# Nursing Experience with Traditional Chinese Medicine Fumigation and Washing Combined with Red Light Irradiation for Pain in a Patient After Anal Fistula Excision

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## Abstract

This paper summarizes the nursing experience of treating postoperative pain after anal fistula resection with traditional Chinese medicine fumigation and washing combined with red light irradiation. Under the theoretical guidance of syndrome differentiation nursing in traditional Chinese medicine, traditional Chinese medicine fumigation and washing and red light irradiation were applied, together with routine nursing measures such as dietary guidance and daily care, effectively alleviating postoperative pain symptoms and promoting postoperative recovery.

## Full Text

# Nursing Experience with Traditional Chinese Medicine Fumigation and Washing Combined with Red Light Irradiation for Pain in a Patient After Anal Fistula Excision

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**Abstract:** This article summarizes the nursing experience of treating pain after anal fistula excision in one patient using traditional Chinese medicine fumigation and washing combined with red light irradiation. Guided by the theory of syndrome differentiation-based nursing in traditional Chinese medicine, traditional Chinese medicine fumigation and washing and red light irradiation were selected, together with routine nursing measures such as dietary guidance and daily-life care, effectively relieving the patient' s postoperative pain symptoms and promoting postoperative recovery.

**Keywords:** anal fistula; surgery; traditional Chinese medicine fumigation and washing; red light irradiation; pain

# Nursing Experience of Herbal Fumigation Combined with Red Light Irradiation in Relieving Postoperative Pain After Anal Fistula Resection: A Case Report

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**Abstract:** This paper summarizes the nursing experience of herbal fumigation combined with red light irradiation for pain relief after anal fistula resection in one patient. Guided by the theory of syndrome differentiation-based nursing in traditional Chinese medicine (TCM), interventions including herbal fumigation and red light irradiation were adopted, combined with routine nursing such as dietary guidance and daily life care. The protocol effectively relieved postoperative pain and promoted the patient' s rehabilitation.

**Key words:** Anal fistula; surgery; herbal fumigation; red irradiation; pain

An anorectal fistula, also customarily referred to as an anal fistula, is one of the relatively common diseases in anorectal surgery, and its current incidence is second only to hemorrhoids. Anal fistulas may occur at any age, especially among young men aged 20–40 years, in whom they are more common[1]. Anal fistulas develop from perianal abscesses; the high rate at which anal fistulas form after drainage of perianal abscesses means that patients often have no choice but to undergo a second operation. Eisenhammer once

Conclusion: "Perianal abscess is the mother of anal fistula" ; if most perianal abscesses are not managed properly, they will inevitably progress to anal fistula. If not treated radically or if managed inappropriately, the vicious cycle of abscess-fistula-sinus-type abscess-fistula will ensue and persist for a long time. Difficulty in wound healing after anal fistula surgery is one of the challenging conditions in anorectal surgery[2]. Postoperative fumigation, washing, and sitz-bath therapy with traditional Chinese medicine can be used to treat wound edema and pain. This therapy acts directly on the affected area and can exert effects of clearing heat and detoxifying, drying dampness and relieving itching, and cleansing the wound[3]. The use of traditional Chinese medicine fumigation and washing combined with red-light therapy can accelerate wound healing, reduce patients' pain, and improve clinical therapeutic efficacy, making it suitable for clinical promotion and application[4]. This article summarizes the nursing experience of using traditional Chinese medicine fumigation and washing combined with red-light irradiation as a traditional Chinese medicine nursing technique to improve pain after anal fistula excision in one case, as reported below.

# 1 Clinical Data

## 1.1 General Information

The patient was female, 63 years old, and was admitted for anal fistula because of "recurrent anal swelling and pain with rupture, ulceration, pus discharge, and bleeding for 1 year, aggravated for 1 week." The patient had previously been in

good health and denied any history of food or drug allergy. Onset season: 2 days after Frost' s Descent.

### 1.2 Physical Examination

Vital signs on admission: T: 36.6°C; P: 64 beats/min; R: 20 breaths/min; BP: 134/68 mmHg. Specialist examination: in the knee-chest position, at the 7 o' clock position 3 cm from the anal margin, a small ulcerated opening was visible, approximately 0.1 cm × 0.2 cm, with no obvious pus or blood exudation and tenderness (+). No obvious mass or induration was palpable in the lower rectum; a small amount of pus and blood was seen on the finger cot, and the anal sphincter contraction was acceptable.

### 1.3 The Four Examinations of Traditional Chinese Medicine

Inspection: the patient was conscious and alert, in fair spirits, with a rosy complexion.

Auscultation and olfaction: speech was clear, respiration was normal, there was no special odor, the tongue was red, and the coating was yellow and greasy.

Inquiry: anal swelling and pain, with rupture, ulceration, pus discharge, and bleeding.

Palpation: the pulse was wiry and rapid.

### 1.4 Diagnosis

Traditional Chinese medicine diagnosis: anal leakage disease (pattern of damp-heat pouring downward)

Western medicine diagnosis: anal fistula

### 1.5 Treatment

After admission, the patient was given grade II nursing care and a regular diet. On October 27, 2023, anal fistula excision was performed under local anesthesia. On the day after surgery, the patient complained of marked pain in the anal region.

## 2 Nursing

### 2.1 Nursing Assessment

Pain symptom assessment

The visual analog scale (VAS) was used to assess the degree of postoperative pain. The patient marked the degree of pain on a 10-cm straight line on a sheet

of paper. The higher the score, the more severe the pain[^5]. The total score was 10 points.

0 points: no pain;

1–3 points: mild pain, but tolerable for the patient;

4–6 points: pain that affects the patient' s sleep;

7–10 points: pain that is clearly difficult to tolerate and has a relatively great impact on daily life.

The patient marked the line, and the degree of pain was quantified accordingly. The patient reported that postoperative pain made it difficult to fall asleep; the pain score was 6 points, indicating moderate pain.

## 2.2 Nursing Diagnosis

Based on the patient' s physical assessment and chief complaint, the patient had difficulty tolerating postoperative pain. Nursing diagnosis: acute pain related to the surgical incision.

## 2.3 Nursing Plan

Based on the patient' s nursing assessment and diagnosis, the following plan was formulated: provide the patient with traditional Chinese medicine fumigation and washing combined with red-light irradiation therapy, while also providing routine nursing care such as monitoring vital signs and dietary therapy.

## 2.4 Nursing Measures

### 2.4.1 Traditional Chinese Medicine Characteristic Nursing

Traditional Chinese medicine fumigation and washing involves steaming a traditional Chinese medicinal decoction while hot, followed by rinsing the affected area with the medicinal liquid, thereby dredging the channels, eliminating dampness and detoxifying, reducing swelling and relieving pain. Through absorption via the skin, it can not only promote local blood circulation, reduce capillary permeability in the inflamed area, and accelerate wound healing[^6], but also avoid gastrointestinal irritation caused by drugs and improve the patient' s quality of life. It is a commonly used therapeutic method in traditional Chinese medicine traumatology[^7]. Before the procedure, the patient was asked whether he had any allergy to traditional Chinese medicines, and the knowledge and methods of traditional Chinese medicine fumigation and washing therapy were explained to the patient in order to obtain cooperation.

Prescribed formula: Huangbai 10 g, Huajiao 10 g, Fangfeng 5 g, Wubeizi 15 g, Diyutan 10 g, Jinyinteng 10 g, Pugongying 10 g, Mabo 10 g, Baifan 10 g, Baizhi 10 g, Dahuangtan 10 g, Bingpian 2 g, Lianqiao 10 g, Zhuzishen 6 g.

This formula was uniformly prepared and decocted by the hospital preparation room and has the effects of clearing heat and detoxifying, reducing swelling, and relieving pain.

Procedure: The traditional Chinese medicine was uniformly decocted by the hospital preparation room into 200 mL per bag. When used, 200 mL of the Chinese medicinal decoction was first added to 1,500 mL of hot water and mixed evenly. The anus and surrounding area were fumigated with the steam; when the water temperature decreased to approximately 37°C, the patient then took a sitz bath for 10 minutes, twice daily[^8].

Red-light irradiation is a technique that uses light of infrared and near-infrared wavelengths for treatment. Acting on the skin, it can promote cell growth and also relieve pain[^9].

Procedure: After fumigation and washing, the patient was placed in the lateral decubitus position. Irradiation therapy was performed using a Carnation red-light therapeutic instrument produced by Shenzhen Pumen Technology Co., Ltd.; the irradiation distance was 15–20 cm, 15 min per session, twice daily.

### 2.4.2 Routine Nursing Care

After surgery, strengthen patrols of the patient and monitoring of vital signs, and record them accurately. Pay attention to the color, nature, and amount of exudate and bleeding from the patient' s wound dressing, and report to the physician promptly when necessary. To ensure cleanliness of the surgical site and prevent infection at the operative site, the perineum was wiped with iodophor cotton balls after surgery, twice daily. Because of postoperative dysfunction of the viscera and bowels, and because the spleen and stomach cannot transform and transport water and grain essence properly, the large intestine cannot conduct normally, resulting in retention of turbid stool internally and inability to expel it from the body. Therefore, within 24 hours, the patient may drink water and a juice that moistens the intestines several times. In addition, abdominal distension should be actively prevented and treated. If the number of bowel movements is excessive, it may cause wound infection, bleeding, and edema. Because the patient' s syndrome differentiation was damp-heat pouring downward, excessive intake of greasy and cold foods should be avoided, and intake of irritating foods should be reduced.

## 2.5 Nursing Evaluation

After 3 days of intervention, the patient' s pain symptoms were significantly relieved. See Table 1.

**Table 1 Evaluation of effects before and after intervention**

| Time | Postoperative 1 d | Postoperative 2 d | Postoperative 3 d |
|---|---|---|---|
| Before intervention | Moderate pain VAS:6 | Moderate pain VAS:4 | Mild pain VAS:3 |
| After intervention | Markedly effective VAS:5 | Markedly effective VAS:3 | Markedly effective VAS:1 |

## 3 Results and Follow-up

On the 7th day after discharge, telephone follow-up was conducted. The patient stated that he usually felt no pain, with a VAS score of 0, and no adverse reactions occurred. The patient expressed satisfaction with the therapeutic effect.

## 4 Discussion

After anal fistula is diagnosed, surgical treatment is generally required to achieve a radical cure[^10]. However, after surgical management, the wound at the affected site often requires a relatively long time to heal, and postoperative pain is easily caused by the limitations of anesthetic drugs. Therefore, carrying out appropriate traditional Chinese medicine techniques after surgery is of great significance for relieving the patient' s symptoms and improving pain.

Traditional Chinese medicine fumigation and washing can act directly on the skin, mucosa, and other tissues. While cleansing the surgical wound, the effects of the medicine can also play a role in drying dampness and detoxifying, reducing swelling, and relieving pain. Red light can promote blood circulation and accelerate body metabolism, achieving the effects of promoting the growth of granulation tissue and hair; this helps promote wound healing. At the same time, in the early and middle postoperative stages, the inflammatory response at the incision is relatively severe locally, and the content of 5-hydroxytryptamine in the tissue increases. This substance is precisely a cause of postoperative pain, and red-light irradiation can reduce the content of 5-hydroxytryptamine, effectively alleviating postoperative pain[^11].

TCM fumigation and washing combined with red-light irradiation intervention provides superior analgesic effects and wound-healing speed compared with a single therapeutic modality; the two interventions are noninvasive, highly safe, economical and convenient, and nursing operations are easy to train and master. However, it cannot be directly applied to all patients after anal fistula surgery. Factors such as the complexity of the fistulous tract, age, underlying chronic diseases, individual pain threshold, and whether the wound is infected may all affect the intervention effect.

This case reviewed the key nursing points, observation priorities, and health-

education details throughout the entire process of TCM fumigation and washing combined with red-light irradiation, thereby enriching multimodal pain-management protocols after anal fistula surgery. It helps standardize the timing and frequency of interventions that combine appropriate TCM techniques with physical therapy. In summary, TCM fumigation and washing combined with red-light irradiation is superior to single-modality treatment and can better improve postoperative pain and promote postoperative recovery.

**Patient informed consent:** Informed consent for publication of the case report was obtained from the patient or family members.
**Conflict of interest statement:** The authors declare no conflicts of interest.

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*Note: Figure translations are in progress. See original paper for figures.*