

Short Commentary

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Traditional Chinese medicine treatment of ulcerative colitis**Zhidan Huang¹; Qiquan Liu^{2*}**¹Puning People's Hospital of Guangdong Province, China.²The First Affiliated Hospital of Hebei University of Traditional Chinese Medicine, China.***Corresponding Author: Qiquan Liu**The First Affiliated Hospital of Hebei University of
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Abstract

This paper discusses the treatment of ulcerative colitis with Traditional Chinese Medicine, and expounds the specific pathogenesis of ulcerative colitis. In addition, we put forward the application of some new technologies and methods for the scientific research on the treatment of ulcerative colitis, and summarizes the research hotspots of ulcerative colitis, hoping to provide reference for other scholars to study ulcerative colitis.

Keywords: Chinese traditional; ulcerative colitis; techniques and methods; medicine treatment.

Introduction

Ulcerative colitis (UC) is a nonspecific inflammatory disease of the intestine, which is mainly manifested by abdominal pain, diarrhea and mucous pus and blood stool. It is difficult to cure and relapse. It has a certain risk of cancer. The incidence rate of ulcerative colitis is increasing year by year, the recurrence rate is high, and the prognosis is poor. It is one of the most difficult diseases recognized worldwide.

The main drugs for the treatment of UC include immunosuppressant, amino salicylic acid and glucocorticoids. In recent years, biological agents have become a research hotspot in the treatment of this disease in Traditional Chinese Medicine (TCM), but the overall treatment effect is not ideal, the treatment cost is expensive, and some patients are accompanied by adverse drug reactions. Therefore, it is very important to explore new and effective treatment methods for UC.

TCM understanding of ulcerative colitis

Traditional Chinese Medicine has advantages in the treatment of ulcerative colitis. Ulcerative colitis is mostly classified as "diarrhea" in TCM. Syndrome differentiation and treatment is the characteristic and advantage of TCM. There

are many studies on syndrome differentiation of ulcerative node in TCM. TCM compound has achieved outstanding results in the treatment of this disease by means of multi-component, multi-target, multi-channel and multi system. It has the unique advantages of significant curative effect, low recurrence rate and less side effects. At present, exploring the treatment of UC with TCM has become a research hotspot in the field of digestive diseases. The curative effect of Western Medicine on UC is not ideal, and there are few clinical studies, especially the mechanism of curative effect.

Pathogenesis of ulcerative colitis

The specific pathogenes of UC is complex, which is considered to cause intestinal inflammatory reaction and mucosal tissue destruction under the influence of multiple factors such as genetics, immunity, spirit and intestinal microenvironment. Among them, the abnormally activated immune response under genetic susceptibility is considered to be the key factor in the occurrence of UC. Studies have confirmed that there are a large number of infiltration of immune cells such as neutrophils, macrophages and mast cells in the intestinal tissue of patients with UC [1,2]. Immune cells participate in the occurrence of UC by secreting inflammatory mediators such as chemokines

and cytokines [3,4]. Cytokines play an important role in the pathological injury of UC [5], pro-inflammatory cytokines mainly activate or aggravate the body's inflammatory response, and anti-inflammatory cytokines mainly inhibit the inflammatory response. Under normal circumstances, they are in balance in the body, and the imbalance of cytokine secretion is the key link in the production of intestinal nonspecific inflammatory response [6]. Monoclonal antibodies and other drugs treat moderate to severe or refractory UC by inhibiting the secretion of proinflammatory cytokines, which has become the focus of new drug development.

Application of new techniques and methods in the study of ulcerative colitis

The non additivity of clinical manifestations of diseases and syndromes is manifested in the nonlinear and multi-level characteristics of data. The clinical data analysis of this characteristic has gone beyond the scope of traditional statistical methods. Multi-level statistical model, nonlinear data analysis and data mining technology are used to explore the internal regularity of data. Such as syndrome differentiation rules, syndrome differentiation elements, syndrome differentiation classification and so on, is a feasible way. In the field of disease differentiation and syndrome differentiation of traditional Chinese medicine, some useful research has been carried out in the application of multi-level statistical model. The application of multivariate statistical methods in the field of traditional Chinese medicine has made a lot of progress. There are also some problems. Data mining technology is gradually applied to the field of medicine at home and abroad.

The multidimensional data analysis method is used to comprehensively analyze the clinical actual data to obtain its internal regularity. Some research has been carried out at home and abroad and gratifying progress has been made, but there are also some problems. For example, the subject relationship between data analysis and TCM professional understanding is not clear. We should explore whether professional knowledge determines the content and direction of data analysis, or whether data analysis can automatically produce laws. Most studies are often one-step, trying to use a single method to solve the problem, and the results are not good. There are differences and connections between various data analysis technologies. Its successful application in a professional field should be the comprehensive application of a series of related data analysis technology systems.

Conclusion

The pathogenesis of UC has been proved to be closely related to many signal pathways. More in-depth studies include JAK / stat, PI3K / Akt, Keap1 / Nrf2, Wnt, MAPKs and NF- κ B and other cellular signaling pathways, which participate in the occurrence and development of UC by regulating immune and inflammatory response, oxidative stress, apoptosis, intestinal mucosal barrier function and intestinal flora. Mitogen activated protein kinase (MAPK) and nuclear factor- κ B (nuclear factor kappa-B, NF- κ B) Mediated signaling pathway has been proved to play a key regulatory role in the immune and inflammatory response of UC, and has gradually become a hot spot in the field of UC research in recent years.

TCM has the advantages of multi-target, multi-link and multi-system in the treatment of UC. Traditional Chinese medicine treats UC through a variety of mechanisms such as regulating immune response, antioxidant stress, regulating intestinal flora and inhibiting the expression of inflammatory factors. It has the characteristics of definite curative effect and small side effects, showing obvious advantages and broad prospects.

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