

Case study

A case report on the effectiveness of diet and lifestyle changes based on the principles of Iranian traditional medicine with the focus on cellular energy in treatment of liver cirrhosis: health triangle

Abstract

Iranian traditional medicine (ITM) is a school of medicine that has been a source of medical care since ancient times. Based on the teachings of ITM, a balance between six essential principles governing a person's body can lead to health and cure disease. The current paper reports of a case of liver cirrhosis managed according to these principles in an approach known as the triangle of health. A combination of dietary, medicinal, and therapies was prescribed for a patient with a definitive diagnosis of autoimmune-induced liver cirrhosis. Adherence to the prescribed regimen has led to the improvement of the patient's condition over the last few months.

Keywords: Diet, lifestyle, Cellular Energy, Liver cirrhosis.

Introduction

The sum of teachings, disciplines and rationales known collectively as the Iranian traditional medicine (ITM) has been a source of medical care in the country for thousands of years. Based on the teachings of ITM, every human being has a temperament or Mizaj, that is, a collection of physical and mental characteristics based on which all individuals belong to four broad groups: Warm, cold, dry, or wet temperaments. The person's temperament in turn determines the symptoms of disease in that person. It is based on different that a single disease is known and even expected to have different symptoms in different individuals (1).

ITM believes that health is defined as a balance between the body humors and that the main goal of ITM is to restore this balance. The governing principles of ITM are divided into six rules know as the essential six or "Setah Zaroriah" which include: Climate (air), food and drinks, Carnal movements, physical movements, Sleeping and awaking, and retention and excretion. It is believed that balance and moderation in these six principles based on the teachings of ITM can lead to physical and mental health (2).

The liver has fascinated scientists since ancient times. Its heavy vascularization and significant size seemed puzzling before its function became known. Liver cirrhosis, as one the most serious and life-threatening diseases afflicting this organ, has also been the subject of much research and investigation over the years [barnett]. The disease results from chronic and repetitive injuries to the liver parenchyma that leads to necroinflammation and fibrosis. Overtime, this leads to the disruption of liver tissue structure and causes a dysfunction in the organ's synthetic functions. Liver cirrhosis also leads to a phenomenon known as portal hypertension (3).

Case Presentation

A 52-year-old male was presented to the outpatient clinic in our center with a definite diagnosis of autoimmune induced liver cirrhosis. He was first diagnosed to have a fatty liver around four years ago at which time he had presented with fatigue, lack of appetite, nausea, weight loss, and thrombocytopenia. At the time, he had been treated with medications such as spironolactone, vitamin E, lactulose, and antioxidants. A year after the onset of symptoms (around 3 years ago), the patient was diagnosed with autoimmune induced liver cirrhosis as well as diabetes mellitus based on a combination of lab tests and ultrasonography. Among the lab findings were a platelet

count of 68000 and AST and ALT levels of 140 and 170 respectively. Patient was referred to the hepatobiliary subspecialty clinic and was put on the list for liver transplantation.

As an alternative treatment, he visited our center which specializes in treatment approaches based on the principles of ITM. His treatment began in accordance with the six essential principles, as mentioned earlier, and consisted of three main categories, the triangle of health:

Nutritional changes:

A reduction in the consumption of foods with a cold temperament, use of organic salt, use of natural oils, an increase in the consumption of fresh fruits and vegetables with warm and wet temperaments, use of organic protein sources particularly local lamb and poultry products.

Medicinal changes:

Use of natural herbal drinks such as eryngium, nettle, milk thistle (Mary thistle), fenugreek, Alpinia syrup, Sarsaparilla syrup, and Carob Tree syrup, and also remedying the patient's constipation and dry temperament with the help of golden shower plant oil, flixweed, warm water, rosewater, and honey, during the day, the amount of at least one glass in rotation of each natural herbal drinks.

Manual therapies:

Mild bloodletting every three months from the right arm, warm cupping of the shoulders, and massaging with oil.

Following the prescribed regimen, the patient's fasting blood glucose was lowered significantly (from 360 to a range of 90 to 105) and his liver enzyme levels were lowered (from AST and ALT levels of 170 and 140, to 100 and 60 respectively). It is of note that the following changes were resulted from a moderate adherence to the prescribed treatment. A stricter adherence and more patient compliance with the treatment is expected to result in yet better outcome.

Discussion

Avicenna, one of the greatest physicians of ancient Persia, considered liver to be one of the three organs, alongside brain and heart, which are essential for the continuation of life (4). He believed that liver is responsible for the production of body humors and that the development and

nourishment of the body depended on its proper function. Even though he had none of the modern tools and diagnostic machines at his disposal, Avicenna devised a number of criteria that were used for the examination of liver and determination of its state and health (4). As for the treatment of liver diseases, more than 160 plants are mentioned by him in his most famous book “The Canon of medicine” to be helpful in various pathologic conditions of the organ (5).

Natural medications have been previously shown to be effective in liver conditions. In a clinical trial by Saberi-Karimian and others, it was found that a prescription of curcuminoids, the active ingredient in the spice turmeric, has the potential to improve non-alcoholic fatty liver disease (NAFLD) in subjects when compared with placebo (6). In another study, Rosa damascene extract was found to be effective against NAFLD in rats inflicted with this condition (7).

Furthermore, application of ITM principles has previously been shown to be effective and beneficial in mitigation and improvement of liver cirrhosis. In a clinical trial on 57 patients, following a diet based on ITM teachings was shown to significantly improve patient lab results (8). In a case report by Baghbanan et. al., adherence to a diet based on ITM was found to significantly improve patient condition and well-being, though it had no effect on the liver function (9). These results suggest the possible beneficial effects of ITM principles in improving the conditions for patients suffering from liver cirrhosis and warrant further research in this field.

Conclusion

Iranian traditional medicine is consisted of principles that try to impact both the physical and also the mental aspects of the human life in order to mitigate and treat ailments and to improve the patient’s life. ITM has been shown to be effective in liver conditions such as cirrhosis and be able to improve the conditions. Considering the complexity of the matter and the factors involved, future research is warranted to further investigate the problem.

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