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Research on the Treatment of Gastric Ulcer and Recovery Process Based on Syndrome Differentiation in Integrated Traditional Chinese and Western Medicine

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Abstract: Traditional Chinese Medicine (TCM) theory emphasizes treatment based on syndrome differentiation, regulating the body's overall functions through therapeutic methods such as soothing the liver and regulating qi, strengthening the spleen and harmonizing the stomach, and activating blood circulation to remove stasis. Integrated Traditional Chinese and Western Medicine treatment fully leverages the advantages of both medical systems, focusing not only on symptom relief but also on holistic regulation, demonstrating unique advantages in improving clinical symptoms, promoting ulcer healing, and preventing recurrence. However, current integrated treatment still faces challenges such as non-uniform diagnostic standards, insufficient treatment plan individualization, and suboptimal drug compatibility. By establishing a comprehensive system for treatment based on syndrome differentiation, optimizing treatment protocols, and strengthening recovery phase management, therapeutic efficacy can be effectively enhanced, providing gastric ulcer patients with more scientific and standardized medical care.

Keywords: Integrated Traditional Chinese and Western Medicine; Treatment based on syndrome differentiation; Gastric Ulcer; Recovery process

Introduction

TCM has a long history in treating gastric ulcers and has accumulated rich clinical experience. Through treatment based on syndrome differentiation, it can regulate the body's overall functional state, improve gastrointestinal motility, and enhance gastric mucosal defense capacity. The integrated Traditional Chinese and Western Medicine model combines the precise diagnosis of modern medicine with the holistic regulation of TCM. It can both rapidly control acute symptoms and fundamentally improve the body's pathological state, holding significant clinical value and social importance. In-depth research on the theoretical basis, practical methods, and recovery phase management strategies of integrated Traditional Chinese and Western Medicine

for gastric ulcer based on syndrome differentiation is of great significance for improving clinical efficacy, reducing recurrence rates, and enhancing patient prognosis.

1. Disease Overview and Understanding of Gastric Ulcer in Traditional Chinese and Western Medicine

Traditional Chinese Medicine's understanding of gastric ulcers has a long history, with relevant records found in the *Huangdi Neijing*, where it was categorized under disease patterns such as "epigastric pain," "pain in the cardiac region," and "fullness and stuffiness." TCM posits that the occurrence of gastric ulcers is closely related to factors including dietary irregularities, emotional disturbances, excessive fatigue, and external pathogen invasion. The spleen and stomach are considered the foundation of postnatal life, responsible for transforming and transporting nutrients from food and drink; the stomach governs the reception and initial digestion of ingested matter. When the functions of these two organs are coordinated, digestion proceeds normally. However, when spleen deficiency leads to impaired transportation, and stomach disharmony results in failure of descent, the movement of qi becomes obstructed, and blood circulation is hindered. If this condition persists, it may generate heat and produce blood stasis, forming a complex pathological state characterized by the intermingling of deficiency and excess [1]. TCM treatment emphasizes pattern differentiation and treatment determination, formulating individualized therapeutic strategies based on the patient's specific clinical manifestations. The therapeutic goal is achieved by regulating the functions of the zang-fu organs and promoting the free flow of qi and blood.

2. Challenges in the Integrated Traditional Chinese and Western Medicine Treatment of Gastric Ulcer

2.1 Lack of Unified Diagnostic Criteria

A significant challenge in the integrated treatment of gastric ulcers is the absence of uniform diagnostic criteria. Modern medical diagnosis primarily relies on gastroscopic findings, Helicobacter pylori testing, and clinical symptom presentation. In contrast, TCM diagnosis employs the four diagnostic methods—inspection, listening and smelling, inquiry, and palpation—integrating these with tongue and pulse examination to determine the specific syndrome pattern. The substantial differences in diagnostic approaches, criteria, and terminology between these two medical systems make it difficult to establish a unified diagnostic standard in clinical practice. Western medical diagnosis emphasizes objective examination indicators, while TCM diagnosis focuses on subjective symptoms and signs. This fundamental divergence often leads to diagnostic confusion and inconsistency during the integrated diagnostic and therapeutic process.

2.2 Insufficient Individualization of Treatment Plans

Current integrated Traditional Chinese and Western Medicine approaches to gastric ulcer still demonstrate shortcomings in treatment individualization. Most therapeutic regimens lack precise design tailored to the specific characteristics of the patient's condition. Modern medical treatments often utilize standardized drug combinations, such as triple or quadruple therapy involving proton pump inhibitors combined with antibiotics. While these are highly effective in controlling H. pylori infection, they tend to overlook the influence of individual patient variations on treatment response. Although TCM's pattern differentiation and treatment determination emphasizes personalized therapy, in practical application, the accuracy of pattern differentiation varies with the physician's experience and expertise, resulting in inconsistent levels of treatment individualization that require further refinement.

2.3 Issues with Rational Drug Compatibility

The rationality of drug combinations is a critical factor influencing clinical efficacy in integrated treatment. When Western pharmaceuticals and Chinese herbal medicines are used concurrently, potential drug interactions may occur, potentially affecting therapeutic effectiveness or increasing the risk of adverse reactions. Proton pump inhibitors might interfere with the absorption of certain components in Chinese herbs, while the concurrent use of antibiotics with compound Chinese herbal preparations could potentially reduce antibacterial efficacy. The complex composition of compound Chinese herbal formulations necessitates careful consideration of factors such as drug metabolic

pathways and potential synergistic or antagonistic effects when combined with Western medicines [2]. Currently, research on the compatibility mechanisms underlying integrated Chinese and Western medicine drug combinations remains insufficient, and there is a notable lack of a systematic evaluation framework for assessing drug interactions.

2.4 Imperfections in the Therapeutic Efficacy Evaluation System

The efficacy evaluation system for integrated Traditional Chinese and Western Medicine treatment of gastric ulcers is not yet fully developed, suffering from a lack of unified evaluation standards and scientific assessment methodologies. Modern medical efficacy evaluation primarily depends on objective indicators such as gastroscopic results, symptom scores, and H. pylori eradication rates. TCM efficacy evaluation, however, requires the integration of the patient's overall symptom improvement with changes in tongue appearance and pulse qualities, which are more subjective in nature. The significant disparities in evaluation content, methods, and standards between these two systems present considerable challenges in forming a comprehensive, unified evaluation framework.

3. Clinical Practice of Syndrome Differentiation and Treatment for Gastric Ulcer in Integrated Traditional Chinese and Western Medicine

3.1 TCM Syndrome Differentiation, Classification, and Treatment for Gastric Ulcer

Treating gastric ulcers based on TCM syndrome differentiation requires classifying and managing the condition according to the patient's specific clinical features. Common patterns include Liver-Stomach Disharmony, Spleen-Stomach Deficiency-Cold, Stomach Yin Deficiency, and Static Blood Obstructing the Collaterals.

Liver-Stomach Disharmony Pattern: Patients often present with distending pain in the epigastrium that may extend to the hypochondriac regions, frequent belching, and worsening of symptoms with emotional fluctuations. The tongue coating is thin and white, and the pulse is wiry. The treatment principle should be to soothe the liver, regulate qi, harmonize the stomach, and alleviate pain. The commonly used formula is Chai Hu Shu Gan San (Bupleurum Liver-Soothing Powder) with modifications. Herbs include Chai Hu (Bupleurum), Bai Shao (White Peony Root), Zhi Ke (Bitter Orange), Xiang Fu (Cyperus), Chen Pi (Tangerine Peel), etc.

Spleen-Stomach Deficiency-Cold Pattern: Symptoms include dull epigastric pain relieved by warmth and pressure, poor appetite, cold limbs, and loose stools. The tongue is pale with a white coating, and the pulse is deep and thready. The treatment principle is to warm the middle jiao, fortify the spleen, harmonize the stomach, and relieve pain. Appropriate formulas are Huang Qi Jian Zhong Tang (Astragalus Center-Fortifying Decoction) or Li Zhong Tang (Center-Regulating Decoction) with modifications. Herbs include Huang Qi (Astragalus), Gui Zhi (Cinnamon Twig), Bai Shao (White Peony Root), Zhi Gan Cao (Honey-fried Licorice), Gan Jiang (Dried Ginger), Bai Zhu (Atractylodes), etc.

Stomach Yin Deficiency Pattern: Patients experience a burning pain in the epigastrium, dry mouth and throat, and dry stools. The tongue is red with scant moisture, and the pulse is thready and rapid. The treatment principle is to nourish yin, benefit the stomach, harmonize the middle, and stop pain. The selected formula is Yi Guan Jian (Linking Decoction) combined with Shao Yao Gan Cao Tang (Peony and Licorice Decoction) with modifications. Herbs include Sha Shen (Glehnia), Mai Dong (Ophiopogon), Sheng Di (Rehmannia), Shi Hu (Dendrobium), Bai Shao (White Peony Root), Gan Cao (Licorice), etc.

Static Blood Obstructing the Collaterals Pattern: This pattern is characterized by stabbing, fixed epigastric pain that worsens at night. The tongue body is purple-dark or has ecchymosis, and the pulse is choppy. The treatment principle is to quicken blood, transform stasis, regulate qi, and alleviate pain. Appropriate formulas are Shi Xiao San (Sudden Smile Powder) combined with Jin Ling Zi San (Melia Toosendan Powder) with modifications. Herbs include Pu Huang (Cattail Pollen), Wu Ling Zhi (Faeces Trogopterori), Yan Hu Suo (Corydalis), Chuan Lian Zi (Melia Toosendan), etc.

3.2 Optimized Application of Modern Medical Treatment Plans

Modern medical treatment for gastric ulcers should involve optimizing the treatment plan based on the patient's specific condition, rationally selecting drug types and dosages.

Proton Pump Inhibitors (PPIs): As the first-line

drugs for treating gastric ulcers, PPIs effectively inhibit gastric acid secretion, creating favorable conditions for ulcer healing. Drugs such as Omeprazole, Lansoprazole, and Pantoprazole can be selected based on the patient's condition. They are generally recommended to be taken 30 minutes before meals for optimal acid-suppressing effects.

Helicobacter pylori Eradication: For patients positive for H. pylori, eradication therapy is essential. Currently recommended regimens include standard triple therapy, quadruple therapy, and sequential therapy. Quadruple therapy typically includes a PPI, bismuth, and two antibiotics, administered for 10-14 days, and achieves high eradication rates.

Gastric Mucosal Protectants: Drugs such as Sucralfate and Bismuth Potassium Citrate can enhance the function of the gastric mucosal barrier and promote ulcer healing.

NSAID-Related Ulcers: For ulcers associated with non-steroidal anti-inflammatory drugs (NSAIDs), the offending drugs should be discontinued or their dose reduced. If necessary, consider switching to selective cyclooxygenase-2 (COX-2) inhibitors [3].

3.3 Timing and Compatibility Principles for Integrated Chinese and Western Medicine

Integrated TCM and Western medicine treatment for gastric ulcers requires mastering the appropriate timing of medication and compatibility principles to achieve the best therapeutic outcome.During the acute phase, modern medical treatment should be prioritized to quickly control symptoms, inhibit gastric acid secretion, and protect the gastric mucosa. During the remission phase, the proportion of TCM treatment can be appropriately increased to regulate zang-fu organ function and improve the body's overall state. When combining PPIs with TCM decoctions, it is advisable to space their administration by 1-2 hours to avoid potential interactions affecting absorption. TCM herbs with heat-clearing, detoxifying, acid-suppressing, and pain-relieving effects, such as Huang Lian (Coptis), Huang Qin (Scutellaria), Hai Piao Xiao (Cuttlefish Bone), and Zhe Bei Mu (Fritillaria), can work synergistically with Western medicines to enhance the therapeutic effect. TCM herbs that quicken blood and transform stasis, such as Dan Shen (Salvia), San Qi (Pseudoginseng), and Hong Hua (Carthamus), can improve gastric mucosal microcirculation and promote ulcer healing. Their use alongside gastric mucosal protectants can produce synergistic effects. Tonic herbs such as Dang Shen (Codonopsis), Huang Qi (Astragalus), and Bai Zhu (Atractylodes) can enhance immune function and improve states of spleen-stomach deficiency, aiding in the prevention of recurrence.

3.4 Formulation and Implementation of Personalized Treatment Plans

The development of personalized treatment plans requires comprehensive consideration of multiple factors, including the patient's age, gender, constitution, severity of the condition, and comorbidities. Younger patients often present with Liver-Stomach Disharmony due to high work pressure and irregular diets; treatment should focus on soothing the liver, regulating qi, harmonizing the stomach, and directing rebellious qi downward. Elderly patients often have declined spleen-stomach function and more deficiency patterns; treatment should prioritize fortifying the spleen, supplementing qi, warming the middle, and harmonizing the stomach. For female patients whose symptoms worsen around menstruation, treatment should consider regulating the menses and nourishing blood. For patients with chronic diseases like diabetes or hypertension, potential drug interactions and impacts on the primary disease must be considered during medication selection. During the implementation of the treatment plan, closely observe changes in the patient's symptoms, regularly recheck gastroscopy and H. pylori tests, and adjust the treatment plan promptly based on the therapeutic response. Establish patient files to meticulously record the treatment process and efficacy changes, providing a reference basis for subsequent treatment.

4. Management of Gastric Ulcer Recovery Phase and Strategies for Preventing Recurrence

4.1 Strategy for Establishing a Comprehensive Efficacy Evaluation System

Establishing a comprehensive efficacy evaluation system for integrated Traditional Chinese and Western Medicine requires the holistic consideration of both objective indicators and subjective patient experiences, forming a multidimensional, multi-level evaluation framework. Objective evaluation indicators include ulcer healing status under gastroscopy, Helicobacter pylori eradication rate, and improvement in serological

markers. Subjective evaluation indicators encompass the degree of symptom relief, quality of life scores, and TCM syndrome scores. Internationally recognized ulcer healing grading standards should be adopted, classifying healing into different stages such as complete healing, partial healing, no change, and worsening. Symptom scoring can utilize methods like the Visual Analog Scale or Numerical Rating Scale to quantitatively assess symptoms such as abdominal pain, bloating, belching, and acid reflux [4]. Quality of life evaluation can employ standardized scales like the SF-36 Health Survey.

4.2 Strategy for Strengthening Patient Health Education Management

Patient health education is a vital component of gastric ulcer recovery phase management. Systematic health education can enhance patient treatment compliance, improve lifestyle habits, and reduce recurrence risk. Educational content should include disease knowledge dissemination, medication guidance, dietary advice, and psychological adjustment [5]. Explain the pathogenesis, treatment principles, and prognosis of gastric ulcers in detail to alleviate patient anxiety and strengthen treatment confidence. Medication guidance should emphasize the importance of taking drugs on time, explain drug mechanisms and potential adverse reactions, and instruct patients on correct administration methods and precautions. Dietary education should involve creating personalized meal plans based on the patient's constitution, advising against irritating foods, and promoting regular meals and thorough chewing. Psychological adjustment education helps patients correctly understand the relationship between disease and emotion, learn self-regulation techniques, and maintain a relaxed and cheerful mood.

4.3 Strategy for Optimizing Dietary Regulation and Lifestyle Intervention

Dietary regulation plays a significant role in the management of the gastric ulcer recovery phase. A reasonable diet structure can promote ulcer healing and prevent recurrence. Patients are advised to eat regularly at fixed times with appropriate quantities, avoiding both overeating and excessive hunger. Food choices should primarily consist of mild, easily digestible items, avoiding overly cold, hot, spicy, or acidic stimulating foods. Appropriately increasing intake of foods rich in protein and vitamins, such as lean meat, fish, eggs, fresh vegetables, and fruits, is beneficial for tissue repair and immune function enhancement. Smoking cessation and alcohol limitation are crucial measures for preventing recurrence; nicotine in tobacco stimulates gastric acid secretion, while alcohol directly damages the gastric mucosa. Maintaining good sleep habits, avoiding staying up late and excessive fatigue, and engaging in appropriate physical exercise to strengthen overall constitution are also important.

4.4 Strategy for Perfecting Follow-up Monitoring and Recurrence Prevention

A well-established follow-up monitoring system is a key safeguard for preventing gastric ulcer recurrence, requiring the creation of standardized follow-up procedures and monitoring indicators. Patients are recommended to undergo regular follow-up examinations at 1 month, 3 months, and 6 months after treatment completion, including symptom assessment, gastroscopy, and H. pylori testing. For high-risk recurrence populations, such as those with unsuccessful H. pylori eradication, long-term NSAID users, or patients with a history of gastrointestinal bleeding, monitoring frequency should be increased. The follow-up process should focus on changes in patient symptoms, enabling timely detection of recurrence signs. For patients who experience recurrence, the causes should be analyzed, the treatment plan adjusted, and preventive measures strengthened [6]. Establishing detailed patient health records, documenting the treatment process, follow-up results, and recurrence situations, provides data support for clinical research and experience summarization.

Conclusion

The integrated Traditional Chinese and Western Medicine approach, based on syndrome differentiation and treatment determination, for gastric ulcers demonstrates the advantage of combining the precise treatment of modern medicine with the holistic regulation of TCM. It shows promising application prospects in improving clinical symptoms, promoting ulcer healing, and preventing recurrence. By deepening the study of TCM pattern differentiation rules, optimizing modern medical treatment plans, mastering the timing and compatibility principles of integrated medicine, and formulating personalized treatment strategies, clinical efficacy can be significantly improved. Future efforts should focus on strengthening

basic research and clinical practice related to the integrated TCM-Western medicine treatment of gastric ulcers, establishing a more scientific and standardized diagnosis and treatment system, and providing patients with higher quality and more efficient medical services.

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