

# Research Progress on Integrated Chinese and Western Medicine Nursing Techniques in the Perioperative Period of Thyroid Cancer

Rongna Ma, Yakun Cheng\*, Dandan Liu, Qian Sun

Affiliated Hospital of Hebei University, Baoding 071000, Hebei, China

\*Corresponding author: Yakun Cheng, 813224962@qq.com

**Copyright:** © 2025 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

**Abstract:** Nursing care during the perioperative period of thyroid cancer plays a crucial role in the recovery of patients. With the development of medical technology, Western medicine nursing techniques have matured in the perioperative period, including preoperative risk assessment and airway management, intraoperative neuromonitoring nursing coordination, postoperative drainage, and incision management. However, single Western medicine nursing often cannot fully meet the multifaceted needs of patients, especially in emotional nursing and the management of postoperative adverse reactions. The involvement of traditional Chinese medicine nursing techniques provides an effective complement to nursing work. Through integrated Chinese and Western medicine nursing, it is possible not only to improve patients' preoperative anxiety and postoperative nausea and vomiting but also to effectively manage postoperative pain, enhancing the overall comfort and recovery speed of patients.

**Keywords:** Integrated Chinese and Western medicine nursing techniques; Thyroid cancer; Perioperative period; Research progress

**Online publication:** August 5, 2025

## 1. Introduction

Thyroid cancer is a common endocrine malignancy in clinical practice. The quality of perioperative nursing care directly affects the quality of postoperative recovery and prognosis of patients. Preoperative, intraoperative, and postoperative nursing care are essential for good postoperative recovery and quality of life. Although Western medicine nursing techniques for thyroid cancer have been fully and effectively applied, such as preoperative risk assessment and airway management to reduce surgical risks, intraoperative neuromonitoring nursing coordination to ensure surgical safety, and new techniques for postoperative drainage and incision management to facilitate wound healing and prevent surgical site infections, traditional Western medicine nursing techniques still have

limitations in controlling surgical risks, intraoperative responses, and postoperative management. In particular, there are significant deficiencies in adjusting patients' mental state and controlling postoperative adverse reactions. Traditional Chinese medicine nursing techniques can effectively fill this gap. Therefore, improving perioperative nursing care for thyroid cancer patients by combining Chinese and Western medicine nursing techniques has become a current research direction in nursing science.

## **2. Special requirements for perioperative nursing of thyroid cancer**

Perioperative nursing for thyroid cancer is a systematic management of the surgical nursing process, involving both physiological and psychological issues. Unlike other cancers, thyroid cancer patients often have stronger concerns about the decrease in body hormones after surgery. As nursing staff, it is necessary to not only consider physiological recovery issues but also take into account hormone regulation to avoid problems such as hypocalcemia and thyroid dysfunction. Nursing is no longer just a technical issue; it involves more care and companionship from the nursing staff. During the treatment process, patients often experience mixed emotions of tension and anxiety, especially when facing total thyroidectomy. Patients generally have fears about changes in their physiological condition <sup>[1]</sup>. Therefore, perioperative nursing should not only focus on preoperative preparations and intraoperative cooperation but also emphasize psychological nursing and emotional communication. Nursing staff need to listen to patients' concerns with a gentle attitude, provide psychological comfort, and help them correctly understand the treatment process and surgery to reduce psychological anxiety and burden. Considering various physiological and psychological issues, perioperative nursing for thyroid cancer is a lasting process of trust-building and emotional maintenance. The success of nursing is not only due to technical factors but also relies on establishing a good relationship with patients through increased trust.

## **3. Application progress of Western nursing techniques in the perioperative period**

### **3.1. Preoperative risk assessment and airway management**

Preoperative risk assessment and airway management are also important aspects of perioperative nursing for thyroid cancer, which are crucial for patient safety during surgery. Given the complex anatomical sites involved in the clinical treatment of thyroid cancer, a detailed preoperative assessment of patients is particularly important. This is not a simple evaluation of patients' basic diseases but a comprehensive consideration of various factors such as patients' basic disease status, respiratory conditions, and high-risk factors of the airway. A careful preoperative assessment can provide more assistance for intraoperative airway evaluation, especially for patients with comorbidities. In terms of airway management, medical staff need to closely cooperate with anesthesiologists. For elderly patients, obese patients, and patients with pharyngeal deformities who have high-risk airway diseases, nursing staff should manage high-risk factors of the airway before surgery to reduce the incidence of intraoperative airway obstruction <sup>[2]</sup>. Additionally, preoperative inspection of airway management devices, such as laryngeal masks and endotracheal tubes, should be improved to prevent difficulties in emergency treatment of airway obstruction during surgery. Through careful management and monitoring of patients' airways, the incidence of airway problems during surgery can be effectively reduced, thereby lowering intraoperative risks and facilitating postoperative recovery.

### **3.2. Intraoperative neuromonitoring nursing coordination**

Intraoperative neuromonitoring is an important technique during thyroid cancer surgery, especially for monitoring the recurrent laryngeal nerve. Damage to the recurrent laryngeal nerve can lead to serious consequences such as loss of voice and difficulty breathing for the patient after surgery. Therefore, protecting this nerve should be a key focus for surgeons during the operation. Intraoperative neuromonitoring is an important task for nurses, who need to cooperate with surgeons to monitor the nerves. If there is a malfunction in the neuromonitoring equipment during surgery, nurses should respond promptly. Neuromonitoring is not only an operational technique for monitoring nerve equipment, but also a surgical technique to protect patients' lives. Nurses must closely cooperate with surgeons to monitor intraoperative nerve conditions and make timely emergency responses in case of abnormalities. Additionally, preoperative and postoperative neurological function assessments cannot be ignored. Nurses need to observe patients' neurological functions, such as speech and respiratory functions, until they recover. Intraoperative neuromonitoring not only guarantees surgical precision but also guarantees the quality of life of patients after surgery <sup>[3]</sup>.

### **3.3. New techniques for postoperative drainage and incision management**

Postoperative drainage and incision care are the focus of perioperative nursing for thyroid cancer patients. In complex surgical cases, new surgical and nursing methods can further accelerate patient recovery and avoid complications. Traditional drainage using a drainage tube is effective, but it has disadvantages such as poor drainage and potential incision infection risks. The use of new technologies such as negative pressure drainage techniques, has shown significant drainage effects with fewer postoperative complications. For incision care, it is no longer limited to changing dressings, but involves more personalized and high-tech interventions. For example, the application of antibacterial dressings can effectively prevent incision infections, and transparent dressings facilitate observation of the incision and prompt handling of abnormalities. Nurses should observe the postoperative drainage tube and incision status, paying attention to any abnormalities in the nature and quantity of drainage fluid. Effective postoperative drainage and incision care ensure smooth recovery, shorten hospital stays, and improve patients' quality of life.

### **3.4. ERAS (Enhanced Recovery After Surgery) nursing pathway**

The promotion of the ERAS nursing pathway in recent years has been an innovation in perioperative nursing work. ERAS nursing pathway advocates multidisciplinary and multiprofessional collaboration, insists on patient-centered care, takes care of the overall state of patients, and strives to achieve the fastest recovery for patients. The ERAS nursing philosophy is based on reducing preoperative, intraoperative, and postoperative interventions to ensure optimal treatment effects, shorten hospital stays, and reduce the trauma caused by surgery. Clinical nurses are an important component of the ERAS nursing pathway. Besides being responsible for traditional nursing work, they also need to assist physicians in implementing clinically personalized nursing treatment plans <sup>[4]</sup>. In the ERAS nursing pathway, patients are prepared psychologically before surgery, provided with adequate preoperative education and guidance, informed about surgical procedures and postoperative care, and educated on psychological knowledge, so that they are aware of their condition and have a clear self-perception and understanding of thyroid tumor resection. During the critical intraoperative period, they assist the anesthesiologist to ensure the implementation of intraoperative anesthesia, postoperative analgesia, and nutritional status. After surgery, patients continue to be observed to promote rapid recovery, such as early exercise and scientific and reasonable nutritional

support, to help them regain self-care ability as soon as possible. The application of the ERAS pathway enables thyroid cancer patients to recover faster after surgery, improves their comprehensive treatment experience, and ensures the effectiveness of comprehensive clinical treatment.

## **4. Optimized practice of integrated traditional Chinese and Western medicine nursing**

### **4.1. Application of traditional Chinese medicine (TCM) emotional nursing in preoperative anxiety intervention**

Thyroid cancer patients often experience tension, anxiety, and fear before surgery due to concerns about the operation. This not only increases their physical burden before the procedure but also hinders their postoperative recovery. As an intervention method, TCM emotional nursing can improve patients' emotional stress by adjusting their mindset, helping them smoothly prepare for surgery. The core of TCM emotional nursing is syndrome differentiation treatment, which is mainly based on the Yin-Yang and five elements theory of TCM. It focuses on harmonizing Qi and blood, heart and spleen, stomach, etc., and dredging liver Qi stagnation according to the patient's physiological and emotional state, thus ensuring a stable and positive mindset. Practical emotional nursing intervention methods can include Tui Na (Chinese massage), massage, and auricular point pressing with beans. These methods help patients relax their bodies and minds and promote the adjustment of their internal environment. Tui Na and massage can stimulate specific acupoints, meridians, and collaterals to relax the body tightness and tension caused by anxiety, facilitating a comfortable mood and a more stable preoperative state. The auricular point pressing with beans, a characteristic of TCM, can regulate the patient's central nervous system by stimulating specific acupoints on the ears, keeping them calm and peaceful, and maintaining a stable and positive preoperative emotional state. Combining TCM emotional nursing and other methods helps patients stabilize their mindset, timely and effectively controls their preoperative anxiety issues, enables them to face surgical treatment positively and calmly, reduces unnecessary fear due to emotional tension, and facilitates smoother postoperative recovery<sup>[5]</sup>.

### **4.2. Acupoint application for prevention and treatment of postoperative nausea and vomiting**

Postoperative nausea and vomiting are common perioperative complications. Intraoperative medication, drug side effects, and surgical procedures can cause significant changes in the patient's physiological state, leading to extreme discomfort. Acupoint application in traditional Chinese medicine is a simple and feasible method to intervene in the above situation. By selecting specific meridians and acupoints for postoperative patients and applying Chinese herbal patches, it can regulate the patient's gastrointestinal function and provide relief from postoperative nausea and vomiting. For example, Neiguan and Shenmen acupoints are often chosen for medication administration, which can dredge meridians and regulate Qi movement. After surgery, nursing staff can select appropriate acupoints for patients based on their physical constitution and condition for application. The applied medication can regulate the patient's gastrointestinal tract, improve their constitution by adjusting Qi and blood, and promote postoperative recovery. The selection of herbs for the medication has strict requirements, using herbs with the effect of warming the stomach and regulating Qi. These herbs, after proper processing, can penetrate the skin and enter the meridians and acupoints to achieve the desired regulatory effect. This method is simple

to operate and highly acceptable to patients, avoiding the use of excessive Western medication and reducing drug-related damage to the body. Acupoint application is not only a local treatment but also involves systemic regulation, achieving the effect of conditioning the patient's body.

### **4.3. Application of auricular acupressure in postoperative pain management**

Perioperative pain management, including intraoperative and postoperative pain control, is a crucial aspect of nursing care for thyroid cancer patients. Adequate postoperative analgesia not only improves patient comfort but also reduces postoperative complications, alleviates the psychological burden on patients' families, enhances treatment compliance, and mitigates medical disputes. Auricular acupressure, a traditional Chinese medicine therapy, stimulates nerve reflex zones corresponding to specific acupoints on the ears. This stimulation dredges meridians, promotes Qi and blood circulation, treats pain, exerts neuro-integrative regulatory functions, provides analgesia and anti-inflammatory effects, and reduces nerve excitement. Through multiple mechanisms, auricular acupressure effectively reduces postoperative pain. The benefits of auricular acupressure in postoperative pain relief are evident:

- (1) It reduces the need for postoperative analgesic drugs, thereby minimizing side effects and improving patients' quality of life.
- (2) Auricular acupoints converge numerous meridians and acupoints, stimulating relevant ear acupoints to facilitate self-healing and pain relief through bodily regulation.
- (3) As a non-pharmacological analgesic method, auricular acupressure is simple, convenient, and well-tolerated by patients. It involves applying pressure to specific ear acupoints using small bean-like objects, allowing patients to continue experiencing pain relief postoperatively.
- (4) For patients concerned about drug side effects or allergies, auricular acupressure offers a safe, effective, non-invasive alternative that reduces complications associated with analgesic drug use.

### **4.4. Evidence-based construction of integrated traditional Chinese and Western medicine nursing care plan**

The application of integrated traditional Chinese and Western medicine nursing care models in the perioperative period of thyroid cancer represents a significant trend in the development of modern medicine. By integrating the holistic approach of traditional Chinese medicine with advanced scientific and technological methods of Western medicine, this model provides patients with comprehensive and individualized nursing care plans. Theoretically, integrated traditional Chinese and Western medicine nursing care must be supported by rich and effective clinical practice experience, as well as modern scientific evidence, to ensure the safety and efficacy of treatment. The implementation of this nursing care model must take into account the actual situation of patients, combining therapies such as Chinese herbal medicine, acupuncture, and massage with Western medical treatments, including surgery, anesthesia, and medication. In the rehabilitation phase after thyroid cancer surgery, Western medical surgical treatment can address the pathological disease, while herbal medicine can accelerate the patient's recovery process by regulating Qi and blood and promoting the function of internal organs according to traditional Chinese medicine principles. Traditional Chinese medicine nursing care plays a role in managing pain, anxiety, and immune function recovery, and the integrated treatment of traditional Chinese and Western medicine can effectively improve patients' overall health and well-being.

## 5. Conclusion

In summary, the adoption of integrated traditional Chinese and Western medicine nursing techniques during the perioperative period of thyroid cancer can not only compensate for the limitations of Western medicine nursing techniques alone, but also further improve the overall quality of nursing care for patients during this period. Traditional Chinese medicine nursing techniques, such as emotional regulation and acupuncture at specific acupoints, can help manage patients' preoperative anxiety, postoperative nausea and vomiting, and pain. Western medicine nursing techniques play a positive role in predicting surgical risks, monitoring neural function, and postoperative care. In the future, it is expected that further research on integrated traditional Chinese and Western medicine nursing models will lead to more comprehensive and humanized care for patients during the perioperative period of thyroid cancer, promoting rapid recovery and a good quality of life after surgery.

## Disclosure statement

The authors declare no conflict of interest.

## References

- [1] Lin Y, Du D, 2025, Analysis of Perioperative Sleep Status, Risk Factors, and Personalized Nursing Interventions for Patients With Thyroid Cancer. *World Journal of Sleep Medicine*, 12(1): 143–146.
- [2] Tan Y, 2024, Application Effect of Comfortable Nursing Combined With Rapid Rehabilitation Intervention in the Perioperative Period of Female Patients Undergoing Radical Thyroidectomy. *Women and Children's Health Guide*, 3(20): 149–152 + 181.
- [3] Xiao H, Wang L, 2024, Evaluation of the Application of Mindfulness-Based Stress Reduction Therapy Combined With Motivational Nursing in the Perioperative Period of Thyroid Cancer. *Tibet Medicine*, 45(4): 131–132.
- [4] Liu P, 2024, Application Effect of Benson's Relaxation Technique Nursing Combined With Rapid Rehabilitation Nursing on Patients With Thyroid Cancer. *Henan Medical Research*, 33(14): 2643–2646.
- [5] Liu Z, Bai C, Yang M, et al., 2024, Application Effect of Humanistic Care Combined With High-Quality Nursing in the Perioperative Period of Thyroid Cancer Patients. *Gansu Medical Journal*, 43(7): 656–658.

**Publisher's note**

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.