

MANAGEMENT OF LIVER DISORDERS IN UNANI MEDICINE: A REVIEW

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ABSTRACT

In Unani system of medicine, *Jigar* (liver) is considered as a vital organ, The main function of the liver is *Istehala* (metabolisms) through which it produces *Hararat-e-ghareeziyah* (innate heat of the body) and *Akhlat* (humors) for the body, it plays a central role in the metabolism of large number of organic and inorganic chemicals and drugs. It receives large amount of nutrients and xenobiotics through digestive portal vein becoming the target organ of several classes of toxicant. The modern medicines have little to offer for easing of hepatic diseases whereas most important representatives are of Phytoconstituents. It has been reported that medicinal plants have sufficient potential to offer effective and safe hepatoprotective drugs. The Indian system of medicine like Ayurveda and Unani system, have a major role in the treatment of liver ailments.

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INTRODUCTION

According to Unani medicine liver is origin of natural *Qawa* (natural power). Liver is an organ composed of fine blood vessels which form the base of two large blood vessels, which arises from above and below part of liver, the one vessel that arises from above known as *Ajwaf nazil* (inferior vena cava) and second vessel which arises from below part known as *Bab-ul-kabid* (portal vein). Liver is main source of nutrition synthesis. *Masariqa* (Mesenteric vein) absorb *Kailoos* (chylus) from intestine and transport to liver^[1,2]. Chylus that is product of first digestion deliver to liver for the second stage of digestion or hepatic digestion to produce humour. The most important function of liver is to produce *Akhlat* (humour) for nourishing, growing and developing the body^[2,3].

Pathophysiology of Kabid (liver)

In Unani system of medicine *Jigar* (liver) is considered as vital organ, which is the origin of *Quwat-e-tabyaiya* (physical faculty). *Buqrat* said that most of our life depends on our healthy liver and being essential place for all metabolic activities^[4]. Liver is a big mass of solidified

blood and has reddish colour, which produces *Rooh-e-tabai* (natural pneuma). It is the source of blood formation, and makes the chyle acceptable for the organs^[5]. If liver becomes incapable to produce blood then other organs will not get sufficient nutrients and finally the organs get affected, and become weak. The main function of the liver is *Istehalah* (metabolism) through which it produces *Hararat-e-ghareeziyah* (innate heat of the body) and *Akhlat* (humors) for the body^[6].

Diseases of liver developed due to *Su-e-mizaj* (an abnormal temperament), *Su-e-tarkeeb* (structural deformity), *Tafarruq-e- itsal* (discontinuity), *Waram* (Inflammation) and *Nafkhat* (collection of gaseous matter)^[7,8]. Liver has five types of *Quwa* (powers), these are *Quwat-e-hazima* ((power of digestion), *Quwat-e-jaziba* (power of absorption) *Quwat-e-mumaiazah* (distinctive faculty) *Quwat-e-masika* ((power of retention) and *Quwat-e-dafeya* (power of excretion). If one or more than one *Quwat* of the above becomes weak, then diseases occur^[9,10].

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In all of these, *Quwaqt-e-mughaiyarah* (transformative faculty) is important faculties, because it takes formation of blood^[9]. The weakness of function in the *Quwat-e-hazima* (digestive faculty) of liver results in production of *Damm-e-balghami* (blood containing excess phlem) and from which all the body organ get their nutrition and thus the whole body acquires *Balghami mizaj*, (phlegmatic temperament.) and leads to the abnormality of *Istisqa lahmi* (anasarca)^[4]. *Istisqa lahmi* occurs due to dominancy of *Su-e-mizaj barid maddi* or *Gair maddi* (cold temperament which is associated with the matter or without matter.) of liver^[9].

Su-e-mizaj (an abnormal temperament) of liver arises from many causes such as diets or other environmental factors. Occasionally, the organ in vicinity of the liver also alters in its function, for instance, stomach does not properly produce good *Kailoos*, (chylus) and thus liver receives the same *Kailoos* leading to manifestation of *Barid mizaj* (cold temperament). In addition to weakness of spleen also plays an important role in the phenomena of *Barid mizaj* as it is unable to purify the blood from *Sauda* (*barid yabis*)^[9].

Su-e-mizaj (an abnormal temperament) of small intestine also predispose to *Su-e-mizaj Barid* (cold temperament) of liver. *Waram* (Inflammation) may also be accompanied with *Su-e-mizaj* of liver and also may be without it. But *Waram* is always in harder consistency, besides these causative factor *Su-e-mizaj* of liver may also result from *Maraz-e- murakkab* such as *Sudda* (obstruction) in liver as it reduces *Hararat-e-gariziya* particularly *Suddah barid*. Abnormality of *Quwat-e-hazima* predisposes to the pathogenesis of following diseases: *Istisqa tabali* (ascites succatus) and disease of *Mirrah safra* (serous bile). The production of *Safra* increases when *Su-e-mizaj haar* is developed in the liver^[9].

Most of the function of liver occurs due to the action of *Hararat-e-gariziya* (innate heat/natural heat). If *Su-e mizaj* exceeds from the normal limit it results in deviation from normal function of liver, in this condition when *Rutubat* (Moistness) comes in contact with this *Hararat* (hotness) it vaporise, resulting in the formation of *Riyah* (gases) and finally become responsible for *Marz Istisqa Tabali* (Collection of condensed gases or mixed fluid in the abdominal cavity)^[9].

The cause of *Su-e-mizaj* of liver which is particularly related to liver is dysfunction of gallbladder due to obstruction of bile duct or weakness of *Quwate dafiya* (excretory power). There are two causes of *Yaraqan*

(jaundice), either functioning of gall bladder disrupt or *Su-e-mizaj* developed in liver, such as in *Waram safrawi* of Jigar and due to uses of hot poison, this is the reason of excess synthesis of *Safra* which expose on external body. *Istisqa Zaqi* (ascites) and many other diseases developed due failure of *Quwat mumaiyeza*.^[9] Many times, it is seen that disease develops due to only *zof-e-Jigar* (hepatic insufficiency) or *zof-e-jigar* along with *Waram sulab* (Chronic inflammation), *Abscess*, *Qarha* (Ulcer) *Suddah* (Obstruction), and *Ta'fun* (Infection),^[10]

Important diseases of the liver

Su-e-mizaj jigar (Abnormal temperament of liver), *Zoufe jigar* (hepatic insufficiency.), *Suddah jigar* (Hepatic obstruction), *wram-e-jigar* (hepatitis), *Dubaila-e-jigar* (liver abscess), *Hisat-e-jigar* (Cholilethiasis), *Su-al-qinia* (anaemia with hypoprotienemia), *Sigr-al-kabid* (hepatic atrophy), *Izam-al-Kabid* (hepatomegaly), *Istisqa* (ascitis), *Yaraqan* (jaundice)^[11,12].

Clinical features of liver diseases^[7]

Qillate Ishteha (loss of appetite), *Qaiy* (vomiting), *Bad-hazmi* (indigestion), *Bayaz shaftain wa lisan* (Appearance of whitish lips and tongue), *Zoafe aam* (General weakness of body), *Faqrudam* (Anaemia), *Safravi dast* (bilicious motion), *Baraze abyaz* (White faeces), *Humma* (Fever).

Principles of treatment in diseases of liver

In the management of liver diseases, the treatment prescribed by Unani physicians on following pattern.

- Removal of the predisposing factors
- Correction of *Su-e-mizaj*
- Dietary management

Thus while managing the liver diseases, hepatic faculties have to be strengthened. Normalizing the unnatural *mizaj* of liver by suppress or motivating the innate heat through diet, drugs possessing *Mubarrid* (refrigerants) / *Musakkin* (calorifacient) property respectively, besides *Muattir* (aromatic), *Mohallil* (anti-inflammatory), *Mufatteh sudad* (deobstruent), *Qabiz* (astringent) and *Mushtahi* (appetizer) properties. Massage with cold/ hot oils over hepatic region, baths and suitable exercises are also recommended. According to Ibn Sina, all these measures which are part of *Ilaj bil zid* (counteractive treatment), if adopted may restore *Tabai mizaj* (natural temperament) of liver^[13].

If disease occurs due to *Su-e- mizaj* (abnormal temperament) of liver, it should be tried to restore its

temperament, such as in case of *Su-e Mizaj haar* (excess of heat) of liver, *Tabreed* (refrigerants) should be given and for this action, *Aab-e-Kasni*, *Sikanjabeen* (mixture of vinegar, lemon and sugar),^[7,12] *Ussarah* Kaknaj (extract of *Physalis alkekengi*), *Ussarah* Mako (*Solanum nigrum*), *Ussarah* Tamar hindi (*Tamarindus indica*) and *Ussarah* Zarishk (*Berberis vulgaris*) are mentioned^[8].

If *Sudda-e-jigar* (obstruction of liver) develops with *Su-e-mizaj har*, then *Muftteh-sudad* (deobstruent) drugs such as *Karafs* (*Apium graveolans*) should be used with above drugs, because *karafs* has deobstruent property which removes all types of obstruction from liver (either concave or convex side), as well as *Qurse Tabasheer*, *Qurse Zarishk*, *Sharbate Nilofar*, like *Barid* (cold temperament) compound formulation are also efficient^[7,8].

In case of *Haar jigar* (excess heat of liver), *Zimad* ((liniments) of *Khurfa* (*portulaca oleracea*) along with *Roghan Gul*, *Sandalain* (both variety of Sandal), *Fofil* (*Areca catechu*), *Banafshah khushk* (*Viola odorata*), and *Gule Surkh* (*Rosa damascena*) are also helpful^[8].

In case of *Su-e Mizaj barid* (excess of coldness) of liver, which developed due to *Maddah* (matter), restoration and normalization of *Humours* (*Balgham and Sauda*) is done by *Nudj* (concoction) and *Tanqiya* (removal of abnormal humours) initially, then after correcting the *Mizaj* of liver with their respective drugs, for this purpose *Dawa-ul-kurkum* and others compound preparation which have hot ingredients such as *Sharbate Afsanteen*, *Qurse Afsanteen* along with *Sikanjabeen Unsoli* are effective^[8,12], as well as numerous *Mufrad* (single) drugs like *Sounf* (*Foeniculam vulgare*), *Tukhm Karafs* (*apium graveolans*), *Mastagi* (*Pistacia lentiscus*), *Qust sheereen* (*saussurea lappa*), *Izkhar* (*Andropogan schoenanthus*) and *Ghafish* (*Argimonia eupatoria*) are also effective for *Barid Jigar* (excess coldness of liver).

Zimad haar, ointment prepared with hot temperament's drugs such as *Zimad Nakhona* (ointment of *Trigonella uncata*) and others *Zimad* which prepared with *Qust* (*Saussurea lappa*), *Sumbulut-teeb* (*Nardostachys jatamansi*), and *Waj* (*Acorus calamus*) along with rose flower should be applied locally on the skin over liver area, restored liver function^[8,12].

Zofe Jigar (hepatic insufficiency), which generally occurs due to *Barodat* (excess cold) and *Ratobat* (excess moisture), it should be treated with *Qabiz* (Astringent) and aromatic drugs like *Darchini* (*Cinnamomum*

zeylanicum), *Izkhar* (*Andropogan schoenanthus*), *Murmaki* (*commiphora myrrh*), *Zafran* (*Crocus sativus*) and other such type of drugs are also useful.^[7,13]

Along this *Mjooon Dabeedul* ward, *Dawaul kurkum* like compound formulation are also useful in *Zofe Jigar* (weakness of liver).

For the management of *Sudda-e-jigar* (hepatic obstruction), obstruction remove with help of *Mufatteh sudad* (deobstruent), *Mohallil* (resolvent) drugs along with *Qabiz* (astringent) and aromatic drugs,^[7] such as *Luk maghsool* (*Cocca lacca*), *Reward Chini* (*Cinnamomum zeylanicum*), *Ussarah Ghafish* (extract of *Argimonia eupatoria*), *Tukhm badiyan* (seed of *Foenicululum vulgare*), *Tukhm Bathuwa* (seed of *Chenapodium album*), *Afsanteen Romi* (*Artemisia absinthium*), *Tukhm Kasni* (seed of *Cichorium intybus*), *Tukhm Karafs* (seed of *Apium graveolans*) and *Tukhm Kasoos* (*Cuscuta reflexa*) are used. In addition, *Joshanda* (decoction) of *Gul-e-Banafsha* (*viola odorata*), *Mako Khushk* (*Solanum nigrum*), *Biranjasif* (*Achellea millefolium*), *Gao Zaban* (*Borage officinalis*) and *Habbe Kabid Naushadri* are also effective^[7].

If the disease is due to weakness of any one or all four faculty of liver (*Quwwate Hazima*, *Jaziba*, *Masika*, and *Dafiya*) then therapeutic management is aimed to strengthening that respective *Qawah*.

For the management of *Waram-e-Jigar* (Hepatitis) with abscess, *Mashroobat*, *Tela*, and *Zimaad* ((Liniments and ointments) are recommended for the purpose of *Nudj* (concoction) and *Talaiyin* (laxation)^[7].

In *Waram-e-Jigar*, if *Maddah* (matter) is present on the *Miqar Jigar* (concave side of the liver), then *Mushilat* (purgatives) and *Muhallilat* (resolvents) should be given, such as *Tukhm Kasni* (seeds of *Cichorium intybus*), *Bekh Kasni* (root of *Cichorium intybus*), *Mako Khushk* (*Solanum nigrum*), in the form of *joshanda* (decoction). If *Maddah* located on *Mohaddab-e-Jigar* (convex side of liver) then diuretics such as *Sikanjabeen* (mixture of vinegar, lemon and sugar) are quite effective. *Aab-e-Kasni* (*Cichorium intybus*water), *Aab-e-Mako* (*Solanum nigrum* water), *Sharbat-e-Anarain* (*Punica granatum*), *Parsiyaonshan* (*Adiantum pedatum*), *Asalassoos* (*Glycyrrhiza glabra*) etc may also be given^[7,8,12,14].

Generally *Yarqan* (jaundice) occurs due to *Waram-e-Haar* (acute hepatitis), *Waram-e-Muzmin* (chronic hepatitis), and *Sudda-e-Jigar* (hepatic obstruction). *Mushile safra* (bile's purgative) and deobstruent drugs

are used for Tanqiya-e-Jigar (to purifyng liver), with help of *Joshanda* (decoction) of Halelah (*Terminalia chebula*), Saqmuniya (*Convulvulus scammony*), Afsanteen (*Artemisia absinthium*) and Ayarij faiqra are also good^[10].

Tablets or pills which are prepare for liver disease should be in fine powders, and used along with suitable vehicle.^[7]

Dietary management:

Diet plays an important role in the management of liver disorders. Both starvation and excessive food intake produces *Su-e-Mizaj Barid*, hence balanced food intake is recommended. Light and easily palatable diet should be prescribed for liver patients such as small bird's soup, chicken soup, pulses, sagodana ki kheer (Metroxylan sago gruel), Aabnakhud (Cicerarietinum), Daliya (wheat gruel), Kishneez (*Coriandrum sativum*), Pudina (*Mentha piperita*) etc.^[14]

In *Yarqan* (Jaundice), restrict food which can produce *Suddah* and increase synthesis of *Safra* (bile) such as meat, and other fatty food. In this condition *Mako*, *Bathua*, *Muli*, *Shaljam*, *Chukanndar* are beneficial^[15].

CONCLUSION

This review shows that, the main function of the liver is *Istehalah* (metabolism) through which it produces *Hararat-e-Ghareeziyah* (Innate heat of the body) and *Akhlat* (humors) for the body. Most of the drugs which is used for hepatic diseases, possess the properties of *Mulattif* (demulcent), *Mufatteh* (deobstruent), *Mohallil* (resolvent), for these action many of drugs are found effective in various studies and scientifically proved for different pharmacological activities. Liver protective herbal drugs contain a variety of chemical constituents like phenols, coumarins, lignans, essential oil, monoterpenes, carotenoids, glycosides, flavonoids, organic acids, lipids, alkaloids and xanthone derivatives. It is reported that flavonoids and steroids may be responsible for hepatoprotective effect. Further, more phytochemical and pharmacological studies are needed.

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