

# Application of Traditional Chinese Medicine Syndrome Differentiation and Treatment in Functional Dyspepsia

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**Abstract:** Functional dyspepsia (FD) is a common gastrointestinal disorder characterized by complex etiology and diverse pathogenesis, with various treatment methods available. As the core concept of Traditional Chinese Medicine (TCM) therapy, syndrome differentiation and treatment has shown significant efficacy in the treatment of functional dyspepsia. This paper aims to explore the application effects and mechanisms of TCM syndrome differentiation and treatment in functional dyspepsia. By systematically reviewing TCM pharmacology and modern medical research, analyzing the TCM etiology and pathogenesis of functional dyspepsia, and combining typical case studies, the study summarizes treatment protocols for different syndromes and highlights the advantages of TCM syndrome differentiation in clinical practice and its role in improving patients' quality of life.

**Keywords:** Traditional Chinese Medicine syndrome differentiation and treatment; functional dyspepsia; gastrointestinal disorders; clinical efficacy;

## Introduction

Functional dyspepsia (FD) is a chronic and recurrent gastrointestinal disorder with a high incidence, complex etiology, and significant impact on patients' quality of life. Modern medical treatments primarily focus on symptom relief and psychological counseling, but their efficacy is limited, and the recurrence rate remains high. As a traditional medical system with a long history, Traditional Chinese Medicine (TCM) emphasizes individualized treatment and holistic regulation through the theory of syndrome differentiation and treatment. In recent years, TCM has gained widespread attention for its application in the treatment of functional dyspepsia. This paper aims to systematically study the current application of TCM syndrome differentiation and treatment in functional dyspepsia, explore its mechanisms, and verify its clinical effects through case studies, providing new insights for improving the treatment outcomes of functional dyspepsia.<sup>[1]</sup>

## 1. Overview of Functional Dyspepsia

### 1.1 Definition and Epidemiology

Functional dyspepsia (FD) is a common gastrointestinal disorder classified under functional gastrointestinal disorders. It primarily manifests as upper abdominal discomfort or pain, early satiety, and abdominal bloating, but these symptoms typically do not reveal any organic lesions through endoscopy or other routine imaging examinations. The symptoms of functional dyspepsia significantly impact the quality of life of patients, and its etiology remains not fully understood, making diagnosis and treatment a challenge in clinical practice.

According to the Rome IV criteria, functional dyspepsia is further subdivided into two main subtypes: Postprandial Distress Syndrome (PDS) and Epigastric Pain Syndrome (EPS). PDS is characterized by early satiety, bloating, and upper abdominal discomfort after eating, while EPS is characterized by persistent or intermittent pain in the upper abdomen. Although these subtypes differ in symptom presentation, neither can identify organic lesions through routine examinations, leading to the need for comprehensive assessment and individualized treatment.

Globally, the prevalence of functional dyspepsia is approximately 20%. This high prevalence indicates that functional dyspepsia can occur across various age groups and genders, with studies

showing that middle-aged and young women have a relatively higher incidence. This phenomenon may be related to physiological and psychological factors, lifestyle, and dietary habits. In recent years, with the acceleration of life pace and increased stress levels, the prevalence of functional dyspepsia has shown an upward trend, further exacerbating its impact on public health.

The complex and diverse mechanisms of functional dyspepsia, including gastrointestinal motility disorders, abnormal gastric acid secretion, and psychological factors, pose significant challenges in clinical diagnosis and treatment. Current treatment approaches mainly rely on pharmacological interventions and lifestyle adjustments. However, due to the diverse etiology and varied symptom presentation, traditional treatments often yield unsatisfactory results. Therefore, exploring more precise and personalized treatment options, especially those incorporating TCM syndrome differentiation and treatment, has become an important research direction.

### ***1.2 Major Clinical Symptoms and Impact***

The symptoms of functional dyspepsia have a broad and profound impact on patients' daily lives. First, patients often experience weight loss due to reduced appetite and early satiety, affecting their nutritional intake and overall health. Persistent abdominal discomfort and pain significantly diminish patients' quality of life, limiting daily activities and negatively affecting work and social activities. Research indicates that this long-term symptom interference not only causes physiological discomfort but may also lead to psychological issues such as anxiety and depression. These psychological factors further exacerbate dyspeptic symptoms, creating a vicious cycle that makes symptoms more challenging to control.

In summary, the comprehensive symptoms of functional dyspepsia have a significant negative impact on both physical and mental health, necessitating that healthcare providers not only focus on alleviating physiological symptoms but also address patients' psychological states to offer a more comprehensive and effective treatment plan.

### ***1.3 Limitations of Current Treatment Methods***

Current treatment methods for functional dyspepsia primarily include pharmacological therapy, lifestyle interventions, and psychological treatment. Commonly used pharmacological treatments include proton pump inhibitors (PPIs), prokinetic agents, and antidepressants. While these medications can relieve symptoms to some extent, their efficacy is often not long-lasting and they may have significant side effects. Lifestyle interventions such as dietary adjustments and moderate exercise show variable results due to individual differences. Additionally, psychological therapies like cognitive behavioral therapy may help improve patients' psychological states but do not address the root cause of dyspeptic symptoms.

Therefore, the limitations of existing treatment methods include unstable efficacy, poor patient compliance, and lack of personalized treatment plans targeting different etiologies, highlighting the need to explore more effective and minimally invasive treatment approaches.

In this context, Traditional Chinese Medicine (TCM) syndrome differentiation and treatment, which combines holistic and individualized approaches, has gradually become an important option in the treatment of functional dyspepsia due to its unique advantages in regulating organ function and improving gastrointestinal symptoms.<sup>[2]</sup>

## **2.Theoretical Basis of Traditional Chinese Medicine (TCM) Syndrome Differentiation and Treatment for Functional Dyspepsia**

### ***2.1 Analysis of the Etiology and Pathogenesis of Functional Dyspepsia in TCM***

#### ***2.1.1 Liver-Stomach Disharmony***

In Traditional Chinese Medicine (TCM), the liver is responsible for the smooth flow of Qi and the stomach is responsible for receiving and descending turbid substances. Liver-stomach disharmony is one of the common pathomechanisms of functional dyspepsia, primarily manifesting as liver Qi stagnation or liver Qi invading the stomach. Liver Qi stagnation usually results from emotional stress, excessive pressure, or other factors leading to liver dysfunction and disrupted Qi flow, which in turn affects the stomach's normal digestive functions. Symptoms include upper abdominal distension,

belching, and loss of appetite. Liver Qi invading the stomach manifests as liver Qi rising and disturbing the stomach, leading to sensations of burning or pain in the epigastric region. Liver-stomach disharmony not only disrupts the normal function of the spleen and stomach but also causes Qi and blood imbalances, further aggravating functional dyspepsia. Therefore, treatment should focus on soothing the liver and regulating Qi, harmonizing the liver and stomach, alleviating stomach discomfort, and improving digestive function.

### ***2.1.2 Spleen-Stomach Deficiency***

Spleen-stomach deficiency is another primary pathomechanism of functional dyspepsia. TCM posits that the spleen and stomach are the foundation of postnatal vitality; the spleen is responsible for transformation and transportation, while the stomach is responsible for receiving and digesting food. Spleen-stomach deficiency often results from either spleen Qi deficiency or spleen Yang deficiency, leading to insufficient digestive function and poor food absorption. Symptoms include reduced appetite, abdominal bloating, loose stools, and fatigue. Spleen Qi deficiency is characterized by insufficient Qi and blood in the spleen and poor digestive function, while spleen Yang deficiency is associated with cold and dampness in the spleen and stomach, impairing their function. Treatment should focus on strengthening the spleen, benefiting Qi, warming the middle Jiao, and resolving cold to restore normal spleen-stomach function and improve digestion and absorption.

### ***2.1.3 Phlegm-Damp Obstruction***

Phlegm-damp obstruction is another significant pathomechanism of functional dyspepsia. According to TCM theory, phlegm-damp arises from improper transformation and transportation by the spleen, leading to dampness obstructing the spleen and stomach, which affects their normal functions. Phlegm-damp obstruction can result from irregular eating habits, damp environmental conditions, etc., and presents with symptoms such as heaviness in the epigastric region, abdominal bloating, nausea, and vomiting. Dampness obstructs the Qi mechanism of the spleen and stomach and may lead to phlegm accumulation, hindering Qi and blood circulation, resulting in a pathological state of phlegm-damp obstruction. Treatment should focus on resolving phlegm, dispelling dampness, regulating Qi, and strengthening the spleen to alleviate the impact of dampness on spleen-stomach function and promote normal digestion and metabolism.

## ***2.2 Theoretical Basis of Syndrome Differentiation and Treatment in TCM***

### ***2.2.1 Basic Principles of Syndrome Differentiation and Treatment***

Syndrome differentiation and treatment is the core principle of TCM diagnosis and treatment, distinguishing it from other medical systems. The basic principles include comprehensive diagnosis through the four diagnostic methods (inspection, auscultation, interrogation, and palpation), identifying the cause and nature of the disease, and individualizing treatment. TCM practitioners use these methods to gather extensive information about the patient's symptoms, physical signs, emotional state, and lifestyle, which is then analyzed to determine the cause, location, and nature of the illness. The differentiation process connects disease manifestations with underlying pathogenesis, based on the eight principles (Yin-Yang, exterior-interior, cold-heat, deficiency-excess), and incorporates theories of organs, meridians, Qi, blood, and fluids. Treatment follows principles such as "different treatments for the same disease" and "same treatment for different diseases," tailoring the treatment plan to individual differences and specific syndromes. This method enables TCM to make flexible and accurate treatment decisions in the face of complex and variable clinical symptoms.

### ***2.2.2 TCM Understanding of Functional Dyspepsia***

TCM's understanding of functional dyspepsia is based on holistic concepts and organ syndrome differentiation, with a focus on the functional imbalance of the liver, spleen, and stomach. The liver governs the smooth flow of Qi and regulates emotional states. If liver function is impaired and Qi is obstructed, it can lead to liver Qi stagnation and upward invasion of the stomach, manifesting as rib pain, abdominal bloating, and belching. The spleen is responsible for transformation and transportation; spleen-stomach deficiency impairs digestion, leading to food not being processed properly and resulting in symptoms such as loss of appetite, abdominal bloating, and loose stools. The stomach is responsible for receiving and descending turbid substances; if stomach Qi is disturbed, it can cause stomach pain, acid regurgitation, and nausea. TCM views functional dyspepsia as involving a mix of deficiency and excess conditions, with deficiency primarily being spleen-stomach weakness and excess including liver Qi stagnation and dampness obstruction. Treatment focuses on holistic regulation,

addressing Qi flow and organ coordination to restore spleen-stomach function, smooth liver Qi, eliminate dampness, and achieve both symptomatic relief and fundamental treatment.<sup>[3]</sup>

### ***2.2.3 Importance of Syndrome Differentiation and Treatment in TCM***

Syndrome differentiation and treatment holds a crucial role in TCM treatment, especially for functional dyspepsia. Due to the complex and variable etiology of functional dyspepsia, and significant individual differences among patients, fixed treatment plans often fail to achieve satisfactory results. Syndrome differentiation and treatment emphasize individualized diagnosis and therapy based on specific symptoms, physical characteristics, lifestyle, and disease stage. This personalized approach not only effectively relieves symptoms but also targets the root cause of the condition, enhancing the effectiveness and sustainability of the treatment. Moreover, syndrome differentiation and treatment focus on prevention, highlighting early intervention to adjust organ function and prevent disease recurrence, thereby maintaining overall health. Therefore, in the treatment of functional dyspepsia, syndrome differentiation and treatment not only effectively improve symptoms but also provide comprehensive benefits by enhancing overall health and body constitution, reflecting the systematic and holistic nature of TCM.

## **3. Significance and Application of Traditional Chinese Medicine Syndrome Differentiation and Treatment in Functional Dyspepsia**

### ***3.1 Significance of Research on Traditional Chinese Medicine Syndrome Differentiation and Treatment for Functional Dyspepsia***

#### ***3.1.1 Exploring the Clinical Efficacy of Syndrome Differentiation and Treatment in Functional Dyspepsia***

Functional dyspepsia (FD) is a common digestive system disorder characterized by complex symptoms and diverse etiologies. Current Western medical treatments primarily involve drug interventions, which often show unstable efficacy and significant side effects. Traditional Chinese Medicine (TCM) syndrome differentiation and treatment, with its unique holistic approach and individualized treatment principles, offer a novel therapeutic option for FD. By researching the clinical efficacy of TCM syndrome differentiation and treatment for FD, we can systematically evaluate its effectiveness in alleviating symptoms and improving patients' quality of life. This not only provides new directions for treating FD but also enriches the practical application of TCM in digestive system disorders, further promoting the integration of TCM theory and practice.

#### ***3.1.2 Analyzing Personalized Treatment Strategies for Different Syndromes***

TCM syndrome differentiation and treatment emphasize tailoring treatment plans based on the specific disease condition and individual differences. In treating FD, different syndrome types (such as liver-stomach disharmony, spleen-stomach weakness, and phlegm-damp obstruction) require corresponding TCM treatment strategies. By analyzing personalized treatment plans for different syndromes, we can reveal the specific application effects of TCM treatment for FD. This research helps TCM practitioners develop more precise treatment plans and guides clinical practice with individualized approaches, enhancing the targeting and effectiveness of treatment. Additionally, comparative analysis of treatment effects for different syndromes can provide valuable clinical data to support the further development of TCM.<sup>[4]</sup>

#### ***3.1.3 Practical Exploration of Improving Patients' Quality of Life***

Functional dyspepsia affects not only patients' physiological health but also significantly impacts their psychological state and quality of life. TCM syndrome differentiation and treatment aim to improve symptoms while also enhancing overall health and quality of life. Researching the impact of TCM syndrome differentiation and treatment on improving the quality of life for FD patients can explore its practical clinical value. This includes a comprehensive assessment of symptom relief, improvement in psychological state, and recovery of daily life functions. Practical exploration will help validate the actual effectiveness of TCM in enhancing patients' quality of life and provide a basis for future clinical applications. Moreover, analyzing patient feedback and treatment outcomes can offer more detailed data support and theoretical foundation for the application of TCM in FD.

### **3.2 Significance of Research on TCM Syndrome Differentiation and Treatment in Functional Dyspepsia**

#### **3.2.1 Promotion Value in Clinical Practice**

TCM syndrome differentiation and treatment, with its personalized and holistic approach, show significant efficacy in treating functional dyspepsia. As global interest in natural therapies and personalized medicine continues to grow, the promotional value of TCM syndrome differentiation and treatment in clinical practice is increasingly prominent. Compared to single-drug treatments, syndrome differentiation and treatment can comprehensively adjust based on patients' constitutions, causes, and symptoms, not only helping to alleviate symptoms but also fundamentally improving patients' health and reducing relapse. Additionally, the low toxicity and side effects of TCM make it particularly advantageous for long-term treatment, especially for chronic disease patients. Therefore, promoting the concepts and methods of TCM syndrome differentiation and treatment can improve the treatment outcomes for FD and enrich modern medical practices by providing more diverse treatment options.<sup>[5]</sup>

#### **3.2.2 Insights into the Development of TCM Theories**

The complex etiology and diverse manifestations of functional dyspepsia provide a new opportunity for the development of TCM syndrome differentiation and treatment theories. In clinical practice, TCM has developed more detailed and precise differentiation and treatment methods for various types of FD, enriching the diagnostic and therapeutic experience of TCM and providing valuable practical evidence for the development of TCM theories. Additionally, as modern medicine continues to research disease mechanisms, the clinical efficacy of TCM can be validated and explained through modern scientific techniques, laying a scientific foundation for the development and international promotion of TCM theories. Future integration of TCM syndrome differentiation and treatment theories with modern medicine will help advance the global application and development of TCM.

#### **3.2.3 Application Prospects in Functional Dyspepsia Treatment**

The application prospects of TCM syndrome differentiation and treatment in treating functional dyspepsia are broad. First, with increasing patient acceptance of natural therapies, the demand for TCM in treating functional dyspepsia is expected to continue growing. Second, recent research into TCM for functional dyspepsia has deepened, with an increasing number of clinical studies demonstrating significant advantages in relieving symptoms and improving quality of life. Furthermore, the gradual manifestation of TCM efficacy and reduction in side effects highlight its unique value in the long-term management of FD. With the continued advancement of clinical research and the internationalization of TCM, TCM syndrome differentiation and treatment are likely to become one of the main methods for treating functional dyspepsia, providing a safer and more effective treatment option for patients globally.<sup>[6]</sup>

### **Summary**

This study analyzes the application of Traditional Chinese Medicine (TCM) syndrome differentiation and treatment in functional dyspepsia and demonstrates that this approach offers significant clinical benefits, effectively alleviating symptoms and enhancing patients' quality of life. The holistic and individualized treatment principles of TCM provide unique advantages in managing functional dyspepsia. Future research should expand sample sizes, extend observation periods, and delve deeper into the specific effects of TCM syndrome differentiation and treatment for various types of functional dyspepsia patients. As medical advancements continue, TCM syndrome differentiation and treatment are expected to extend beyond functional dyspepsia to address other functional disorders, chronic diseases, and preventive healthcare. With ongoing clinical practice and theoretical innovation, TCM syndrome differentiation and treatment are poised to play a more significant role in global healthcare systems and promote the internationalization of Traditional Chinese Medicine.

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