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Experience with Integrated Traditional Chinese and Western Medicine Nursing Care in a Leukemia Patient with Perianal Abscess (Post-print)

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Abstract

This article summarizes the nursing experience and insights gained from treating a patient with acute leukemia complicated by perianal abscess using an anti-inflammatory sitz bath formula combined with herbal fumigation via a modified toilet seat. The content primarily encompasses the composition of the anti-inflammatory sitz bath formula, advantages of the modified toilet seat, operational procedures for herbal fumigation, precautionary measures, lifestyle guidance, and psychological care. Through this series of interventions, the approach can facilitate detumescence of the perianal abscess, alleviate pain, prevent recurrence, improve quality of life, and bolster the patient's confidence in conquering the disease.

Full Text

Clinical Archives of Integrative Medicine · Integrated Chinese and Western Medicine Clinical Cases ·

Application of Integrated Chinese and Western Medicine Nursing Care in a Patient with Leukemia Complicated by Perianal Abscess

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Abstract

This paper summarizes the nursing experience of applying an anti-inflammatory sitz bath formula combined with modified toilet seat herbal fumigation in a

patient with acute leukemia complicated by perianal abscess. The main components include the composition of the anti-inflammatory sitz bath formula, advantages of the modified toilet seat, operational methods for herbal fumigation, precautions, lifestyle guidance, and psychological care. Through this series of interventions, the treatment promoted resolution of the perianal abscess, relieved pain, prevented recurrence, improved quality of life, and enhanced the patient's confidence in overcoming the disease.

Keywords: Chinese herbal fumigation; perianal abscess; pain; acute leukemia; traditional Chinese medicine nursing care

Introduction

Acute leukemia is a malignant clonal disease originating from hematopoietic stem cells with an increasing annual incidence. Current treatment remains primarily chemotherapy-based; however, chemotherapeutic agents damage normal cells and immune function in addition to killing leukemic cells, leading to further immunosuppression and making patients a high-risk population for nosocomial infections. Literature reports indicate that patients with acute leukemia commonly develop various infections following chemotherapy, with perianal infection being a frequent complication occurring in over % of cases and ranking among the top post-chemotherapy infections. Once perianal infection occurs, it may compromise chemotherapy efficacy and seriously affect patient survival and well-being. In China, acute leukemia represents one of the ten most common malignancies, with a very poor prognosis if left untreated. Therefore, effective perianal care through meticulous nursing intervention is essential to reduce infection rates and positively impact disease treatment.

Based on this rationale, our department has implemented a novel technique: the application of an anti-inflammatory sitz bath formula combined with a modified toilet seat for chemotherapy patients in the hematology ward. This approach significantly reduces the incidence of perianal infection and demonstrates notable efficacy in patients who have already developed such infections by accelerating abscess resolution, promoting wound healing, and substantially alleviating suffering, thereby facilitating smooth continuation of chemotherapy. Since project initiation, no complications such as burns, falls, or drug allergies have occurred, and preliminary follow-up surveys indicate high patient satisfaction. This paper reports the nursing experience and insights from one case of acute leukemia with perianal abscess managed with anti-inflammatory sitz bath formula combined with modified toilet seat herbal fumigation.

Clinical Data

The patient was a -year-old female diagnosed with acute leukemia for over two years, who presented to the emergency department with fever for two days (temperature up to °C) and was admitted on a stretcher. She had a history of diabetes

for years with regular acarbose medication and had undergone hysterectomy with bilateral salpingo-oophorectomy. Since disease onset, she had received cycles of standard chemotherapy with recurrent perianal infections. On admission, physical examination revealed temperature °C, pulse beats per minute, respiration /min, blood pressure /mmHg. Laboratory tests showed white blood cells /L, hemoglobin /L, absolute neutrophil count /L, and platelet count /L. The patient was conscious but lethargic, with coarse breath sounds in both lungs and no dry or moist rales. The infusion port site was intact without abnormalities. The abdomen was flat with old surgical scars in the lower abdomen, no tenderness or rebound tenderness. Perianal skin was intact without tenderness, with scattered petechiae on both lower extremities and oral mucosal blood blisters. Admission diagnoses included acute leukemia, post-chemotherapy myelosuppression, infectious fever, and type diabetes. Treatment included critical condition notification, absolute bed rest, hemostatic agents (carbazochrome sodium sulfonate and etamsylate), antibiotics (biapenem combined with levofloxacin), G-CSF for leukocyte elevation, oral eltrombopag for platelet elevation, and platelet transfusion.

On the night of admission, the patient experienced intensified perianal pain with a pain score of points. Perianal examination revealed a cm mass. After oral ibuprofen/codeine, pain decreased to points. Perianal discomfort persisted with a pain score of points. Herbal fumigation was administered as prescribed, and psychological care was provided for anxiety. On day 3 post-intervention, the mass measured approximately cm with a pain score of points. Hematology showed hemoglobin /L, absolute neutrophil count /L, and platelet count /L. By day 7, the mass had reduced to approximately cm with a pain score of points, and the patient was emotionally stable.

Nursing Care

Pain Management and Assessment

Pain assessment was conducted using the Inpatient Pain Evaluation Scale of Jiangyin People's Hospital, which categorizes pain into none, mild, moderate, and severe levels, with scores ranging from 0-10 points directly correlating with pain intensity. The nursing team established effective communication with the patient to understand her pain threshold, provided targeted reassurance, employed distraction techniques, and administered analgesics as prescribed when necessary. The nursing diagnosis was identified as pain related to perianal abscess, with the expected outcome of pain relief and abscess resolution.

Herbal Formula and Administration

The anti-inflammatory sitz bath formula consisted of Rhubarb, Talc, Phellodendron, *Sophora flavescens*, *Galla chinensis*, stir-fried *Atractylodes*, and *Borneol*. Modern pharmacological research demonstrates that Rhubarb granules have heat-clearing, laxative, and fire-purging effects; Talc granules clear heat, relieve summerheat, and eliminate dampness; Phellodendron granules clear heat, dry

dampness, and purge fire to detoxify; *Sophora flavescens* granules clear heat, dry dampness, and kill parasites to relieve itching; *Galla chinensis* granules have astringent and consolidating effects; stir-fried *Atractylodes* granules dispel wind and eliminate dampness; and *Borneol* relieves pain and prevents decay. The combination of these herbs produces anti-inflammatory and detoxifying effects.

Modified Toilet Seat Design

The modified toilet seat featured reinforced stainless steel cross-bracing beneath the original bucket, allowing replacement with a sitz bath basin for safe and convenient administration of therapeutic solutions. For patients on absolute bed rest, the device could be moved bedside for herbal fumigation, enhancing safety and accessibility.

Procedure and Precautions

The nursing protocol included comprehensive assessment of the patient's condition, age, consciousness, psychological status, and cooperation level, as well as perineal cleanliness, skin and mucosal integrity, current treatments, and contraindications (menstruation, postpartum status within two weeks, severe cardiovascular disease). The procedure involved: (1) preparing sufficient solution (milliliters) at appropriate concentration (excessive concentration may cause mucosal burns while insufficient concentration affects efficacy); (2) measuring temperature and positioning the patient with exposed buttocks for initial fumigation at °C for minutes, followed by immersion of buttocks and external genitalia at °C for minutes, with solution replacement as needed; and (3) gentle drying with sterile gauze after completion. Privacy protection and warmth maintenance were emphasized throughout.

Perianal Care and Monitoring

Post-defecation perianal cleansing was performed, followed by daily herbal fumigation. Nursing staff conducted perianal examinations every days, encouraged patients to report sensations of moisture, itching, or pain improvement, and maintained perianal infection records documenting etiology, nursing methods, and improvement measures. A standardized perianal cleansing and sitz bath flowchart was developed for patient and family education. A nursing quality improvement team comprising charge nurses and primary nurses evaluated implementation and provided targeted interventions.

Psychological Support

Patients with acute leukemia are psychologically vulnerable, and perianal infections can increase their psychological burden, causing anxiety and depression. Nursing staff actively communicated with the patient, provided regular counseling, played soothing music, and offered verbal encouragement to ensure cooperation and foster disease-fighting confidence. Family members were advised to maintain active communication post-discharge, guide emotional expression, and understand the importance of maintaining a positive mindset.

Dietary Management

Patients were instructed to increase intake of fresh vegetables and fruits. For constipation, lactulose could be administered to promote gastrointestinal recovery. Spicy and irritating foods were strictly prohibited.

Evaluation and Outcomes

Evaluation criteria were established as: (1) Markedly effective—symptoms resolved, perianal skin and mucosa normalized, treatment compliance maintained; (2) Effective—symptoms improved, perianal skin and mucosa gradually normalized, redness and swelling subsided, diameter less than cm, treatment compliance improved; (3) Ineffective—no improvement or worsening symptoms with non-compliance and resistance. Patient satisfaction was assessed using our hospital's self-designed satisfaction survey covering nursing service attitude, scientific communication, and timeliness of care, scored on a 100-point scale (very satisfied > points, relatively satisfied points, dissatisfied < points).

After one week of intervention, the nursing outcome was evaluated as effective; after two weeks of post-discharge follow-up, the outcome was markedly effective, with an overall effective rate of % and satisfaction rate of %. No complications such as burns, falls, or drug allergies occurred.

Discussion

Perianal abscess is an acute purulent infectious disease occurring in the perianal, anal canal, and rectal regions, manifesting as acute progressive perianal pain that severely impacts daily life and health. Due to severe pain, most patients experience significant negative emotions. Western medicine typically employs povidone-iodine or potassium permanganate sitz baths for anorectal pain, but overall efficacy is suboptimal. Traditional Chinese medicine (TCM) syndrome differentiation and treatment are commonly used in anorectal diseases, offering advantages of simple operation, cost-effectiveness, high safety, and significant efficacy. The pathogenesis of perianal abscess involves invasion of wind-dampness-heat toxins, blood stasis, and local contamination of perianal tissue, requiring treatment principles of clearing heat, detoxifying, and dispersing abscesses. Through herbal decoction followed by fumigation and sitz bath, the medicinal liquid acts on the body via skin and mucosal absorption to promote qi and blood circulation. While TCM treatment focuses on heat-clearing and detoxification, Western medicine emphasizes anti-infection therapy. The combination of antibiotics with herbal fumigation produces synergistic effects, maintains smooth qi and blood flow, and yields excellent clinical outcomes. Integrated Chinese and Western medicine nursing throughout the entire treatment process provides rehabilitation promotion, medical care, and health guidance for patients with nursing needs, demonstrating ideal intervention effects and representing a model worthy of promotion.

Acute leukemia patients undergoing chemotherapy have high infection rates due

to compromised immunity, prolonged bed rest, poor gastrointestinal motility, and difficulty with defecation, making the perianal region vulnerable to bacterial invasion. Early detection and intervention are crucial. Healthcare providers must enhance awareness of infection risks in acute leukemia patients and implement targeted nursing care, including health education, psychological support, dietary management, and exercise guidance to promote defecation and effectively prevent infections while improving medical care quality.

In addition to in-hospital nursing interventions, enhanced attention and supervision after discharge are equally important. Some patients experience delayed recovery, infection recurrence, and significantly compromised quality of life post-discharge due to lack of supervision and self-management awareness. Through follow-up visits, patient WeChat groups, and home visits, we can provide professional guidance to improve patient self-care and family nursing capabilities, accelerate recovery, reduce adverse reactions, and enhance satisfaction. This case demonstrates that implementing anti-inflammatory sitz bath formula combined with modified toilet seat herbal fumigation can effectively improve clinical symptoms and treatment outcomes in acute leukemia patients with perianal abscess, proving its feasibility.

Conflict of Interest Statement: The authors declare no conflicts of interest.

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