38. Nanal, V., Liver disorders and their Ayurvedic management, in Ayurved and Hepatic Disorders, Kulkarni, P.H., Ed., Sri Satguru Publications, Delhi, 2001; 142.

Source of Support: Nil
Conflict Of Interest: None Declared

How to cite this URL: Minal. S.Vaidya & Pravin G. Jagtap: Ayurvedic Management Of Hepatitis B: A Case Report. International Ayurvedic Medical Journal {online} 2018 {cited May, 2018} Available from: http://www.iamj.in/posts/images/upload/1167_1171.pdf