



Clinical Research Progress of Traditional Chinese and Western Medicine on Anal Antral Inflammation

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Abstract: *In recent years, with the improvement of people's living standards, the number of patients with anal antral inflammation has also increased year by year, mainly due to changes in diet and lifestyle, as well as the improvement of the current medical environment. For the clinical treatment of anal antral inflammation, various doctors have their own different diagnostic and treatment ideas. This article summarizes the progress of traditional Chinese and Western medicine in the treatment of anal antral inflammation by searching literature on the treatment of anal antral inflammation in recent years, in order to provide new ideas for future generations of doctors to treat anal antral inflammation.*

Keywords: Anal antral inflammation; Chinese and Western medical methods; Internal treatment method; External treatment method.

1. Introduction

Anal antral inflammation, also known as "anal crypt inflammation", is mainly characterized by discomfort, pain, heaviness, dampness, difficulty in defecation, itching and discomfort in the anus. Anal digital examination shows tenderness in the anal sinus and anal papilla. Colonoscopy examination shows congestion and edema of the anal sinus. The main reason why patients with anal antral inflammation suffer from it is the long course of the disease, easy recurrence of the prognosis, difficult early diagnosis, long and painful treatment process, which can cause psychological problems. There are many traditional Chinese and Western medicine treatment methods for treating anal antral inflammation. This article summarizes the clinical treatment methods for anal antral inflammation.

2. Internal Treatment Methods

Fan Liying et al. [2] used Shengqing Huazhuo Tang, traditional Chinese medicine rectal drip, and Puji hemorrhoid suppository to treat 140 cases of anal antral inflammation. They were randomly divided into four groups: control group 1 was treated with Shengqing Huazhuo method orally and Puji hemorrhoid suppository anal retention, control group 2 was treated with traditional Chinese medicine rectal drip and Puji hemorrhoid suppository anal retention, control group 3 was treated with

microwave therapy and Puji hemorrhoid suppository anal retention, and observation group was treated with Shengqing Huazhuo method orally, traditional Chinese medicine rectal drip, and Puji hemorrhoid suppository anal retention, all for 10 days. The research results showed that the total effective rate of the control group was not as good as that of the treatment group, and the TCM symptom score after treatment was significantly higher than that of the treatment group; Although there was no significant difference in the recurrence rate among the four groups, the observation group had a relatively lower rate. It is suggested that the combination of oral administration of the method of clearing and removing turbidity, traditional Chinese medicine rectal drip, and Puji hemorrhoid suppository can achieve better therapeutic effects, significantly reduce clinical symptoms and signs, and have a certain preventive effect on recurrence. Zhao Piqiong et al. [3] set up a treatment group and administered modified Shugan Jianpi Tang orally in combination with a self-made formula for retention enema to treat chronic anal antral inflammation during perimenopause. The cure rate (52.5%) was better than that of the control group (25.0%), and the difference was statistically significant ($P < 0.05$). This method can avoid the recurrence of chronic anal antral inflammation and improve the cure rate of perimenopausal chronic anal antral inflammation. Liang Qiuping et al. [4] studied the effects of oral administration of Zhitong Rushen Tang and retention enema on inflammatory indicators and pain levels in patients with anal antral inflammation. Result: The degree of perianal swelling, pain, itching, and disappearance time of perianal dampness in the observation group were earlier than those in the control group, and the difference was statistically significant ($P < 0.05$). The results show that oral administration of Zhitong Rushen Tang and retention enema treatment can control patients' inflammatory reactions, alleviate their pain, promote early recovery, and are worthy of further promotion. Zeng Yanfang et al. [5] used modified Bai Tou Weng Tang to treat anal antral inflammation and its effect on inflammatory factor levels. Control group: Conventional symptomatic treatment, including regular sleep, light diet, smoking and drinking cessation, anti-inflammatory measures, etc. Research group: In addition to conventional treatment, the modified formula of Bai Tou Weng Tang was used. The formula consisted of 20g Bai Tou Weng, 10g each of Chishao, Qinpi, Huangbai, and Baizhi, and 5g Huanglian. The various herbs were soaked in warm water for 0.5 hours, and then boiled over low heat. 300mL of the soup was taken orally in two portions. After medication, the total effective rate of the research group was 94.87% (37/39), which was higher than the control group's 74.36% (29/39), and the difference was statistically significant ($P < 0.05$). The results show that the modified formula of Bai Tou Weng Tang can promote the recovery of patients with anal antral inflammation by controlling the inflammatory response, and is worthy of selection.

3. External Treatment Methods

Wan Fei et al. [6] observed the clinical efficacy of compound polymyxin B ointment combined with Puji hemorrhoid suppository in the treatment of anal antral inflammation. The control group was treated with Puji hemorrhoid suppository, and the total scores of symptoms and signs in the treatment group were lower than those in the control group. The conclusion proves that the treatment of hemorrhoids with Puji suppository alone is effective, but the short-term effect is not significant. When combined with compound polymyxin B ointment, the drug concentration can be increased, achieving better clinical efficacy. He Pengji et al. [7] used levofloxacin hydrochloride and sodium chloride injection retention enema to treat anal antral inflammation. The total effective rate of the treatment group was higher than that of the control group, proving that levofloxacin hydrochloride and sodium chloride injection retention enema has significant clinical effects on anal antral inflammation. Hu Shaohua et al. [8] used the combination of Ziyu ointment and Zhongtong'an capsules to treat damp heat type anal antral inflammation. The treatment group was treated with a combination of Ziyu ointment and Zhongtong'an capsules for anal retention, while the control group was treated with metronidazole and sodium chloride injection combined with gentamicin sulfate injection for retention enema. Result: The

total effective rate of the treatment group was 93.3% (28/30), and the recurrence rate was 15.8% (3/19), while the control group was 76.7% (23/30) and 58.3% (7/12), respectively. The results showed that the treatment method of Ziyu Gao combined with Zhongtong'an capsules for anal sphincter insertion is more effective than Western antibiotics, with fewer side effects, lower recurrence rate, safety and reliability, and is worthy of clinical reference. Zheng Lijun et al. [9] used Kangfu New Liquid retention enema to treat anal antral inflammation, while the control group received warm water sitz bath treatment. After treatment, the total effective rate of the treatment group was 95%, and the total effective rate of the control group was 60%. The use of Kangfu New Liquid enema for the treatment of anal antral inflammation has a definite therapeutic effect, which can effectively improve symptoms such as incomplete defecation and anal pain in patients, and is inexpensive. In summary, the main external treatment for anal antral inflammation is retention enema. This treatment plan is not only economical and direct to the disease site, but also simple and easy to learn, which is more accepted by patients with anal antral inflammation.

4. Surgical Treatments

Chen Zhengshi et al. [10] used the treatment method of anal sinus resection and relaxation combined with white peony seven substance particle fumigation and washing to treat anal antral inflammation. The control group patients underwent a treatment plan of anal sinus incision and insertion of Puji hemorrhoid suppository into the anus. The results showed that the resection of the anal sinus is beneficial for postoperative wound drainage, while also maintaining smooth bowel movements and reducing patient pain. Therefore, the use of anal sinus resection and release surgery is more effective. Yang Wenzhi [11] used anal sinus incision and drainage under three-dimensional transrectal ultrasound guidance to treat anal antral inflammation, while the control group also used conservative treatment plans such as fumigation and sitz baths under three-dimensional ultrasound guidance. Result: The cure rate of the treatment group was 94.44%, the effective rate was 100%, the average was 19.2 days, and no complications occurred. The control group had a cure rate of 25.00%, an effective rate of 80.00%, and an average of 22 days. Conclusion; The use of three-dimensional transrectal ultrasound provides a more objective standard for the diagnosis of anal antral inflammation, which is beneficial for early diagnosis of anal antral inflammation. At the same time, three-dimensional ultrasound examination can also clarify the specific location and number of lesions, making clinical surgical treatment more direct and rapid for clinicians. Conservative treatments such as retention enema and suppository insertion into the anus are also more targeted. At the same time, this inspection method also has disadvantages, as the equipment is relatively expensive, which makes the project difficult to carry out. Zhao Wenbo et al. [12] used incision and drainage combined with detoxification powder fumigation detergent to treat anal antral inflammation and observed its clinical efficacy. The results show that surgical treatment for anal antral inflammation is simple and fast, but the postoperative pain level is higher than that of conservative treatment in clinical practice, and the postoperative recovery speed is faster than conservative treatment. However, patients are more likely to accept conservative treatment.

5. Summary

There are various causes of anal antral inflammation, and traditional Chinese medicine has different theories on its etiology. Traditional Chinese Medicine believes that anal antral inflammation is caused by dampness and turbidity entering the anus, and its pathogenesis is often due to the patient's irregular diet and excessive consumption of spicy, greasy, and irritating substances. [13] Western medicine believes that the occurrence of anal antral inflammation is mainly due to the physiological and anatomical characteristics. The shape of the anal sinus is similar to a funnel, which is why feces

often accumulate and block at the anal sinus, causing contamination. Moreover, the anal glands and ducts are located beneath the anal recess, and the infection of the anal recess is mainly caused by the invasion of the anal glands and ducts, which makes the spread of infection more convenient, thus forming a progressive relationship of layer by layer anal antrum inflammation, perianal abscess, and anal fistula. Therefore, early diagnosis and timely symptomatic treatment are particularly important in the diagnosis and treatment of anal antral inflammation. With timely and effective treatment, the prognosis is generally good. Therefore, in the diagnosis and treatment of anal antral inflammation, early diagnosis, the use of treatment plans that are suitable for different patients, and personalized treatment plans should fully utilize the academic concepts of traditional Chinese and Western medicine, combined with internal and external treatment, to alleviate the pain of anal antral inflammation patients and improve their quality of life, are what medical workers should constantly explore and learn today.

References

- [1] Li Yueqing, He Qinghu *Traditional Chinese Medicine Surgery* [M]. 3rd edition Beijing: China Traditional Chinese Medicine Press, 2012:251.
- [2] Fan Liying, Sha Jingtao, Cao Kai Clinical study on the treatment of anal antral inflammation with oral administration of Shengqing Huazhuo Formula combined with traditional Chinese medicine retention enema [J] *Hebei Traditional Chinese Medicine*, 2020,42 (12): 1808-1811845.
- [3] Qin Yixiang, Wang Zengmei, Li Yingchao The effect of detoxification and turbidity elimination method on immune function, oxidative stress, and inflammatory factor levels in patients with chronic anal antral inflammation of damp heat type [J] *Journal of Traditional Chinese Medicine*, 2020, 35 (10): 2252-2256.
- [4] Liang Qiuping, Xie Xiangyu The effect of oral administration of Zhitong Rushen Tang and retention enema on inflammatory indicators and pain severity in patients with anal antral inflammation [J] *Clinical Research in Traditional Chinese Medicine*, 2021,13 (1): 114-116.
- [5] Zeng Yanfang, Gong Yi, Zhang Xueya, Duan Yunchun The effect of modified Baitouweng decoction on patients with anal antral inflammation and its impact on inflammatory factor levels [J] *Oriental Tonic Diet*, 2021, (11): 197.
- [6] Wan Fei, Wang Shanshan, Xu Yue Clinical observation of the combination of compound polymyxin B ointment and Puji hemorrhoid suppository in the treatment of anal antral inflammation [J] *Journal of Clinical Rational Drug Use*, 2021,14 (4): 29-31,34.
- [7] He Pengji Exploration of the effect of retention enema with levofloxacin hydrochloride and sodium chloride injection in the treatment of anal antral inflammation [J] *Contemporary Medicine Review*, 2020,18 (15): 79-80.
- [8] Hu Shaohua, Liu Jiao, Chen Shanhu, Zhang Minghui, Zhang Yue, Liu Manjun Clinical study on the combined use of Ziyu ointment and Tongzhong'an capsules for the treatment of damp heat descending type anal antral inflammation [J] *Hebei Traditional Chinese Medicine*, 2021, 43 (3): 420-422462.
- [9] Zheng Lijun, Ma Ji, Xing Jinliang Observation of the clinical efficacy of Kangfu New Liquid enema in the treatment of anal antral inflammation [J] *World's Latest Medical Information Digest (Continuous Electronic Journal)*, 2020,20 (66): 127-128.
- [10] Chen Zhengshi, He Yongheng The clinical effect of anal sinus resection and release combined with white peony seven particles fumigation and washing in the treatment of anal antral inflammation [J] *Contemporary Chinese Medicine*, 2021, 28 (3): 178-181.
- [11] Yang Wenzhi, Wang Jianda, Hao Cuiling, Li Linghua, Li Zhixiong, Wang Jun Clinical observation on the treatment of anal antral inflammation with three-dimensional transrectal

- ultrasound-guided anal sinus incision and drainage [J] *Journal of Traditional Chinese Medicine External Treatment*, 2021, 30 (1): 54-55.
- [12] Zhao Wenbo, Guo Shihong Observation of the therapeutic effect of incision and drainage combined with detoxification powder fumigation and washing on anal antral inflammation [J] *Journal of Practical Traditional Chinese Medicine*, 2020,36 (8): 977-979.
- [13] Liu Jingzhou Observation of the therapeutic effect of Shenbai enema formula on 64 cases of anal antral inflammation [J] *Medical Theory and Practice*, 2017 (7): 1012-1013.