

Successful Treatment of Chronic Pancreatitis with Irregular Pancreatic Morphology and Pancreatic Tail Agenesis: A Case Report with 3-Year Follow-up

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Case Report

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Abstract

Background

Chronic pancreatitis (CP) is a progressive inflammatory disease characterized by recurrent abdominal pain, nausea, vomiting, and structural changes in the pancreas. It is widely regarded as one of the most intractable diseases of the gastrointestinal tract. We report a case of chronic pancreatitis with irregular pancreatic morphology and pancreatic tail agenesis, successfully treated with combined Chinese-Western medicine, with clinical improvement confirmed by deep palpation of the pancreatic projection area.

Case Presentation:

A 29-year-old woman presented with a 7-year history of recurrent abdominal pain, nausea, and vomiting. Symptoms were aggravated by cold and fatty foods. Magnetic resonance imaging (MRI) of the abdomen revealed irregular pancreatic morphology with agenesis of the pancreatic tail. Physical examination demonstrated tenderness on deep palpation of the right hypochondriac region overlying the pancreatic projection area. The patient received 24 days of combined Chinese-Western medicine treatment. Following treatment, the frequency and severity of abdominal pain and vomiting completely resolved, and tenderness on deep palpation disappeared. No recurrence was observed during 3 years and 4 months of follow-up.

Conclusion

This case demonstrates the potential of combined Chinese-Western medicine in treating chronic pancreatitis. Deep palpation of the pancreatic projection area may serve as a simple, reproducible clinical tool for evaluating disease activity and treatment response, particularly in settings where advanced imaging is not readily available.

1. Introduction

Chronic pancreatitis (CP) is a progressive inflammatory condition characterized by irreversible structural and functional damage to the pancreas. It commonly presents with recurrent or persistent abdominal pain, nausea, vomiting, and exocrine or endocrine insufficiency [1,2]. The diagnosis of CP is based on a combination of clinical presentation, imaging findings, and functional assessment. The 2020 American College of Gastroenterology (ACG) guidelines emphasize that no single test is definitive for CP, and that diagnosis requires integration of clinical, imaging, and functional data [3].

Chronic pancreatitis is widely regarded as one of the most intractable diseases of the gastrointestinal tract. According to the 2018 Chinese Guidelines for the Diagnosis and Treatment of Chronic Pancreatitis,

it is a refractory disease with persistent symptoms requiring lifelong treatment, severely impacting patients' quality of life. The Lancet has also highlighted that no curative treatment is currently available [2]. Imaging modalities such as computed tomography (CT), magnetic resonance imaging (MRI), and endoscopic ultrasound (EUS) play a central role in diagnosing and staging CP. However, in resource-limited settings, advanced imaging may not be readily available, and clinicians must rely on physical examination and clinical judgment.

Deep palpation of the epigastric pancreatic projection area is a simple, reproducible physical examination technique that may provide valuable information about disease activity and treatment response. In this report, we describe a case of chronic pancreatitis with irregular pancreatic morphology and pancreatic tail agenesis, successfully treated with combined Chinese-Western medicine, with clinical improvement confirmed by deep palpation.

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 because it represents a distinct disease entity, treatment course, and long-term follow-up. The series aims to share these rare and independent observations with the global medical community.

2. Case Presentation

A 29-year-old woman presented with a 7-year history of recurrent abdominal pain, nausea, and vomiting. The pain was located in the epigastric region and occasionally radiated to the back. Episodes were aggravated by cold and fatty foods. She had been treated at multiple hospitals without significant improvement.

Pre-treatment assessment:

Magnetic resonance imaging (MRI) of the abdomen on May 23, 2023, revealed irregular pancreatic morphology with agenesis of the pancreatic tail. No pancreatic duct dilatation or peripancreatic exudation was observed. Physical examination demonstrated tenderness on deep palpation of the epigastric and right hypochondriac regions overlying the pancreatic projection area. Laboratory tests showed serum amylase 89.18 U/L, normal liver and kidney function, and normal tumor markers (AFP, CEA, CA125, CA19-9).

Treatment:

The patient was admitted on May 26, 2023, and received 24 days of combined Chinese-Western medicine treatment based on syndrome differentiation. The treatment focused on regulating qi, harmonizing the stomach, and resolving damp-heat. No invasive procedures or surgical interventions were performed.

Post-treatment assessment:

Following treatment, the frequency and severity of abdominal pain and vomiting completely resolved. The patient's appetite and sleep improved. On June 3, 2023 (day 9 of hospitalization), tenderness on deep palpation of the epigastric and right hypochondriac regions disappeared. On June 10, 2023 (day 15), the patient reported no nausea or vomiting after meals. On June 13, 2023 (day 18), she remained symptom-free with normal diet and bowel habits.

Follow-up:

At the most recent follow-up, 3 years and 4 months after treatment, the patient reported no recurrence of abdominal pain or vomiting. She remained asymptomatic and required no further hospitalization.

Written informed consent for publication was obtained from the patient.

3. Discussion

3.1 The Role of Deep Palpation in Chronic Pancreatitis

Deep palpation of the pancreatic projection area is a simple, reproducible physical examination technique that may provide valuable information about pancreatic inflammation and disease activity. In this case, tenderness on deep palpation correlated with clinical symptoms and resolved following treatment, suggesting its potential utility as a clinical tool for evaluating treatment response. This technique is particularly valuable in resource-limited settings where advanced imaging may not be readily available.

3.2 The Potential of Combined Chinese-Western Medicine in Chronic Pancreatitis

This case demonstrates the potential of combined Chinese-Western medicine in treating chronic pancreatitis. The patient's symptoms and physical findings improved significantly following treatment, without invasive interventions. The mechanisms underlying this improvement warrant further investigation.

3.3 Pancreatic Tail Agenesis: A Rare Anatomical Variant

Pancreatic tail agenesis is a rare congenital anomaly that may predispose to pancreatic dysfunction and recurrent inflammation. In this case, MRI revealed irregular pancreatic morphology with agenesis of the pancreatic tail, which may represent a congenital anomaly, chronic pancreatitis-induced atrophy, or a combination of both. The clinical significance of this anomaly in the context of chronic pancreatitis warrants further study.

3.4 Limitations

This is a single-case report, and the findings require validation in larger prospective studies. The mechanisms underlying the observed improvement remain to be fully elucidated. However, this case

provides preliminary evidence supporting the potential efficacy, safety, and reproducibility of this integrative therapeutic approach, warranting further investigation. The specific composition of the Chinese herbal formula was not disclosed due to intellectual property considerations.

4. Conclusion

This case demonstrates the potential of combined Chinese-Western medicine in treating chronic pancreatitis with irregular pancreatic morphology and pancreatic tail agenesis. Deep palpation of the pancreatic projection area may serve as a simple, reproducible clinical tool for evaluating disease activity and treatment response. Further studies are warranted to validate these findings.

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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