

## Ayurvedic Herbo-Mineral Approach in Management of Hepatitis (Kamala)

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### Abstract

Inflammation of the liver (Hepatitis) can be traced to many different causes, including viral infections, alcohol, fat accumulation in the liver, an incorrectly functioning immune system, exposure to chemicals and other toxins, and certain drugs. Most of those Asian countries that consider Hepatitis is an urgent public health issue, and have a national strategy in place. Awareness of all those concerned is essential for effective control measures as therapies are expensive with moderate efficacy and side-effects. As a result in recent years there has been great interest in scientific field to evaluate the efficacy of Ayurvedic formulations and single herbal remedies on Hepatitis. Kamala is one of the important, common clinical entities in Ayurveda, whose description appears to be most comprehensive and incorporates the disorders of Hepato-Biliary System of Modern Medicine. Numbers of clinical and experimental studies have been conducted to prove the scientific basis of the use of Ayurvedic therapeutic for management of Hepatitis at primary care level. This study work had been carried out to found Ayurvedic herbomineral formulations which already proved their effect on Hepatitis (Kamala) through hepato-protective activity.

**Key Words:** Kamala, Ayurveda, Hepatitis, Hepato-Biliary System

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### Introduction

Common Gastrointestinal Diseases often exhibit geographic, cultural, and gender variations. Diseases previously less common in certain areas of the world have shown a recent increase in prevalence. Industrialization has traditionally been noted as a major cause for this epidemiologic evolution. However, environmental factors such as diet, hygiene, and exposure to infections may play a major role.<sup>1, 2</sup> Hepatobiliary system also considers within this context. The hepatobiliary system refers to the liver, gall bladder and bile ducts – organs that are involved with the production, storage, transport and release of bile, a secretion that prepared fats for further digestion. There are numerous conditions that can harm the hepatobiliary system, some of which are life threatening and ultimately, require surgery and/or liver transplantation. Liver damage can occur from a variety of sources: Infections with viruses (Hepatitis

A: HAV, Hepatitis B: HBV, Hepatitis C: HCV, Hepatitis D: HDV and Hepatitis E: HEV viruses), Exposure to toxic drugs or chemicals, Excessive use of alcohol, Genetic disorders, Diabetes, Heart failure, Cancer and Shock. In many cases, the liver is able to repair itself; in others, a variety of treatments may be effective. But Liver disease is thought to be relatively rare. However, some liver diseases (e.g. Nonalcoholic fatty liver disease or Hepatitis C) are prevalent in the population and others: e.g., Hepato Cellular Carcinoma (HCC) or Fulminant Hepatic Failure (FHF) is highly lethal. Acute liver disease is a general term for any episode of liver damage that completely resolves within 6 months. The most common causes of acute liver injury are acute infection with a Hepatitis virus, alcohol, and drugs.<sup>3</sup>

Inflammation of the liver is called Hepatitis. According to the International Classification of

Disease (ICD) 1992, Hepatitis is categorized under the infectious and Parasitic Diseases (Code B15 – B19) of Digestive System.<sup>4</sup> Inflammation (or soreness) of the liver can be traced to many different causes, including viral infections, alcohol, fat accumulation in the liver, an incorrectly functioning immune system, exposure to chemicals and other toxins, and certain drugs. Most of the causes of Hepatitis cannot be distinguished on the basis of the pathology but some do have particular features that are suggestive of a particular diagnosis. And although most of those carrying Hepatitis do not know they have it, they can unknowingly transmit it to others and at any time in their lives it can develop to kill or disable them, the United Nations agency warned. Therefore accurate knowledge of the burden of liver disease is essential in formulating health care policies to prioritize health interventions and research and to allocate resources accordingly.<sup>5,6</sup> With the recent publication of the first human map of genetic variation (i.e. Human Haplotype Map), genomic-based discoveries will improve the understanding of the genetics of hepatobiliary diseases, resulting in better prevention measures and diagnosis as well as more effective therapies. Currently, alcoholic liver disease, nonalcoholic fatty liver disease, and symptomatic gallbladder stones affect a sizable portion of the population. On the other hand, chronic cholestatic liver diseases, HCC, and polycystic liver disease, although rare, shorten life expectancy and diminish the quality of life of patients. In the genomic era modern sciences have opportunity to start dissecting the susceptibility genetic variants of liver diseases. They are now in a position to begin elucidating the complex genotype/phenotype relationships of liver diseases with the anticipation to understand disease pathogenesis better. But they are unable to treat Hepatitis effectively at community level due to many reasons such as understanding of the patterns of Hepatitis B transmission, pathogenesis and antiviral drug resistance etc. But at primary care level, Hepatitis group of diseases were present in form of Jaundice. Therefore at that level it should be treated in broader terms of Hepatitis not only orient towards Viral Hepatitis and it will be helpful to prevent the disease at early stages.<sup>7,8</sup>

## Materials and Methodology

The present study mainly focuses to identify the herbo mineral drugs and treatment modalities which have been indicated for management of Kamala (Hepatitis) in source books of Ayurveda, undergone extensive clinical and experimental research trials with special reference to Hepatitis and critical understanding of the aetiopathogenesis of Kamala

according to Ayurvedic fundamentals. Main source books of Ayurveda, Post Graduate research studies, WHO reports and other relevant sources were used for this study.

## Results

### 1. The Global Perspective of Hepatitis

As the world around us is becoming progressively interconnected and complex, human health is increasingly perceived as the integrated outcome of its ecological, social-cultural, economic and institutional determinants.<sup>9</sup> Due to globalization transmission of infectious diseases are spreading drastically throughout world. Hepatitis is one of the leading diseases among infectious diseases which is not identified properly at the primary level due to its syndromic presentation. 78% of global carriers of Hepatitis B reside in Asia and Hepatitis B is highly endemic in much of the South-East Asia region. Most of those Asian countries that consider Hepatitis is an urgent public health issue, and have a national strategy in place.<sup>10</sup>

In this present era modern medical science challenges infectious disease like Hepatitis. Awareness of all those concerned is essential for effective control measures as therapies are expensive with inadequate efficacy of availability of chemotherapy agents and side-effects.<sup>11</sup> As a result in recent years there has been great interest in scientific field to evaluate the efficacy of Ayurvedic formulations and single herbal remedies on Hepatitis. A number of clinical and experimental studies have been conducted to prove the scientific basis of the use of Ayurvedic therapeutic for management of Hepatitis at primary care level.

### 2. Tools for Prevention, Care and Treatment

Better knowledge is an essential requirement for prevention, care and treatment. Hepatitis or inflammation of liver cells should not be confused with Jaundice because it is one of the symptoms of Hepatitis but it can also be due to other causes.

Hepatitis can be identified in two broad categories: Viral Hepatitis and Non-Viral Hepatitis: Autoimmune Hepatitis, Non-alcoholic Steato Hepatitis, Toxic Hepatitis, Ischaemic Hepatitis and Hereditary liver disease.

Viral Hepatitis is in two phases: Acute Viral Hepatitis and Chronic Viral Hepatitis. Acute Viral Hepatitis is a systemic infection affecting the liver predominantly. Almost all cases of acute Viral Hepatitis are caused by one of five viral agents: HAV, (HBV), HCV, the HBV-associated delta agent or HDV, and HEV. These ranges from asymptomatic

and inapparent to fulminant and fatal acute infections are common to all types of Hepatitis. And also from subclinical persistent infections to rapidly progressive chronic liver disease with cirrhosis and even HCC, are common to the blood borne types (HBV, HCV, and HDV).<sup>12</sup>

Chronic Hepatitis represents a series of liver disorders of varying causes and severity in which hepatic inflammation and necrosis continue for at least 6 months. Milder forms are non-progressive or only slowly progressive, while more severe forms may be associated with scarring and architectural reorganization, which, when advanced, lead ultimately to cirrhosis.<sup>3,13,14</sup>

Acute Viral Hepatitis is the initial short-term stage of the disease. It begins with the entry of the virus into the body and continues for up to six months. All forms of Viral Hepatitis (A to E) have an acute phase. Symptoms may or may not appear during this phase. Chronic Hepatitis refers to a continuing lifelong infection. The diagnosis of Chronic Hepatitis is made only when the clinical signs and symptoms have lasted more than six months, Hepatitis viruses B, C and D are known to cause chronic Hepatitis; the others do not. Chronic Hepatitis does not always develop because a person's immune system may successfully defeat the virus. But it can develop when a person's immune system is unable to eliminate the invading virus.<sup>6,15,16,17</sup>

The resulting clinical spectrum of human Hepatitis ranges from asymptomatic courses to manifest disease. Further diagnostic evaluation is essential, as different hepatic and extrahepatic pathologies may mimic human Hepatitis. Beside routine laboratory tests of liver enzymes, which are regularly the first indicator of Hepatitis, further diagnostic assessment need to orchestrate patient history, clinical findings and laboratory investigations. Liver histology and diagnostic imaging are important complementary diagnosis gives first insights into the stage, prognosis and therapeutic options of newly diagnosed Hepatitis.<sup>18,19,20,21</sup>

There is no modern medicine treatment that can rid our bodies entirely of Hepatitis viral infection. Only our own immune system can defeat the virus. When the immune system defeats a viral infection, it is said that the disease is self-limited. Medical treatment is directed toward relief of discomfort and symptoms and toward compensation for changes in body functions that could cause death. Reduction of fever, replacement of body fluids and intravenous feeding, and support of breathing with a respirator are examples of the support that may be required. A liver transplant is an extreme last resort in some cases.<sup>6,15,16,17</sup> Primary prevention of infection with Hepatitis

viruses can be achieved either through immunization or through behavioral interventions to reduce risk factors for infection.<sup>22</sup> Standard safety precautions in laboratories and hospitals must be enforced strictly to avoid accidental needle punctures and contact with infected body fluids. There is no vaccine for Hepatitis C prevention.<sup>23,24</sup>

### 3. Ayurvedic Management of Kamala

Kamala is one of the important, common clinical entities in Ayurveda, whose description appears to be most comprehensive and incorporates the disorders of Hepato-Biliary System of Modern Medicine. The hepatobiliary system is the seat of Pitta Dosha and numbers of Pitta dominant diseases are known to be occur other than Kamala.

Kamala as a somatic disease has been described according to unique principles of Ayurveda such as different anatomical components and physiological components are identified in relation to Kamala. Ayurveda body parts are enumerated and described according to Srotas, Koshta, Koshtanga, Shaka, Kala, Ashaya and Roga Marga, Marma, Yakrit, Pleeha etc. and physiological components: Sharirika Dosha, Manasika Dosha, Dhatu, Agni, Ama, and Mala etc. are important factors related to Kamala Roga. According to the Roga Rogi Pariksha of Ayurveda its aetiopathogenesis and its management are vividly discussed by the great Acharyas in the Pandu and Kamala Roga Chikitsa Adhikarana. Different types of Kamala have been mentioned in most of the Vedic and Ayurvedic classics such as Koshtasrita Kamala, Shakashrita Kamala, Kumbha Kamala, Halimaka, Lagharaka, Apanaki and Alasakya.<sup>25,26,27,28,29</sup> Most of all Ayurvedic classics have given explanation about disease Kamala is a Pittaja Nanatmaja Vyadhi, resultant due to untreated or Chronic Pandu Roga or after other Rogas too. And further they expressed that the Kamala might manifest in normal person also by the excessive intake of Pitta Vardhaka Ahara and Vihara.<sup>25,26,27</sup>

Furthermore Kamala can be correlated with Hepatitis in the company of the possible modern entities of Hepato-Biliary system diseases. Effective management of the patient with mild to severe form of Kamala requires a multi-dimensional approach. Accurate diagnosis is essential for the application of appropriate forms of therapy.

In Ayurveda different therapeutic approaches used for treatment. The treatment of a disease or ailment affecting an individual in mental and physical dimensions are refer as Laukiki Cikitsa has a general line of treatment i.e. Samanya Cikitsa and special line of treatment for specific disease condition i.e. Vishesha Cikitsa. To gain the

equilibrium state Caraka Sutra 11/54<sup>30</sup> categorized Ayurveda treatment into 3 types: Yuktivyapashraya Cikitsa; Daivavyapashraya Cikitsa: Sattvavajaya Cikitsa. Yuktivyapashraya Cikitsa is further divides into two varieties: Samshodana Cikitsa (Purification therapy) and Samshamana Cikitsa (Palliation therapy). Samshodana advocates a number of therapeutic procedures to purify Srotas which get blocked due to stagnation of Ama and other Malas. It consists of three stages viz Purva Karma (Depana, Pacana, Snehana, Swedana), Pradhana Karma i.e. Panca Karma (Vamana, Virecana, Vasti, Shirovirecana, Raktamokshana) followed by Pashcat Karma (Special dietary regimen or Samsarjana Krama). The Samshamana or palliative therapy is given to bring about therapeutic equilibrium of Doshas and Dhatus by administrating appropriate drugs, diet, exercise and lifestyle.<sup>31</sup> By keeping this fact in mind here it is an attempt to look over the effective multi-dimensional approach by Ayurvedic formulations for the management of Kamala.

## Samanya Cikitsa

### *Yuktivyapashraya Cikitsa for Kamala*

According to the Cakrapani commentary, basically Kamala is physical disease which is originated by physical course. For that best treatment for Kamala is Yuktivyapashraya Cikitsa. Such Yuktivyapashraya Cikitsa is further divides into varieties such as Samshodhana Cikitsa (Purification therapy) and Samshamana Cikitsa (Palliation therapy).

### *1. Samshodhana Cikitsa for Kamala*

It consists of three stages viz Purva Karma (Depana, Pachana, Snehana, Swedana), Pradhana Karma i.e. Panca Karma (Vamana, Virecana, Vasti, Sirovirecana, Raktamokshana) followed by Pashcat Karma (Special dietary regimen or Samsarjanana Krama)

Acarya Caraka described the patient suffering from Kamala and Pandu shall be treated with Snigdha and Tikshana Dravya possessing Urdhva and Adhah Sodhana treated with Madu and Tikta Virecana and followed by Pathyapathyas.(Ca.Ci.16/40)<sup>32</sup>

**Deepana Pachana:** Deepana Pacana Dravyas are advised before proceeding to the main line of Shodhana treatment as these are helpful to restore Agni and alleviate Ama.

**Snehapana:** All the Acharyas indicated Snehapana as Purva karma for Virecana in Kamala. Caraka has recommended Kalyanaka Ghrita, Panca Tikta Ghrita and Maha Tikta Ghrita for Snehapana. Yogaratnakara

Pandu Rogadhikara has described Snehapana, Virecana, Samana Kriya as Cikitsa Karma for Kamala. Kevala Sarpi is contraindicated in Kamala as it may lead to icteric tinge to the entire body (Ca.Su.13/74)<sup>33</sup>

**Virecana:** Kamala is one among them and is described as Virecana Sadhya Vyadhi by Acarya Caraka on Samhita 2/13.<sup>34</sup> Also he has advised Tiktak Mrudu Virecana in Kamala. (Ca.Ci.16/40)<sup>35</sup>

**Vasti:** Yapana Vastis with Madhura Dravyas described in Caraka Samhita Siddhithana for the management of Kamala.

**Nasya:** The following drugs such as Jimutaka Phala Nasya, Jalini Phala Nasya and Karkotaka Mula Svarasa are mentioned for Nasya Karma in Cakra Datta. As mentioned in Gada Nigraha, Ankola Mula Nasya can be prescribed for Kamala .

**Anjana Karma:** Anjana Karma Dravyas includes Hingu (Br.Ni.Ra.), Drona Pushpi Svarasa (C.D) and Nisha, Gairika, Dhatri (A.H.).

### *Samshamana Therapy:*

Single drugs such as Katuuki, Daruharidra, Vasa, Kiratatikta, Guduci, Kumari, Kalamegha, Bhumyamalaki, Bhringaraja, Nimba, Triphala, Punarnava, Parpatuaka, Kakamaci, Madhuyashtui, proved to be very effective and are substantiated by various clinical and experimental trials mentioned the actions such as Pitta hara/Tri Doshahara, Pitta Recaka, Yakrit Uttejaka, Deepana, Recana, Shotahara, Jvarahara, Raktashodhaka, Rasayana and Sroto Sodhaka.

### *Daivavyapashraya Cikitsa:*

There are several references of prayers (Mantradi Rasadi) in Rigveda and Atharva Veda which use to restore the normal color of patients (Hariman).

In Basavarajeeyam 5/151, is mentioning of Kamala Mantra and also in 24th chapter is advised to wear of gold or silver amulet at Manibandha for disease Kamala.

In Vaidya Cintamani Kamala Roga Prakarana, it is described as 'Daivakarajanita Vyadhi' i.e., due to deeds performed in the Purva Janma and has been mentioned Daivavyapashraya Cikitsa. It includes preparation of golden idol (pratima) of Pakshiraja (Garukmanta), which should be offered, to a Brahmin after he is duly worshipped. There is also description of Kamala Devata i.e. the golden idol of Kamala Devata consists of Pitanga (yellow colored body) with Musala (pounding staff) in one hand and Kapala (skull) in the other. This description itself may indicate the bad prognosis of the disease.<sup>36,37</sup>

### **Sattvavajaya Cikitsa**

Psychological and psychodynamic deamination of the therapeutics for Kamala is also essential because its Manasika Nidana involvement. For this physician uses the technique of Ashvasana or assurance, replacement of emotions and psycho shock procedures when needed.

### **Visesha Cikitsa**

#### **Shakhashrita Kamala Cikitsa:**

A Separate set of therapeutic measures specific to Shakhashrita Kamala are mentioned by Acarya Caraka in Cikitsa Sthana 16/124 and 16/30-132<sup>38,39</sup> that is, Kaphahara and Pittavardhaka Cikitsas are to be adopted simultaneously as they remove obstruction caused by Kapha and clears the way of Pitta to Koshta.

Vata Prashamana Cikitsa is necessary as aggravated Vata is responsible throwing out Pitta into Shakhas from Koshta. It helps the Pitta in coming back to Koshta.

In Shakhashrita Kamala as Pitta is displaced to Shakhas, it is advised to adopt different measures to bring back the Shakhashrita Pitta to Koshta. Caraka explained five general measures such as Vriddhat, Vishyandanat, Pakat, Srotomukhavishodhanat and Vayoshcanigrahat to bring Doshas from Shakhas to Koshta.

1) **Vriddhat:** It means aggravation i.e., quantitative increase in Shakhashrita Dosh. In Shakhashrita Kamala as Pitta has become Vimargagamana to Shakhas, initially Pittavardhaka Dravyas such as kulutha, Shushka Mulaka Yusha, Mamsarasa of Barhi, Tittiriand Daksha seasoned with Katu, Amla Rasa Dravyas and Aushadhis like Trikatu Curna along with Madhu and Matulunga Svarasa were described.(Ca.Ci.16/128-129)<sup>40</sup>

2) **Vishyandanat:** Cakrapani defines it as Vilayana i.e., increase in fluidity. Vriddha Pitta, which is accumulated in shakhas attain Vilayana i.e. liquefied or loosened due to Tikshna, Ushna Gunas of Dravyas. (Ca.Su.28/33 Cakrapani vyakhya)<sup>41</sup>

3). **Pakat:** Shivadas sen opines that Doshas become Laghu or Laghava after Paka. This results in detachment of Dosh from the place of lodgment. Cakrapani considered Pakat as Abaddhata. Doshas after attaining Abaddhata moves towards Koshta. Here Paka can be considered as Abaddhata or Laghava of Kapha, which has caused Avarodha.

4) **Srotomukhavishodhanat:** As sequels to the above step due to Paka of Kapha the Srotas become clear, facilitating the passage of Vishyanda Pitta.

5) **Vayoshcanigrahat:** Hridaya plays a key role in spreading the Doshas from Koshta to shakha. But when Nigrahana of Hridaya is attained, Doshas automatically reaches Koshta.

Once Pitta reaches to Koshta, Malaranjana Kriya is restarted and Sakrit attains 'Apitta ragat' (Color of Pitta). Then the line of treatment laid down to Koshtushrita Kamala should be adopted.(Ca.Ci.16/131- 136)<sup>42</sup>

#### **Kumbha Kamala Cikitsa:**

Some specific treatments were described by Sushruta and Vagbhata.(A.H.Ci.16/52)<sup>43</sup>

- 1) Swarnamakshika Bhashma with Madhu
- 2) Shilajithu, Triphala kwatha with Madhu
- 3) Loha Kitta Bhashma with Madhu.
- 4) Saindavadi Mandura
- 5) Shilajithu with cow's urine
- 6) Makshika Tikta Bhashma.
- 7) Harina Mamsa

Sushruta Uttara Stana 44/26 has mentioned

1. Mandura with cow's urine + Saindhava Lavana – 1 month.
2. Mandura Bhashma + Vibhitaki Phala Majja + Shuntui + Krishna Tila in equal proportions with cow's urine for Kumbha Kamala Roga

According to Acarya Vagbhata:(As.Hr.Ci.16/52)

1. Shilajatu with Gomutra – 1 month
2. Swarnamakshika Bhashma with Gomutra – 1month

#### **Halimaka Cikitsa:**

According to Caraka Ca.Ci.16/134-136<sup>44</sup> following treatments can provide for Halimaka Cikitsa

- 1) Guduci Svarasa with Buffalow's milk.
- 2) Amalaki and Nishotha Aushadhis
- 3) Trivrit, Dhatri, Vasa, Nimba, Madhuyashtui, Ragini, Pippali
- 4) Yapana Vasti.
- 5) Drakshavaleha, Abhayawaleha
- 6) Madwikarishtua etc.

#### **Single drugs for Kamala:**

Amrita Svarasa, Daruharidra Svarasa, Nimba Patra Svarasa etc.

#### **Compound Drugs for Kamala:**

Several herbal, mineral and herbo-mineral preparations have been advocated in Kamala Roga.

**Ghritas:** Kalyanaka Ghrita, Katukadya Ghrita, Danti Ghrita, Haridradi Ghrita, Mahatiktadi Ghrita, Panchagavya Ghrita, Pippalyadi Ghrita, Triusanadi Ghrita etc.

**Rasaushadhi:** Nisha Lauha, Arogyavardini vati, Swarnamakshika yoga, Yogaraja Shilajitu Vataka, Punarnava Mandura, Mandura Bhashma, Trika trayadi loha, Dhatri Loha, Vidangadi Loha, Yakridari Loha, Pancashya Rasa, Pranaballabha Rasa, Kamalantakar Rasa, Lauha Parpati, Navayasa Aushadhis, Bhunimbadi Aushadhis, Jiwanyadi Aushadhis, Satyadi Aushadhis etc.

**Kwatha:** Triphala, Visaladi kwatha, Vasadi kwatha, Phalatrikadi kwatha, Dashamuladi kwatha

**Avaleha:** Darvadiavalehya, Triphaladiavalehya, Drakshadiavalehya, Vidangavalehya.

**Asava and Arishtua:** Dhatriarishtua, Parpatadyarishtua, Rohitakarishtua, Phalarishtua and Beejakarishtua etc.

## Discussion

According to the Viral Hepatitis Report by the Secretariat of WHO, the group of viruses (Hepatitis A, B, C, D and E) that cause acute and/or chronic infection and inflammation of the liver gives rise to a major public health problem globally. Hepatitis B and C viruses are major causes of severe illness and death. The global burden of disease due to acute Hepatitis B and C and to cancer and cirrhosis of the liver is high (about 2.7% of all deaths) and is forecast to become a higher ranked cause of death over the next two decades.<sup>1-2,5-8</sup>

The Hepatitis Health Assembly has considered specific aspects of Hepatitis prevention in past resolutions. WHO is in a position to provide coordinated global support and leadership in the development of a comprehensive approach to prevention and control of Viral Hepatitis. As a result medical research on Hepatitis driving force oriented towards in search of elimination of Hepatitis. "Health research", "medical research" or "clinical research," has equal meanings refers to research that is done to learn more about human health which aims to find better ways to prevent and treat disease. It provides scientific information and theories for the explanation of the nature and the properties of the world around us. And also it is an important way to help improve the care and treatment of people worldwide. In globally there are many needs assessment and strategic plan focused on Hepatitis. Most of the

developed policies have been stated that Conduct qualitative and quantitative research designed to understand the knowledge, skills, abilities, and attitudes of providers in regard to prevention, care, and treatment of Viral Hepatitis.<sup>15,15,16</sup>

Important questions remain regarding Viral Hepatitis treatment, including whether the virus could develop resistance to a drug, whether and when treatment can be started or discontinued, and whether it is safe to use drugs for Hepatitis B over the long-term; additional investments in basic and translational research are needed to determine why many patients living with Hepatitis C do not respond to currently available therapies and whether future directly acting agents against Hepatitis C can be used effectively in combinations without long-acting interferon. Some answers can be given by several systems of medicines such as traditional medicines, but is currently of limited availability in many parts of the world. Among these Ayurvedic Medicine also helped to give better answers in this regard.

Ayurveda is a natural system of medicine that has been practice in India for more than 5,000 years. It is not just a system of preventive medicine; it emphasizes a helpful and enlightened lifestyle a concept that's gaining wide acceptance across the globe.

In Caraka Samhita Vimana Stana has explained the way of research study going on through the Siddhanta (Hypothesis/Theorem) which is established by making repeated observations, arguing with logic, reasoning and finally stating the truth. The main objective of Ayurvedic research in contemporary period is to verify the truth in our ancient concepts and to evolve practical ways of treatment relevant to the present era. The goal of treatment for any disease is to restore balance of humors to reestablish a person's original constitution. The method used to achieve constitutional balance could be elimination by purificatory measures and palliation by herb, herbo mineral and mineral drugs, lifestyle changes by adopting wholesome diet and behavior or both.

The treatment of Liver disorders usually involves a combination of above two methods. Despite tremendous advances in modern medicine even at molecular level, there are no effective hepatoprotective medicines which can be used at primary care level for prevention and cure of Hepatitis. But recent past decades in the field of Ayurvedic research many fruitful results have been found for Viral Hepatitis but not Hepatitis as whole.

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