
AI translation • View original & related papers at
chinaxiv.org/items/chinaxiv-202211.00110

Integrated Traditional Chinese and Western Nursing Care for Incontinence-Associated Dermatitis in an Elderly Bedridden Patient with Malignant Cervical Spine Tumor: A Case Report (Postprint)

Authors: Du Na, Wang Jing

Date: 2022-11-06T21:14:27+00:00

Abstract

This article summarizes the integrated Chinese and Western nursing experience in an elderly bedridden patient with cervical spine malignant tumor complicated by incontinence-associated dermatitis (IAD). Through dynamic assessment and application of holistic nursing concepts, a structured skin care protocol was combined with traditional Chinese nursing techniques of moxibustion and herbal tea decoctions, implementing symptomatic treatment for local skin while holistically adjusting the patient's visceral yin-yang balance, thereby promoting comprehensive rehabilitation.

Full Text

Integrated Traditional Chinese and Western Medicine Nursing Care for a Bedridden Elderly Patient with Cervical Spine Malignant Tumor Complicated by Incontinence-Associated Dermatitis: A Case Report

DU Na, WANG Jing

Department of Oncology and Geriatrics, Beijing Changping District Hospital of Integrated Traditional Chinese and Western Medicine, Beijing

Abstract

This paper summarizes the nursing experience of integrated Traditional Chinese and Western medicine for a bedridden elderly patient with cervical spine malignant tumor complicated by incontinence-associated dermatitis (IAD). Through

dynamic assessment and holistic nursing concepts, a structured skin care protocol was combined with Traditional Chinese Medicine nursing techniques including moxibustion and herbal decoction, providing symptomatic treatment for local skin lesions while systematically regulating the yin-yang balance of the body's organs to promote comprehensive recovery.

Keywords: cervical spine malignant tumor; incontinence-associated dermatitis; skin damage; infection; Traditional Chinese Medicine; moxibustion; integrated Traditional Chinese and Western medicine nursing

Incontinence-associated dermatitis (IAD) refers to skin damage caused by exposure to urine or feces, representing a form of contact irritant dermatitis occurring in patients with urinary or fecal incontinence. It frequently develops in patients with tumor-related spinal cord compression and advanced terminal bedridden patients, and is currently recognized as a risk factor for pressure injuries [1]. IAD not only causes physical and psychological suffering, severely impacting quality of life, but also triggers related complications and increases nursing workload. This article summarizes the integrated Traditional Chinese and Western medicine nursing experience for an elderly bedridden patient with advanced cervical spine malignant tumor complicated by IAD.

1 Clinical Data

The patient was a 76-year-old female who presented with intermittent cough and sputum production for 2 months, having self-administered more than two types of antibiotics without improvement. She was diagnosed with cervical spine malignant tumor 3 years previously and experienced weakness in all four limbs. She was admitted for further palliative treatment. Since disease onset, the patient exhibited poor appetite, restless sleep, urinary incontinence with yellow-brown urine 4-5 times daily, loose stools, and a 10 kg weight loss over the past 3 months. Past medical history included diabetes mellitus for 10 years and hypertension. Physical examination upon admission revealed large areas of skin loss, erythema, and infection in the perineal, gluteal, and medial thigh regions. Laboratory findings showed: white blood cells 19×10^9 /L, neutrophils 89.4%, hemoglobin 89 g/L. Urinalysis revealed white blood cell count of 245/L. Traditional Chinese Medicine diagnosis: cancerous disease with qi deficiency and blood stasis syndrome. Western medicine diagnosis: cervical spine malignant tumor, pulmonary infection, and hyperosmolar hyperglycemic state.

2 Nursing Interventions

Following admission, targeted treatment and integrated Traditional Chinese and Western medicine nursing interventions were implemented based on comprehensive assessment and evaluation.

2.1 Dynamic Assessment and Risk Factor Identification

IAD risk factor assessment revealed multiple risk factors including incontinence with frequent episodes, use of occlusive care products, pain, limited mobility, reduced cognitive function, inability to maintain personal hygiene, multiple antibiotic use, and severe underlying disease.

2.2 Perineal Skin Assessment

The Perineal Assessment Tool (PAT) was used to evaluate IAD risk, scoring 20 points. Developed by Nix [2] through literature review, this scale comprises four domains: irritant intensity, duration of exposure, perineal skin condition, and related contributing factors, with higher scores indicating greater IAD risk. The patient's assessment revealed watery stool (accompanied by urine), nursing pad changes every 8-12 hours, skin condition with desquamation (dermatitis present), and four risk factors, categorizing her as high-risk.

2.3 IAD Classification and Skin Damage Assessment

The IAD classification tool evaluates skin integrity based on intactness, erythema, redness, edema, and breakdown, categorizing IAD into Grade 1 (no IAD), Grade 2 (mild IAD), and Grade 3 (moderate-to-severe IAD). The patient presented with localized erythema, skin damage, desquamation, and infection, consistent with Grade 3 (moderate-to-severe IAD).

The Incontinence-Associated Dermatitis and its Severity Instrument (IADS), developed by Borchert et al. [3] and subsequently revised, comprises 15 items evaluating 13 body regions commonly affected by IAD using a 5-point Likert scale, with higher scores indicating more severe skin damage. The patient exhibited: external genitalia skin loss (2 points); right inguinal skin loss (2 points); perianal and gluteal cleft skin loss (3 points); left upper gluteal erythema (1 point); left lower gluteal skin loss (2 points); right upper gluteal erythema with skin loss (3 points); right lower gluteal skin loss (2 points); sacrococcygeal skin loss (2 points); left posterior thigh skin loss (2 points); right posterior thigh skin loss (2 points); and right medial thigh skin loss (2 points), yielding a total score of 25 points and indicating severe localized skin damage.

2.4 Structured Skin Care Protocol

Cleansing: A neutral, mild-formulation no-rinse skin cleanser with non-ionic surfactants was used at 37-40°C to minimize friction during cleaning. A gentle patting technique was employed for timely, thorough cleansing. Appropriate temperature enhanced patient comfort while neutral pH minimized skin irritation.

Protection: Following cleansing and complete drying, stoma powder was lightly dusted onto the skin for even, thin coverage. Liquid dressing was then sprayed vertically from 10-15 cm distance, with a second application after 15

seconds of drying. Research [6] indicates that application frequency of 3 times daily versus 6 times daily shows no significant difference; for this patient, frequency was increased based on stool assessment.

2.5 Traditional Chinese Medicine Interventions

Interrupting the Skin-Excreta Contact Pathway: An indwelling catheter was placed to eliminate continuous urine exposure. Additionally, ginger-separated moxibustion was administered twice daily at acupoints including Shenque (CV8), Qihai (CV6), Guanyuan (CV4), Yinlingquan (SP9), and Zusanli (ST36), all of which address abdominal pain, distension, diarrhea, urinary disorders, and gastrointestinal conditions by harmonizing ying-wei and promoting qi-blood circulation to improve bowel and bladder function. Concurrently, a decoction of *Cortex Ailanthi* (Chunpi) was administered as tea replacement, 200 mL per dose, warm. *Cortex Ailanthi*, documented in *Lei Gong's Treatise on Preparation and Broiling* and *Ri Hua Zi Ben Cao*, is warm, non-toxic, stops diarrhea and intestinal wind, and reduces urination [5]. It enters the Yangming meridians of hand and foot, with functions of clearing heat, drying dampness, stopping diarrhea, treating chronic dysentery, and controlling hematochezia. Following these interventions, bowel frequency decreased to 2-3 times daily with formed stool by day 5.

Moxibustion-Assisted Nursing: Following local skin cleansing and protection, mild moxibustion and revolving moxibustion were performed for 20 minutes per session [7]. When local wound temperature approaches or stabilizes at normal 37°C, mitotic activity increases and enzymatic function optimizes, while moxa in moxibustion enhances immune function and increases local skin disease resistance.

2.6 Enhanced Assessment and Health Education

Nursing staff conducted bedside assessments using the IADS and evaluated care products and bed environment [8]. Health education emphasized prevention over treatment, teaching patients and families about IAD knowledge and protective measures to enhance awareness and prevent recurrence. Guidance included selecting breathable, friction-reducing bedding and comfortable nursing pads; instructing patients to clean promptly after each episode of incontinence to maintain clean, dry skin; and encouraging family participation in care.

3 Discussion

This elderly patient with advanced malignancy had IAD complicated by skin damage area $>50 \text{ cm}^2$, posing high infection risk and requiring complex, labor-intensive care [4]. Following admission, dynamic assessment and integrated Traditional Chinese and Western medicine nursing methods were employed to decisively interrupt precipitating stimuli and actively control dermatitis, effectively improving skin condition. Nursing intervention constitutes a crucial com-

ponent of IAD prevention and treatment, requiring symptomatic management and comprehensive, multi-faceted care plans in clinical practice.

This case utilized an aromatic neutral no-rinse skin cleanser to enhance patient comfort and compliance. Stoma powder, primarily composed of carboxymethyl-cellulose sodium with strong absorptive capacity, maintains dry skin, promotes rash resolution, and reduces inflammatory reactions, demonstrating significant clinical efficacy in IAD prevention and treatment. Liquid dressing containing dilute acid copolymer and polyethylmethylsiloxane was sprayed to form a protective film over damaged skin, shielding it from urinary and fecal irritation with friction-resistant and waterproof properties.

Traditional Chinese Medicine nursing techniques are widely applied clinically; this patient, after syndrome differentiation, received moxibustion and herbal decoction as adjuvant care to regulate organ yin-yang balance and local skin microenvironment, accelerating healing with remarkable effects. Prevention outweighs treatment in IAD management; throughout the nursing process, nurses created opportunities for patient and family participation.

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

References

- [1] Wang Ling, Zheng Xiaowei, Ma Rui, et al. Interpretation of expert consensus on nursing practice for incontinence-associated dermatitis at home and abroad[J]. Chinese Nursing Management,
- [2] NIX D H. Validity and reliability of the perineal assessment tool[J]. Ostomy Wound Manage,
- [3] BORCHERT K, BLISS D Z, SAVIK K, et al. The incontinence-associated dermatitis and its severity instrument: development and validation[J]. J Wound Ostomy Continence Nurs,
- [4] Zhang Yu, Zhang Xiaoxue, Zhao Xiaowei, et al. Current status and influencing factors of incontinence-associated dermatitis in critically ill patients[J]. Journal of Nursing in Chinese People's Liberation Army,
- [5] Wang Erhuan, Wang Jiqiang, Chang Hui, et al. Herbal textual research on Cortex Ailanthi[J]. Asia-Pacific Traditional Medicine,
- [6] Song Juan, Jiang Qixia, Wang Xuemei. Comparative study of different nursing measures for preventing incontinence-associated dermatitis in critically ill patients[J]. Chinese Journal of Nursing,
- [7] Liu Zhongmin. Nursing experience of moxibustion treatment for incontinence-associated dermatitis[J]. Journal of Practical Traditional Chinese Medicine,
- [8] Xu Dan, Tong Li, Hu Fen, et al. Bundle nursing for process management and control in elderly patients with incontinence-associated dermatitis[J]. Journal of Nursing Science,

[9] Xu Jingjing, Gong Haoling, Jia Jing. Investigation on current knowledge of incontinence-associated dermatitis prevention and management among clinical nurses[J]. Chinese Nursing Management,

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

Source: ChinaXiv — Machine translation. Verify with original.