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Nursing Experience of Integrated Traditional Chinese and Western Medicine Treatment for a Patient with Autoimmune Encephalitis: A Case Report

Authors: Jin Bo, Chen Xingyi, Yuhua Wang, Zhu Yu, Li Jinguang

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Abstract

This article provides a detailed report of the comprehensive nursing management of a 17-year-old female patient with anti-NMDAR encephalitis. The patient was admitted with chief complaints of “decreased appetite for 26 days, psychiatric and behavioral abnormalities for 17 days, limb convulsions for 11 days, and fever for 5 days,” presenting in a comatose state with concomitant pulmonary infection. In addition to conventional Western medical treatment, we systematically implemented characteristic traditional Chinese medicine nursing techniques including Baihui acupoint massage, moxibustion therapy, and auricular acupoint plastering, combined with individualized rehabilitation training and psychological intervention. After 4 weeks of treatment, the patient’s level of consciousness improved significantly, limb function recovered markedly, and she was eventually discharged with improvement. This case elaborates in detail the specific implementation methods, key operational points, and effectiveness evaluation of each nursing measure, providing referable practical experience for clinical nursing care of patients with autoimmune encephalitis.

Full Text

Nursing Experience of Integrated Chinese and Western Medicine Treatment for a Case of Autoimmune Encephalitis

Jin Bo, Chen Xingyi, Wang Yuhua, Zhu Yu, Li Jinguang

Department of Neurology, Beijing Chaoyang Integrated Chinese and Western Medicine Emergency Rescue Hospital, Beijing, 100023

Abstract

This article presents a detailed report of the comprehensive nursing care for a 17-year-old female patient with anti-NMDAR encephalitis. The patient was admitted with a 26-day history of decreased appetite, 17 days of abnormal mental behavior, 11 days of limb convulsions, and 5 days of fever, presenting in a comatose state complicated by pulmonary infection. Building upon conventional Western medical treatment, we systematically implemented traditional Chinese medicine (TCM) nursing interventions including Baihui acupoint massage, moxibustion therapy, auricular acupressure, along with individualized rehabilitation training and psychological support. Following four weeks of treatment, the patient's level of consciousness improved markedly, with significant recovery of limb function, leading to discharge in stable condition. This case report elaborates on the specific implementation protocols, operational key points, and effectiveness evaluation of these nursing measures, offering valuable clinical experience for nursing patients with autoimmune encephalitis.

Keywords: autoimmune encephalitis; anti-NMDAR encephalitis; traditional Chinese medicine nursing; Baihui acupoint; moxibustion therapy; acupoint massage

Introduction

Autoimmune encephalitis (AE) is an inflammatory brain disorder mediated by autoimmune responses, primarily involving the cerebral cortex and deep medullary structures, with potential involvement of white matter, meninges, or spinal cord. Currently, AE accounts for 10%-20% of all encephalitis cases, with anti-N-methyl-D-aspartate receptor (NMDAR) encephalitis being the most prevalent subtype, comprising 54%-80% of AE patients[1]. The clinical presentation is characterized by seizures, abnormal mental behavior, and brain dysfunction[2]. As one of the severe yet potentially curable neurological conditions, AE presents complex and diverse manifestations that pose significant challenges to clinical nursing care[3].

Case Report

Patient Information The patient was a 17-year-old female student admitted to our department via emergency transfer at 19:54 on April 7, 2025, with a 26-day history of decreased appetite, 17 days of abnormal mental behavior, 11 days of limb convulsions, and 5 days of fever. According to her family, the onset began with decreased appetite, followed by psychiatric symptoms including incoherent speech and agitation, then generalized convulsions, and finally fever peaking at 39.2°C.

Admission Examination On admission, the patient was in a comatose state with a Glasgow Coma Scale (GCS) score of 6 (E1V1M4). Vital signs showed: temperature 36.9°C, pulse 134 beats/min (sinus tachycardia), respiratory rate 32

breaths/min (tachypnea), blood pressure 120/73 mmHg, and oxygen saturation 92%. Neurological examination revealed bilateral pupils equal in size (3 mm) with sluggish light reflexes. Motor strength was grade 2 in the left limbs and grade 3 in the right limbs, with a positive Babinski sign on the left and negative neck rigidity.

Laboratory and Imaging Findings Laboratory tests revealed leukocytosis (WBC $12.3 \times 10^9 / \text{L}$, neutrophils 85%). Cerebrospinal fluid analysis showed opening pressure of 120 mmHg, $10 \times 10^6 / \text{L}$ white blood cells, and mildly elevated protein. Serum anti-NMDAR antibodies were positive (titer 1:320). Neuroimaging demonstrated abnormal signals in bilateral temporal lobes on MRI, while chest CT revealed inflammatory changes in both lower lung lobes.

Diagnosis **Western medical diagnosis:** (1) Anti-NMDAR encephalitis, (2) Symptomatic epilepsy, and (3) Pulmonary infection.

TCM diagnosis: Epilepsy (Phlegm-Fire Disturbing the Spirit Syndrome). Comprehensive TCM assessment revealed unconsciousness with dark red tongue and yellow greasy coating, left-sided hemiplegia with facial deviation; coarse breathing with phlegm rattle; history of irritability and emotional fluctuations prior to onset; and a wiry, slippery, and rapid pulse.

Treatment Course The treatment protocol initiated immediately upon admission included: (1) Etiological therapy with intravenous immunoglobulin (0.4 g/kg/day for 5 days) and methylprednisolone pulse therapy (1 g/day for 3 days, followed by gradual tapering); (2) Symptomatic management comprising antiepileptic medication (levetiracetam), antimicrobial therapy (ceftazidime plus acyclovir), and enteral nutritional support; and (3) Traditional Chinese Medicine interventions including acupuncture, acupoint massage, and herbal decoction (modified Huanglian Wendan Tang). After four weeks of comprehensive treatment, the patient's consciousness gradually improved, seizures were controlled, and limb function showed significant recovery, leading to discharge in May 2025.

Nursing Care

Comprehensive Assessment Nursing assessment using standardized scales revealed: Barthel Index of 10 points (severe dependence, requiring total care); Morse Fall Scale score of 35 points (moderate risk, requiring precautions such as adequate lighting and bedside lamps at night); aspiration risk score of 9 points (high risk, necessitating close monitoring for choking and hiccups during nasogastric feeding); and Braden Scale score of 13 points (moderate pressure ulcer risk, requiring repositioning every two hours).

Nursing Diagnoses and Potential Complications The primary nursing diagnoses identified were: (1) Altered level of consciousness related to cerebral

dysfunction secondary to encephalitis; (2) Impaired physical mobility with left limb muscle strength grade 2 and right limb grade 3; and (3) Hyperthermia related to pulmonary infection. Potential complications included aspiration, deep vein thrombosis, pressure injury, and recurrent seizures.

Nursing Objectives Based on the comprehensive assessment, we established the following nursing objectives: (1) restoration of left limb muscle strength to achieve functional independence; (2) recovery of language function with clear communication; (3) reduction of anxiety symptoms; and (4) prevention of complications including aspiration and pressure ulcers during hospitalization.

Integrated Nursing Interventions

Baihui Acupoint Massage We employed Baihui acupoint massage as a core TCM intervention. The acupoint was located using the “cross positioning method” at the intersection of the head’s midline and the line connecting both ear apices[4]. The procedure involved: (1) ensuring the operator had trimmed nails and warmed hands; (2) positioning the patient supine with a thin pillow; (3) gentle kneading with the thumb pad for one minute (30 seconds clockwise, then 30 seconds counterclockwise); (4) sustained pressure for 30 seconds at a tolerable intensity; (5) 10 pushing movements from Baihui toward the anterior hairline; (6) total duration of 5 minutes, administered twice daily at 9:00 AM and 3:00 PM. Safety precautions included continuous monitoring for adverse reactions and immediate cessation if discomfort occurred, with special caution in patients with skull defects. The therapeutic rationale lies in Baihui’s status as a crucial point on the Governor Vessel, where stimulation can regulate cerebral function, improve brain circulation, and facilitate consciousness recovery.

Moxibustion Therapy Moxibustion was administered following the “resuscitation and orifice-opening” principle, targeting Baihui (to awaken the brain), Zusanli (to strengthen spleen and qi), Neiguan (to calm the heart and spirit), and Sanyinjiao (to nourish liver and kidney). The procedure utilized premium moxa sticks (1.8 cm diameter, 20 cm length) with the patient in a comfortable position. Mild moxibustion was applied 2-3 cm from the skin surface for five minutes per point until local erythema appeared, following the sequence Baihui→Neiguan→Zusanli→Sanyinjiao. Treatment was administered once daily for ten sessions per course. Strict temperature monitoring prevented burns, and dedicated supervision was maintained throughout. Post-treatment warmth was ensured to avoid cold exposure. Clinical outcomes demonstrated progressive improvement: pupillary light reflexes became more responsive after one week, GCS score improved to 10 points after two weeks, and the patient achieved basic consciousness after four weeks[6-7].

Auricular Acupressure Auricular acupressure was implemented based on auricular therapy principles, targeting Shenmen (for sedation), Subcortex (for

cerebral regulation), Heart (for calming), and Sympathetic points (for autonomic modulation). Following disinfection of the auricle with 75% alcohol, sensitive points were identified using a probe, and Vaccaria seeds were applied. Family members were instructed to apply pressure three times daily (morning, post-lunch, and bedtime) for one minute per point using mild pressure. Seeds were replaced every three days, alternating between ears. Therapeutic effects included reduced nocturnal agitation after three days and improved sleep quality after one week[8-10].

Rehabilitation and Supportive Care Proper limb positioning was maintained with the upper extremities in 45° shoulder abduction, elbow extension, and wrist dorsiflexion; lower extremities in neutral hip position with slight knee flexion and ankle dorsiflexion. To build rehabilitation confidence, we established stage-specific goals, provided timely positive feedback, and arranged peer support sessions with recovered patients. For self-care deficits, we monitored sensory function, muscle strength, tone, joint mobility, and limb movement changes. Safety measures included bedside rails to prevent falls. Daily warm water bathing and massage of bony prominences and pressure areas promoted circulation and prevented pressure ulcers. We assisted with proper limb positioning, regularly observed and corrected positioning, and guided patients through functional exercises. Music therapy using “Tianyun Five Elements Music” and Baduanjin exercise were implemented, which have demonstrated positive effects on reducing post-stroke fatigue and improving functional capacity[11-13].

Aspiration Prevention Aspiration precautions included maintaining upright or semi-upright positioning during meals with the head slightly inclined forward to minimize airway entry. Food texture was modified to soft, uniform consistency while avoiding hard, dry, or slippery items. Patients were taught to perform dry swallows between bites, gradually increasing portion size while controlling eating speed to ensure complete swallowing before subsequent bites.

Outcomes and Follow-up

Treatment Outcomes Primary outcome measures included consciousness status (GCS score), limb function (Brunnstrom stages), and activities of daily living (Barthel Index). Comparative results demonstrated significant improvements across all domains: GCS scores increased progressively, Barthel Index improved from total dependence to partial independence, and feeding advanced from nil-per-os to pureed diet.

Follow-up Results At one-month follow-up, the patient could ambulate independently with cane assistance, achieved basic self-care (Barthel Index 85), remained seizure-free, maintained emotional stability, and was preparing to resume school.

Key Implementation Points

Critical success factors included: (1) precise acupoint localization, especially for Baihui; (2) standardized manipulation techniques with appropriate pressure and temperature control; and (3) collaborative teamwork among healthcare providers, nurses, and patients.

Conclusion

In conclusion, integrating TCM nursing techniques—particularly Baihui acupoint massage combined with moxibustion—into conventional Western medical treatment effectively promotes consciousness recovery and functional rehabilitation in autoimmune encephalitis patients. This approach is straightforward, safe, and clinically effective, warranting broader application. Future large-scale studies are needed to further validate these findings.

References

- [1] REN H T, FAN S Y, ZHAO Y H, et al. The changing spectrum of encephalitis China[J]. Journal antibody-mediated Neuroimmunology, 2021, 361:577753.
- [2] 中华医学会神经病学分会神经感染性疾病与脑脊液细胞学学组. 中国自身免疫性脑炎诊治专家共识 (2022 年版)[J]. 中华神经科杂志, 2022, 55(9):931-949.
- [3] 王乾贝, 薄琳, 孙阳艺, 等. 自身免疫性脑炎病人临床及护理特点的回顾性分析 [J]. 护理研究, 2021, 35(14):2609-2612.
- [4] 连妍洁, 商钰, 刘红旭, 等. 基于VOS viewer 和CiteSpace知识图谱的水蛭可视化分析 [J]. 中草药, 2023, 54 (6): 1896-1905.
- [5] 王友刚, 董昌武, 高大红, 等. 百会实按灸结合通督调神针法治疗脑卒中后眩晕的临床疗效 [J]. 中国老年学杂志, 2023, 43 (11): 2581-2584.
- [6] 林少鸿, 郭佳颖, 聂平英, 等. 基于数据挖掘探讨艾灸治疗脑卒中后认知功能障碍的选穴规律研 [J]. 中国民间疗法, 2022, 30 (16): 37-40.
- [7] 裴艳娜, 田娟, 陈元元. 中医情志调欲法结合艾灸干预对脑卒中抑郁症患者负性情绪及生活质量的影响 [J]. 齐鲁护理杂志, 2021, 27 (7): 75-78.
- [8] 陈焱. 针灸联合耳穴贴压治疗带状疱疹后遗神经痛临床研究 [J]. 新中医, 2021, 53 (2): 171-173.
- [9] 章津敏, 邓蕾, 杨俊, 等. 中药联合耳穴贴压治疗肝郁脾虚型失眠临床观察 [J]. 光明中医, 2024, 39 (11): 2199-2203.
- [10] 李少源, 荣培晶, 张悦, 等. 基于耳穴迷走神经电刺激技术的“脑病耳治”思路与临床应用 [J]. 2020, 61 (24): 2154-2158.
- [11] 曹云松, 韩振蕴, 胡文悦, 等. 五行音乐联合八段锦治疗轻中度抑郁和焦虑障碍的临床研究 [J]. 中华中医药杂志, 2024, 39 (1): 505-509.

[12] 魏新宇. 论音乐中十二平均律与人体十二经脉的联系 [J]. 湘南学院学报, 2021, 42 (3): 90–94.

[13] 成郅潼, 蒋筱, 黄洁雯, 等. 中医五音疗法研究进展 [J]. 中国民间疗法, 2022, 30 (3): 122–125.

[14] HEINE J, DUCHOW A, RUST R, et al. Autoimmune encephalitis—an update[J]. Nervenarzt, 2023, 94(6):525-537.

[15] GITIAUX C, SIMONNET H, EISERMANN M, et al. Early electro-clinical features may contribute to diagnosis of the anti-NMDA receptor encephalitis in children[J]. Clin Neurophysiol, 2013, 124(12):2354-2361.

[16] 占芳芳. 抗 NMDA 受体脑炎的临床特征及其预后的相关性因素分析 [D]. 福州: 福建医科大学, 2021.

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