

Myths in Liver Disease - Experience at Tertiary Care Centre of Northern India

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1. Abstract

1.1. Background: Liver disease is a common cause of morbidity and mortality all over the world, including developing country like India and effects significant proportion of population. It can cause both acute and chronic liver disease. The three most important causes of liver disease are alcohol, Nonalcoholic fatty liver disease and Chronic hepatitis B & C.

1.2. Discussion: Liver disease has a multifactorial pathogenesis and common symptoms depending upon severity vary from initial prodrome of fever, malaise, jaundice, ascites, pedal edema, upper gastrointestinal bleed, Porto systemic encephalopathy, anemia etc. There are multiple myths associated with presentation and treatment of liver diseases, especially in developing country like India.

1.3. Conclusion: At the time of initial diagnosis of liver disease, the patient and family members should be taken into confidence with proper counseling and clearly explained about prognosis and course of disease. It will help in dispensing all the myths associated with liver disease, thus helping in early recovery of patients.

2. Introduction

Liver is strategically placed as all blood passing from the small intes-

tine travel through it. It performs multiple functions like storage and metabolism of macronutrients (protein, carbohydrates, lipids), micronutrients (vitamins and minerals) and metabolism and excretion of drugs & toxins. Liver stores carbohydrate as glycogen and play important role in Gluconeogenesis and Glycogenolysis. It also synthesize serum proteins e.g. albumin, blood clotting factors, formation of urea from ammonia, oxidation, Deamination or transamination of amino acids. It stores fat, synthesize cholesterol, produces bile necessary for digestion of dietary fat. It is involved in enzymatic steps in the activation of vitamins like thiamine, pyridoxine, folic acid, vitamin D (25 hydroxycholecalciferol), site of the synthesis of carrier proteins for vitamins A, B12, E and stores fat soluble vitamins A, D, E, K, B12, copper iron and zinc. In view of multiple and vital role played by liver, there can be varied manifestations for which treating physician should be extra vigil, so that early and proper diagnosis is made for effective outcome. There are so many unwarranted myths associated with liver diseases, especially in patients belonging to poor socio-economic strata of developing country like India. Hence, extra effort is required from the treating doctors to remove these unscientific myths from mind of patient and relatives, so as they have no detrimental effect on course of illness (Figure 1).

Myths About Hepatitis



Figure 1: Showing Necklace made of wooden sticks weaved on thread

2. Discussion

Our experience regarding these myths about liver diseases has been obtained due to continuous running of special dedicated liver clinic and hepatitis B & C clinic for last eleven years where suspected cases of liver disease are referred from various specialties/ superspecialties at PGIMS, Rohtak, different government and private hospitals from all over haryana and nearby states. Hence, these myths in mind of patients and relatives of liver disease have been understood from the day of diagnosis to their long term follow up of eleven years. India being a developing country faces huge problem of illiteracy, poor socio-economic status and non accessibility of proper health care services which leads to flourishing practices of quackery i.e. treatment by unqualified health care workers who are significantly responsible for percolation of these myths in society.

3. Myth Associated with Interpretation of Gastro-intestinal Symptoms as Liver Disease

It is common belief in various sections of society that indigestion, dyspepsia, vomiting, gastro esophageal reflux distension of abdomen and diarrhea are symptoms of liver disease. Almost one third of the patients who present in OPD/liver clinic have these symptoms and thus want to get evaluated for liver disease. The main reason behind this is persistent and continuous wrong infusion of these symptoms as marker of liver disease by quacks whose easy and economical availability is widespread in the society. As significant percentage of population belong to below poverty line, hence they are forced to depend on these quacks as first line and only when some complication arises, then they are referred to specialist doctor. There are many chemists who are just supposed to dispense medicines which have been prescribed by doctors but instead they treat on their own for minor ailments including jaundice. As there is no consultation fees, hence poor patient easily fall prey to these so called self styled

doctors who are bound to commit mistakes in interpretation of symptoms and disease. They are doing so for increasing their sale of medicines which can easily be given without prescription due to lack of stringent laws and their effective applicability. The other common thing which has been noticed over prolonged interaction with patient and family members is that in every home there is some elder who takes the role of doctor despite being having no knowledge of medical profession. These elder play negative role in infusing wrong thoughts and perception in various family members and generations to follow about various diseases including related to liver.

4. Myth Associated with Treatment of Liver Disease

There is strong myth that whenever there is any impact on liver then patient has to take boiled food which is rich in carbohydrate and deficient in fat and protein. All kind of fried foods, milk, pulses are stopped in diet. The common belief behind it is that liver is involved in digestion of food and at this time on stress of liver, it cannot handle and digest the load of fat and protein in the diet. It is totally reverse according to nutritive needs of liver at the time of stress on liver, as good nutrition has significant role in the recovery. High protein/high energy intake are required to promote hepatocyte regeneration and fat restriction is contraindicated. Protein turnover in cirrhotic patients is normal or increased and stable cirrhotic have increased protein requirements [1, 2]. The dietary protein restriction does not appear to be of any benefit even in episodic hepatic encephalopathy [3]. The alteration in the ratio of branched chain amino acids and aromatic amino acids has been proposed as an etiological factor in the development of encephalopathy [4]. Hence, studies have shown that long-term oral branched chain amino acid supplementation (6 months) resulted in an increase in body weight [5]. Swart and Zillikens demonstrated that spreading food intake and inclusion of a late evening meal significantly improved nitrogen

balance in cirrhotic [6]. Patients with compensated cirrhosis do not appear to need modification of their energy intakes but with decompensated liver disease, there is requirement of 35 – 40 kcal/kg/day [7]. There is reduced glycogen storage capacity, hence patients are unable to tolerate periods of prolonged fasting and there is increased protein breakdown in periods of prolonged fasting. After persistent convincing of patient and relatives, only half of them will follow the advice of eating nutritious and balanced diet. It is easy to monitor and feed the proper diet in admitted patients but majority of patients who are treated on outdoor basis, intentionally fail to adhere to the advice of the treating physician. It is so frequent to be enquired by patient, after their complete recovery for restarting use of fat and protein in diet, despite being the fact they were motivated to take all kind of vegetarian food during course of illness. The other myth is that in any kind of jaundice or liver disease, there is need of complete bed rest, till Icterus is completely resolved and this has no scientific rationale or basis. Many patients despite normalization of liver function tests after an episode of acute viral hepatitis, do not believe recovery from their current illness because of remnant Icterus in sclera which persists for longer duration due to conjugation of sclera proteins with Bilirubin pigment.

The other important myth is wearing of necklace made of small wood sticks which are weaved on piece of thread and patient is made to understand that all his jaundice will be removed by these wooden sticks. We know that most important reason for jaundice is acute viral hepatitis caused by hepatitis A and E which recovers completely in majority of cases. The Bilirubin pigment is secreted in urine, sweat and semen, thus via sweat slowly over period of time, it gives yellow color to these small wooden sticks in neck and patient is made to believe that this jaundice has been removed by some spiritual magic of these wooden sticks. One more practice of removing jaundice is via playing a flute in ear of patient where Bilirubin laden sweat coming from ears is explained as basis of removal of jaundice from ears.

The next common practice followed is to give hidden steroid under the garb of medicine in banana by cobbler who has been labeled as God man with divine powers. The scientific rationale is steroid wash effect but it becomes detrimental in certain cases where it leads to superadded infections, and at that point of time, these so called God man for saving themselves, refer these complicated patients to specialist. One should beware of miracle cures as many people in community are increasingly seeking out alternative or “natural” therapies for any kind of jaundice or liver disease especially acute viral hepatitis. There is strong need of caution against herbal remedies as some may be harmful, even hepatotoxic and most have no scientific basis. One more myth associated with treatment of any kind of jaundice is to take bath in pond of a village Chaara in Haryana state where superstition is that the water and soil of this pond has divine powers which help in recovering from jaundice but reality is that contaminated water sometimes lead to infections and delays recovery.

5. Myth Associated with Investigations of Liver Disease

The most common problem which occurs with hepatitis B and C is that many patients are put by quacks on alternative medications and monitored with hepatitis B surface antigen (HbsAg) and anti HCV antibody levels without even getting viral loads done. This leads to delay in treatment and significant proportion of patients have reached cirrhotic stage when they consult specialist for their illness. It is known scientific fact that anti HCV antibodies can persist for very longtime after successful treatment of chronic hepatitis C. The patient, relatives, sometimes even many doctors are not aware of this fact and they are not ready to acknowledge the Sustained viral report which confirms complete absence of virus in body and force for retreatment, assuming that treatment has failed. Many surgeons refuse to do any operative interference in these successfully treated patients and mandates the need of HbsAg and anti HCV antibody test to become negative before doing surgery. This has no scientific rationale and thus requires more awareness among patient, society and medical fraternity.

6. Myth Associated with Common name of Liver Disease

Haryana is hotspot for both hepatitis B & C which is commonly seen in poor socio economic status and illiterate patients. Thus to make them understand difference between Hepatitis A & E related jaundice which has almost complete recovery and does not go into chronic phase whereas Hepatitis B & C has potential for going into chronic phase, hence they have been named as Kala Piliya or black jaundice by Malhotra et al. The basis of which is to make patient understand that as black color stain can persist on clothes for longer time, similarly hepatitis B & C can persist in body for longer time and thus there is need of regular follow up, even after resolution of Icterus in eyes. Many patients attach this black word with blackening of skin, eyes or even urine and think that they are suffering from Kala Piliya i.e. Chronic hepatitis B & C, thus want to unwarrantedly get investigated and treated for the same.

7. Conclusions

It takes dedicated efforts by treating team for dispensing these wrong beliefs, sometimes which get rectified after successful treatment of the patient. At the time of initial diagnosis of any kind of liver disease, the patient and family members should be taken into confidence with proper counseling and clearly explained about prognosis and course of disease. The need of strict adherence to normal high protein vegetable diet must be made understood to patient and family members. The use of alternative medications should be discouraged. There is need of awareness about diagnosis and management of liver diseases among medical fraternity and strict laws and their proper and timely execution is required for stopping practice of quackery. This quackery problem can be easily taken care of by easy availability of proper health facilities to all the strata of society.

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