



# Re-analysis on Heidan Disease (Black Jaundice) in *Synopsis of Golden Chamber (Jin Gui Yao Lue)*

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## Abstract

### Keywords

- Heidan disease
- black jaundice
- Xiaoshi Fanshi powder
- chronic liver disease
- liver cirrhosis
- Yinshao Erjin decoction
- Yincheng Zhizi decoction
- *Synopsis of Golden Chamber (Jin Gui Yao Lue)*

Heidan disease (black jaundice) is a kind of jaundice, which is caused by lingering and chronic jaundice, often with blood stasis and damp-heat, etc. The clinical symptoms of Heidan disease (black jaundice) are similar to those of cirrhosis caused by multiple chronic liver diseases in Western medicine. Heidan disease (black jaundice) generally belongs to yin jaundice type, and the pathogenesis is mostly related to blood stasis and dampness stagnation, often with damp-heat residue. According to Zhongjing Zhang, the prescription Xiaoshi Fanshi powder for the treatment of Heidan disease (black jaundice) is based on the understanding that the nature of Heidan disease (black jaundice) is inseparable from the two key pathological factors of dampness and blood stasis. The treatment of jaundice should be based on removing blood stasis and dampness, supplemented by soothing the liver and promoting the transportation function of spleen, removing blood stasis and harmonizing the collaterals, and promoting diuresis and reducing jaundice. In the treatment of jaundice, removing blood stasis and purging turbidity should be stressed, and powerful tonification should be used with caution. Since blood stasis and turbidity are always intermingling and often complicated with damp heat, the method of warm drying should be used with caution. For promoting blood circulation, removing blood stasis, and dredging the liver-biliary collaterals, drastic medicine should be used with caution.

## Introduction

The name of Heidan disease (black jaundice) originated from Zhongjing Zhang's *Synopsis of Golden Chamber (Jin Gui Yao Lue)* in the Eastern Han Dynasty. However, the understandings of its connotation and the definition of its clinical manifestations differ among doctors. Some doctors believed that Heidan disease (black jaundice) is the extension and

outcome of a variety of jaundice. For instance, it recorded in the *Etiology and Symptomatology of Various Diseases (Zhu Bing Yuan Hou Lun)* that: "Long-term jaundice, jaundice due to excessive drinking or jaundice due to sexual intemperance will lead to Heidan disease (black jaundice)"<sup>1</sup>; some doctors believe that Heidan disease (black jaundice) belongs to adrenal cortical dysfunction (known as Addison's disease).<sup>2</sup> There are theoretical and even clinical diagnostic and

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treatment deviations in the doctors' understanding of Heidan disease (black jaundice), which is related to the understanding of "black" and "jaundice" in the name of the disease, the correlation of the five elements of the disease and the understanding of Zhongjing Zhang's original text. Therefore, the author explored and analyzed by combining with specific cases, hoping to clarify the concept and connotation of Heidan disease (black jaundice) and thus guide the clinical practice more effectively.

## Zhongjing Zhang's Interpretation of "Heidan Disease (Black Jaundice)"

### Name and Main Symptoms of Heidan Disease (Black Jaundice)

The name of Heidan disease (black jaundice) originated from Zhongjing Zhang's book named *Synopsis of Golden Chamber: Treatment of Jaundice Disease Based on Syndrome Differentiation* in the Eastern Han Dynasty. There are two sections related to Heidan disease (black jaundice) in this chapter.<sup>3</sup> According to section 14: "The patient with jaundice usually has a fever from 3 p.m. to 7 p.m. If the patient doesn't have a fever but aversion to cold, this is a woman consumptive disease. If there are symptoms and signs of tension of bladder, lower abdominal fullness, generalized yellowing, black forehead and heat in the soles of feet, it will develop into Heidan disease (black jaundice). If there are symptoms and signs of abdominal distension like retention of water, black stool and frequent sloppy stool, it is a woman consumptive disease, but not retention of water. If the patient's abdomen is full, it is difficult to treat the disease. The appropriate formula for treating it is Xiaoshi Fanshi Powder." In section 7, it records that "In jaundice due to excessive drinking, after treatment with purgation, it will eventually transform into Heidan disease (black jaundice) after a certain period of endurance with blue eyes, black facial expression, scorching sensation in the heart like having taken garlic and Chinese chives, black stool, squamous and numb skin, floating and weak pulse. Although the patient's skin is black, it is also slightly yellow. This is the result of wrong treatment of it with the purgation method used to treat jaundice due to excessive drinking." It pointed out that jaundice due to excessive drinking with improper treatment and misuse of the purgation method would develop into damp-heat fumigation and black and yellowish complexion of patients with Heidan disease (black jaundice). Internal accumulation of blood stasis leads to black stools, which would further turn into Heidan disease (black jaundice) after a long time.

The above sections show that Heidan disease (black jaundice) mentioned by Zhongjing Zhang is developed from jaundice due to sexual intemperance and due to excessive drinking.<sup>4</sup> The main symptoms include generalized yellowing, black forehead, blue eyes and black face, black, and slightly yellow skin. According to the analysis, Heidan disease (black jaundice) is a disease due to damp heat and blood stasis syndrome manifested as dark forehead and face, accompanied by dark and slightly yellow eyes and skin. In addition, Heidan disease (black jaundice) is often accompa-

nied by fever from 3 p.m. to 7 p.m. with tension in bladder, lower abdominal fullness, heat in the soles of feet, scorching sensation in the heart like having taken garlic and Chinese chives, black stool, floating and weak pulse, etc.

### Disease Attribution of Heidan Disease (Black Jaundice)

According to the *Origin of Chinese Characters (Shuo Wen Jie Zi)*, jaundice is a kind of yellow disease.<sup>5</sup> There are two causes leading to Heidan disease (black jaundice), one is long-term jaundice due to sexual intemperance. Jaundice caused by dampness. Damp-heat impairing the spleen, sexual intemperance impairing the kidney, impairment of the spleen and kidney, and long-term intermingling of dampness blockage lead to Heidan disease (black jaundice). The other is long-term jaundice due to excessive drinking. Jaundice due to excessive drinking is caused by alcoholic heat and greasiness, accumulation of dampness and heat, and damage caused to the spleen and liver. If jaundice due to excessive drinking is ill-treated, it will lead to the deficiency of healthy qi and kidney, dampness blockage, and blood stasis, which can develop into Heidan disease (black jaundice).

Therefore, although the symptoms of Heidan disease (black jaundice) are dark forehead and eyes, there must be a slight yellowness in the skin. Heidan disease (black jaundice) is inseparable from yellow symptoms. In other words, dark and blackish forehead and face (but not Addison's disease caused by liver disease) which is not caused by prolonged jaundice is not considered to be Heidan disease (black jaundice). From the perspective of disease attribution, Heidan disease (black jaundice) is still a kind of jaundice in essence, which is a chronic protracted stage, often with blood stasis and damp heat.<sup>6</sup>

### Main Treatment Principles of Heidan Disease (Black Jaundice)

According to section 14, *Synopsis of Golden Chamber: Treatment of Jaundice Disease Based on Syndrome Differentiation*: "If there are symptoms and signs of abdominal distension like retention of water, black stool and frequent sloppy stool, it is a woman consumptive disease, not retention of water. If the patient's abdomen is full, it is difficult to treat. The appropriate formula for treating it is Xiaoshi Fanshi Powder." The note after the prescription suggests: "Xiaoshi (saltpeter) (burn) and Fanshi (alunite) (burn) are of the same amount." These two ingredients are pounded into powder and mixed with barley juice. The powder is taken about 2.74 mL (each time), three times a day. This disease is eliminated through defecation and urination, indication of which are pure yellow urine and pure black stool. "Xiaoshi (saltpeter) (burnt) and Fanshi (alunite) (burn) in the prescription have the effects of removing blood stasis and removing dampness." The barley juice is mixed to protect and nourish stomach qi.

Zhongjing Zhang's Xiaoshi Fanshi powder is used to treat Heidan disease (black jaundice), which shows that the main treatment principle of jaundice is to remove blood stasis and dampness. In *Illuminations of the Origins of Miscellaneous Diseases (Za Bing Yuan Liu Xi Zhu)*, Heidan prescription for treating Heidan disease (black jaundice),<sup>7</sup> with 200g of

Yinchen (*Artemisiae Scopariae Herba*) and 500 g of Gualougen (*Trichosanthis Rhizoma*) is recorded. In the *Categorized Patterns with Clear-cut Treatments (Lei Zheng Zhi Cai)* in the Qing dynasty, Peiqin Lin held that Shaogong Shen treated all Heidan disease (black jaundice) with Heidan decoction.<sup>8</sup> These were the continuation and development of Zhongjing Zhang's idea of treating Heidan disease (black jaundice) in clinical practice. In modern times, some doctors treat Heidan disease (black jaundice) by nourishing the kidney.<sup>9</sup> This method deviates from Zhongjing Zhang's intention of "eliminating blood stasis and removing dampness" and is difficult to achieve good results in clinical practice.

## Understanding of Heidan Disease (Black Jaundice) in Modern Medicine

Modern scholars believe that Heidan disease (black jaundice) is equivalent to what modern medicine calls adrenal cortex dysfunction (Addison's disease) and should be classified as renal disease.<sup>2</sup> However, the author believes that although most Addison's patients have symptoms of dark skin, similar to the "black forehead" of Heidan disease (black jaundice), Addison's disease and Heidan disease (black jaundice) are two different kinds of diseases. As an ancient Chinese medicine disease name, the phenomena of internal stagnation of blood stasis such as "abdominal distension like retention of water, black stool and frequent sloppy stool" are very similar to the clinical manifestations and the complications of portal hypertension, esophageal varices, and bleeding in patients with cirrhosis (decompensation) caused by multiple chronic liver diseases in modern Western medicine.<sup>10,11</sup> Fluctuations of cirrhosis in chronic liver disease, impaired liver function, decreased adrenal cortex function and estrogen inactivation in the body and increased melanogenic hormone lead to the pigmentation of the face and other exposed parts of the patient, dark yellow, and dull complexion, which are facial features of liver disease.<sup>12</sup>

## Typical Cases of Heidan Disease (Black Jaundice) Treatment

Professor Shi Jin has rich experience and is good at treating internal diseases. The author followed Professor Shi Jin and researched his years of clinical data of chronic liver disease during the clinical internship and found that there were clearly recorded 31 cases (12.5%) with black forehead and dark yellow skin among 168 patients. Among them, 18 cases of Heidan disease (black jaundice) caused by cirrhosis of chronic hepatitis B or hepatitis C, 9 cases of alcoholic cirrhosis, and 4 cases of primary biliary cirrhosis (PBC). Hepatolenticular degeneration caused by disturbance of copper metabolism, hemochromatosis caused by disturbance of iron metabolism, and other autoimmune liver diseases were not recorded, which may be related to the low incidence of these diseases and limited detection conditions many years ago.

A good curative effect according to Zhongjing Zhang's main idea of "removing blood stasis and dampness" to treat

chronic liver disease is achieved in the treatment of Heidan disease (black jaundice). The following cases are given for analysis.

Case 1: Wu, 62 years old female, from Wuxi City of Jiangsu Province, was initially diagnosed on March 11, 2009 with many years of liver disease and 3.5 years of jaundice. She was diagnosed with PBC by Wuxi People's Hospital and went to Shanghai for medical treatment many times. There was no improvement after the long-term use of ursodeoxycholic acid capsules, diammonium glycyrrhizinate, Chinese medicinals, etc. Immediate diagnoses were blackish and dark yellow face, purple and dark under the eye sockets, emaciation and fatigue, poor abdominal distension, itching of the skin, aversion to cold, heat vexation, loose stool, two to three times a day, yellow urine, pale purple tongue with yellowish greasy coating, and thin and taut pulse. Liver function showed total bilirubin (TB) 48.4  $\mu\text{mol/L}$ , direct bilirubin (DB) 18.3  $\mu\text{mol/L}$ , aspartate aminotransferase (AST) 82 U/L, alanine aminotransferase (ALT) 104 U/L, alkaline phosphatase (ALP) 334 U/L, albumin-globulin ration 3.1/3.8, all negative for hepatitis A and E virus and positive for antimitochondrial antibody (AMA) and AMA type 2. Color Doppler ultrasound showed liver cirrhosis, and splenomegaly. Pathogenesis included long-term jaundice impairing the liver, spleen, and kidney, blood stasis and dampness stagnation, obstruction of the gallbladder collaterals, and damp-heat residue. Treatment included clearing heat and promoting diuresis, removing blood stasis, and dredging collaterals. Prescription included modified Yinshao Erjin decoction. Medicinals included Yinchen (*Artemisiae Scopariae Herba*) 30 g, Chishao (*Paeoniae Rubra Radix*) 30 g, Yujin (*Curcuma Radix*) 15 g, Jianghuang (*Curcuma Longae Rhizoma*) 10 g, Jinqiancao (*Lysimachiae Herba*) 30 g, Zhiquiao (*Aurantii Fructus*) 10 g, Fried Baizhu (*Atractylodis Macrocephalae Rhizoma*) 10 g, Ganjiang (*Zingiberis Rhizoma*) 6 g, Nyu Zhenzi (*Ligustri Lucidi Fructus*) 15 g, Fried Zhizi (*Gardeniae Fructus*) 10 g, Chuipencao (*Sedi Herba*) 40 g, Lianqiao (*Forsythiae Fructus*) 12 g, Huangqin (*Scutellariae Radix*) 15 g, Cheqiancao (*Plantaginis Herba*) 30 g, Raw Gancan (*Radix et Rhizoma Glycyrrhizae*) 5 g, and seven doses decocted in water for oral administration in the morning and evening.

Thereafter, the medicinals of Sharen (*Amomi Fructus*), Chenpi (*Citri Reticulatae Pericarpium*), Calcined Walengzi (*Arcae Concha*), Juluo (*Citri Reticulatae Retinervus*), Sanqi (*Notoginseng Radix et Rhizoma*), Dangshen (*Codonopsis Radix*), and Gouqi (*Lycii Fructus*) with the function of promoting qi circulation, harmonizing stomach, softening hardness, dredging collaterals, strengthening spleen, and nourishing liver were added along with the syndromes. After 3 months, the symptoms and liver function were significantly improved. After 6 months, TB was reduced from 48 to 24  $\mu\text{mol/L}$ , DB from 18.3 to 7.5  $\mu\text{mol/L}$ , AST from 82 to 36 U/L, ALP from 334 to 140 U/L, and  $\gamma$ -glutamyl transpeptidase ( $\gamma$ -GT) from 556 to 120 U/L. After 2 years, the patient's physical strength was significantly improved. Blackish and dark yellow complexion and dark purple under the eye sockets disappeared, and the face turned ruddy. No recurrence had been observed within 5 years.

Case 2: Jiang, 55 years old male, from Nanjing City of Jiangsu Province was diagnosed initially on July 16, 2018. The patient had a history of alcoholism, drinking 0.5 to 0.75 kg of wine daily for more than 30 years. On October 20, 2016, he was hospitalized in Bayi Hospital due to fatigue and abdominal distension, and he had been hospitalized for 6 times within 15 months thereafter. Immediate diagnoses were dark yellow complexion, dark yellow skin, fatigue, chest and abdomen tightness, frequent belching and flatus, difficulty in sleeping at night, edema of lower limbs, yellow urine, loose stool, dark purplish tongue with thin yellow tongue coating, and slippery pulse. Liver function showed TB 30.7  $\mu\text{mol/L}$ , DB 15.1  $\mu\text{mol/L}$ , ALT 47 U/L, AST 65 U/L,  $\gamma$ -GT 69 U/L, and alpha-fetoprotein 15/14 ng/mL. Pathogenesis included wine of heat and greasy nature impairing the liver and spleen and damp-heat accumulation resulting in jaundice due to excessive drinking. Mistreatment led to gradual deficiency of the spleen and kidney, and long-term blood stasis and dampness stagnation led to Heidan disease (black jaundice). Diagnosis included (1) alcoholic cirrhosis (decompensated period); (2) spontaneous peritonitis; (3) hepatic encephalopathy (phase II); and (4) diabetes mellitus. Treatment included clearing away heat and dampness, removing blood stasis and dredging gallbladder, soothing the liver, and harmonizing the stomach. Prescription included Yinshao Erjin decoction plus modified Yincheng Zhizi decoction.<sup>13</sup> Medicinals included Yincheng (Artemisiae Scopariae Herba) 20 g, Zhizi (Gardeniae Fructus) 10 g, Chishao (Paeoniae Rubra Radix) 15 g, Danshen (Radix et Rhizoma Salviae Miltiorrhizae) 30 g, Yujin (Curcumae Radix) 10 g, Jianghuang (Curcumae Longae Rhizoma) 10 g, Huangbai (Phellodendri Chinensis Cortex) 10 g, Lianqiao (Forsythiae Fructus) 15 g, Chuipencao (Sedi Herba) 30 g, Fabanxia (Pinelliae Rhizoma Praeparatum) 10 g, Houpo (Cortex Magnoliae Officinalis) 10 g, Chenpi (Citri Reticulatae Pericarpium) 10 g, Tianjihuang (Hyperici Japonici Herba) 20 g, Cheqiancao (Plantaginis Herba) 30 g, Zexie (Alismatis Rhizoma) 30 g, Dazao (Jujubae Fructus) 15 g, and seven doses decocted in water for oral administration in the morning and evening.

After 1 month of treatment, the patient's abdominal distension, edema, and liver function were significantly improved. Due to the carelessness in diet, the patient was rehospitalized on December 25, 2018. After discharge, he was still treated with the previously modified prescription, successively added with medicinals of Taizishen (Pseudostellariae Radix), Baizhu (Atractylodis Macrocephalae Rhizoma), Nyu Zhenzi (Ligustri Lucidi Fructus), Fried Zaoren (Jujube Kernel), etc., to strengthen the spleen and kidney and nourish the heart.

After 3 months, the patient's abdominal distension and fatigue disappeared and his face changed from dark to ruddy. After 3 years of observation, the condition was stable and he was no longer hospitalized. The liver hardness decreased from 36.9 to 17.8 kPa.

Notes: Yinshao Erjin decoction used by these two patients is a self-made prescription by Professor Shi Jin who has accumulated over 50 years of experience in the treatment of liver diseases. In the prescription, Chishao (Paeoniae Radix

Rubra), Yujin (Curcumae Radix), and Jianghuang (Curcumae Longae Rhizoma) were used to promote blood circulation, dredge the gallbladder, and harmonize collaterals as the monarch medicinals, Jinqiancao (Lysimachiae Herba), Yincheng (Artemisiae Scopariae Herba), Tianjihuang (Hyperici Japonici Herba), Huangqin (Scutellariae Radix), Lianqiao (Forsythiae Fructus) were used to clear heat, promote diuresis, and reduce jaundice with the minister medicinals, Houpo (Cortex Magnoliae Officinalis), etc., for soothing the liver and dredging the gallbladder as the assistant medicinals and Gancao (Radix et Rhizoma Glycyrrhizae) for harmonizing various herbs as the envoy medicinal. The whole prescription enters the liver, gallbladder, kidney, and bladder meridians and has the effects of removing dampness, reducing jaundice, promoting diuresis and relieving stranguria; for patients with impaired liver function, Chuipencao (Sedi Herba), Zhizi (Gardeniae Fructus), Jigucao (Abriherba), etc., can be added to clear heat and eliminate toxicity, protect the liver, and lower the level of enzyme; for jaundice with dark color and stagnation of liver depression and blood stasis, add Danshen (Salviae Miltiorrhizae Radix et Rhizoma), Ezhu (Curcumae Rhizoma), Jianghuang (Curcumae Longae Rhizoma), etc., to promote blood circulation, remove blood stasis, and harmonize collaterals; for excess dampness, it can be supplemented by Baizhu (Atractylodis Macrocephalae Rhizoma), Chenpi (Citri Reticulatae Pericarpium), Fabanxia (Pinelliae Rhizoma Praeparatum), Sharen (Amomi Fructus), etc., to promote transportation of the spleen and remove dampness; and for patients with deficiency of various viscera, add Taizishen (Pseudostellariae Radix), Baizhu (Atractylodis Macrocephalae Rhizoma), Nyu Zhenzi (Ligustri Lucidi Fructus), Tusizi (Cuscutae Semen), etc., to strengthen the spleen and kidney. After treatment with the above prescription, the level of liver enzymes returned to normal and the dark and yellow complexion was relieved.

## Experience in the Treatment of Heidan Disease (Black Jaundice)

Heidan disease (black jaundice) has similar clinical manifestations to cirrhosis caused by a variety of chronic liver diseases. The most common causes of cirrhosis are viral hepatitis, alcoholic liver disease, and nonalcoholic steatohepatitis. However, most cirrhotic patients do not have significant symptoms before decompensation, and only about one-third of patients know that they have cirrhosis. Cirrhosis is a diffuse hepatic injury process that is considered irreversible in its advanced stages.<sup>14</sup> Cirrhosis is a highly complex disease. Although there is a further understanding of its pathogenesis and the corresponding targets for drug therapy have been found, there is no specific drug for clinical use.<sup>15</sup> The treatment of cirrhosis remains a common challenge for both Chinese and Western medicine. The analysis of Professor Shi Jin's experience in the treatment of Heidan disease (black jaundice) has guidance and reference significance for the diagnosis and treatment of the related difficult diseases, including the following three pieces of experience for sharing.



### **Pay Attention to the Removal of Blood Stasis and Purging Turbidity, and Powerful Tonification Should Be Applied with Caution**

Heidan disease (black jaundice) is caused by intermingling of blood stasis, dampness and turbidity, and deficiency in the kidney. Therefore, attention should be paid to the removal of blood stasis and purging turbidity, and powerful tonification should be applied with caution. Heidan disease (black jaundice) is a type of jaundice, which is caused by persistent jaundice, intermingling of blood stasis, dampness and turbidity, deficiency of kidney, and retention of blood stasis. Heidan disease (black jaundice) will not disappear until blood stasis and turbidity are removed. Powerful tonification will lead to stagnation of qi and blood, increase of pathogenic qi, and aggravation of bluish and dark forehead and face. In clinical practice, it is necessary to remove blood stasis and purge turbidity, eliminate pathogenic factors primarily, and strengthen healthy qi secondarily, mainly dispel pathogenic factors and gradually add tonics as pathogenic qi gradually disappears.

### **Pay Attention to the Removal of Damp Heat, and the Method of Warm Drying Should Be Applied with Caution**

Although Heidan disease (black jaundice) belongs to yin jaundice type, with the manifestation of healthy qi deficiency, there are few cases of yang deficiency and internal cold syndrome most of which are deficiency of spleen and kidney essence, few are purely cold and damp syndrome and most of them are intermingled dampness and heat syndrome. With the symptoms of pale tongue and aversion to cold, attention should be paid to damp heat stagnation. Clinically, Yinchen (*Artemisiae Scopariae Herba*), cold-prone medicinals such as Tianjihuang (*Hyperici Japonici Herba*), Huangqin (*Scutellariae Radix*), Lianqiao (*Forsythiae Fructus*), and Zhizi (*Gardeniae Fructus*) are commonly used. Fuzi (*Aconitum Lateralis Radix Praeparata*) and Chuanjiao (*Zanthoxylum Piperitum*) with warm and dry nature should be used with caution because misuse or excessive use of them may cause severe fire and fluctuation of liver function and eventually result in the deterioration of the condition.

### **Pay Attention to Removal and the Drastic Method Should be Applied with Caution**

Heidan disease (black jaundice) is a kind of jaundice, which is caused by long-term intermingling of blood stasis and turbidity and impairment of the spleen and kidney. It is mostly attributed to the decompensation period of cirrhosis defined by Western medicine, with commonly seen symptoms of portal hypertension, esophageal and gastric varices, and gastrointestinal bleeding. High-dose application of drastic medicinals like Taoren (*Persicae Semen*) and Tubiechong (*Eupolyphaga Steleophaga*) cannot tonify the liver but is likely to cause collateral bleeding, viscera damage, and lead to critical illness.

## **Summary**

In the study of medical classics, on the basis of clarifying the semantics of the text, it is undoubtedly more clinically

instructive to explore the nature of the disease in combination with specific clinical real cases. As in this article, combined with the analysis of specific clinical cases, it is believed that Heidan disease (black jaundice) is a kind of jaundice, which is a chronic and persistent caused by the long-lasting jaundice, similar to cirrhosis, liver function damage, and chronic hepatic face in modern Western medicine.<sup>16</sup> Heidan disease (black jaundice) generally belongs to yin jaundice type. According to the analysis of nearly 100 cases of Heidan disease (black jaundice) treated by Professor Shi Jin within decades, the following conclusions can be drawn: the pathogenesis of Heidan disease (black jaundice) is mostly not cold-dampness, but stagnation and dampness, often with damp heat residue. This view also breaks through the wrong method of tonifying the kidney to treat Heidan disease (black jaundice) by previous scholars.<sup>9</sup>

According to Zhongjing Zhang, the prescription of Xiaoshi Fanshi powder for the treatment of Heidan disease (black jaundice) is based on the understanding that the nature of the disease is inseparable from the two key pathological factors of dampness and blood stasis. The treatment principle of removing blood stasis and dampness is in line with clinical practice and worthy of inheriting, understanding, and flexibly applying. Of course, on the basis of eliminating dampness and removing blood stasis, medicinals for tonifying the spleen and kidney can be added as appropriate according to the condition of the disease.

However, if the nature of Heidan disease (black jaundice) pertaining to jaundice is put aside, it is difficult to achieve good results by taking kidney deficiency as the main pathogenesis of Heidan disease (black jaundice), following the rule of correspondence between kidney and black, and applying pure kidney-tonifying method, or using Xiaoshi Fanshi powder rigidly.

### **CRedit Authorship Contribution Statement**

**Lin Tzi Chiang:** Writing - original draft. **Xiaolin Yuan:** Writing -original draft?writing-review & editing, project administration. **Gang Wei:** Resources. **Shi Jin:** Conceptualization, resources, writing-review & editing.

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### **Conflict of Interest**

The authors declare no conflict of interest.

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