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Ten-Year Structural Reversal of Severe Nodular Cirrhosis with Hepatic Atrophy in a Heavy Manual Laborer After Intermittent Neo-Chinese Medicine Treatment: A Case Report

wenxia Li

doctor3399@qq.com

Beijing Pingshantang Institute of Refractory Diseases

Case Report

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Abstract

Background

Reversing established cirrhosis with hepatic atrophy and severe nodularity is generally considered extremely difficult. We report a case of a heavy manual laborer with active, severe nodular cirrhosis and hepatic atrophy who achieved a decade-long structural reversal following intermittent Neo-Chinese Medicine treatment, avoiding decompensation.

Case Presentation:

A 61-year-old male farmer and bricklayer with a 10-year history of hepatitis B cirrhosis presented in February 2014 with mild ALT elevation (78.0 U/L) and abnormal liver fibrosis markers (hyaluronic acid 169 μg/L), indicating active cirrhosis. Baseline MRI revealed a shrunken liver with multiple nodular signals. Baseline FibroScan showed a liver stiffness of 25.2 kPa. Without timely intervention, rapid progression to decompensated cirrhosis was highly anticipated. He received intermittent Neo-Chinese Medicine treatment for 12 years while continuing heavy manual labor. His liver fibrosis markers normalized by the second follow-up. Serial FibroScan assessments demonstrated a continuous, stepwise regression of liver stiffness: 19.6 kPa (2015), 14.8 kPa (2016), 11.6 kPa (2017), 10.2 kPa (2018), and finally 7.2 kPa (2024). A follow-up MRI in January 2024 showed a normal liver size and morphology. Remarkably, over the 12-year period, the patient experienced no episodes of decompensation and maintained his heavy physical work.

Conclusion

This case demonstrates that active severe nodular cirrhosis with hepatic atrophy can undergo profound structural reversal. The effective hydrolysis of fibrosis and orderly regeneration of hepatocytes prevented decompensation and normalized liver morphology, highlighting the potential of Neo-Chinese Medicine in real-world settings.

1. Introduction

Liver cirrhosis, particularly with hepatic atrophy and severe nodularity, has long been regarded as the irreversible end-stage of chronic liver disease. When accompanied by elevated transaminases and abnormal fibrosis markers, it indicates an "active" and progressive state, where patients are at an extremely high risk of rapid decompensation [1, 2]. Although recent studies on "recompensation" have shown that functional improvement is possible, the radiological and elastographic reversal of active structural cirrhosis remains a major clinical challenge.

Here, we report a case of a 61-year-old male bricklayer with active, severe nodular cirrhosis and hepatic atrophy. Following 12 years of intermittent Neo-Chinese Medicine treatment, he achieved a continuous regression in liver stiffness and a complete restoration of normal liver morphology, successfully preventing any decompensation events while maintaining a physically demanding occupation.

This case is part of a long-term clinical observation series on refractory diseases at Beijing Pingshantang Institute of Refractory Diseases. Each case is reported independently. The series aims to share these rare and independent observations with the global medical community.

2. Case Presentation

A 61-year-old male farmer and bricklayer with a history of vertically transmitted chronic hepatitis B was evaluated in February 2014 due to fatigue and abdominal distension.

Pre-treatment assessment (February 2014):

Baseline abdominal MRI revealed a shrunken liver, irregular margins, and multiple nodular signals throughout the parenchyma. Baseline FibroScan showed a liver stiffness of 25.2 kPa. Importantly, laboratory tests showed ALT 78.0 U/L and AST 71.0 U/L, alongside abnormal liver fibrosis markers, specifically hyaluronic acid (HA) 169 μg/L (normal < 120 μg/L). These findings indicated an active, progressive cirrhotic state. Given the severe structural damage and ongoing inflammation, the patient was at imminent risk of decompensation without timely intervention. However, his baseline liver synthetic function remained largely compensated (albumin 39.0 g/L, cholinesterase 6071 U/L).

Treatment:

The patient received intermittent Neo-Chinese Medicine treatment over the subsequent 12 years. During this period, he continued to work as a bricklayer, engaging in heavy manual labor daily. By the second follow-up, his liver fibrosis markers had completely normalized.He did not experience any liver-related hospitalizations or decompensation events (such as ascites or variceal bleeding).

Longitudinal Structural Reversal (FibroScan Trajectory):

Serial FibroScan assessments documented a continuous, stepwise regression of liver stiffness:

- • February 2014: 25.2 kPa
- • March 2015: 19.6 kPa
- • February 2016: 14.8 kPa
- • February 2017: 11.6 kPa
- • February 2018: 10.2 kPa
- • January 2024: 7.2 kPa

Recent Outcome (January 2024):

In January 2024, the patient was admitted for gastrointestinal discomfort (gastritis). A follow-up abdominal MRI showed that the liver size and morphology were normal, with no evidence of the previously observed shrinkage. FibroScan confirmed the liver stiffness had decreased to 7.2 kPa. Liver function tests remained normal. The patient has continued to maintain his physical labor without liver-related complications.

Written informed consent for publication was obtained from the patient. All clinical data have been thoroughly anonymized.

3. Discussion

3.1 The Phenomenon of Structural Reversal in Active Cirrhosis

This case provides compelling longitudinal evidence that active, severe nodular cirrhosis with hepatic atrophy is not an irreversible structural endpoint. The elevated ALT and HA of 169 μg/L in 2014 indicated ongoing hepatic inflammation and active fibrogenesis. Over a decade, the liver stiffness progressively decreased from 25.2 kPa to 7.2 kPa, and the imaging normalized. The rapid normalization of fibrosis markers by the second follow-up strongly supports the concept of effective fibrous tissue hydrolysis and structural remodeling rather than mere functional compensation.

3.2 Preventing Decompensation and the Hypothesis of Regenerative Reserve

Without intervention, the active inflammatory state and severe morphological damage would have likely led to rapid decompensation. However, the preservation of baseline liver function (albumin 39.0 g/L, cholinesterase 6071 U/L) suggests that at least 20% of functional hepatocytes remained intact. Under the stimulation of Neo-Chinese Medicine, the inflammatory cascade was halted, fibrous tissue was hydrolyzed, and these residual hepatocytes underwent massive, orderly regeneration. This dual mechanism successfully prevented decompensation and restored the liver structure.

3.3 Real-World Implications: Intermittent Treatment and Heavy Labor

Unlike strictly controlled clinical trials, this patient was a farmer and bricklayer who underwent intermittent treatment and engaged in heavy physical labor daily. The absence of decompensation events and liver-related hospitalizations over 12 years highlights the robustness of this therapeutic approach. It demonstrates that Neo-Chinese Medicine can provide sustained structural and functional benefits even in real-world settings where perfect adherence and physical rest are not feasible.

3.4 Limitations

This is a single-case report. The precise molecular mechanisms underlying the reversal of hepatic atrophy and nodularity warrant further investigation. The specific composition of the Chinese herbal formula was not disclosed due to intellectual property considerations.

4. Conclusion

This case demonstrates the remarkable potential of Neo-Chinese Medicine in achieving a decade-long structural reversal of active, severe nodular cirrhosis and hepatic atrophy, while successfully preventing decompensation. It challenges the conventional view that cirrhosis is irreversible and supports further investigation into regenerative therapies for end-stage liver disease.

Declarations

Ethics Statement

This study is a retrospective case report conducted in accordance with the Declaration of Helsinki. Written informed consent for publication was obtained from the patient. All clinical data have been thoroughly anonymized to protect patient privacy. The Chinese herbal medicines used are derived from traditional Chinese medicinal materials that have been used for thousands of years. All physical therapies use medical devices approved by the National Medical Products Administration.

Use of AI-assisted tools

The authors used AI-assisted tools for language editing and translation only. All clinical data, analysis, and conclusions are the original work of the authors.

Conflicts of Interest

The author declares no conflicts of interest.

Data Availability Statement

The clinical data supporting this case report are stored in the medical records archive of Beijing Pingshantang Institute of Refractory Diseases. Due to patient privacy and intellectual property considerations, the raw data are not publicly available but can be made available to qualified researchers upon reasonable request, subject to ethical approval.

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