Table des matières

post-stroke constipation

Constipation post-AVC

1. Systematic Reviews and Meta-Analysis

1.1. Generic Acupuncture

1.1.1. Feng 2025 (network meta-analysis)

Feng S, Wu X, Dai X, Liu Z, Luo Y, Wang F. Comparative effectiveness of multiple different non-pharmacologic interventions for post-stroke constipation: a Bayesian network meta-analysis. Front Neurol. 2025 Oct 10;16:1591620. https://doi.org/10.3389/fneur.2025.1591620

Background	Post-stroke constipation (PSC) is a frequent and disabling complication in stroke survivors, correlating with stroke severity and increasing the risk of secondary cerebrovascular events through elevated intracranial pressure. Due to the limitations of pharmacological management, non-pharmacologic interventions (NPIs) such as traditional Chinese medicine (TCM) and rehabilitative methods have been explored. This study aimed to determine the most effective NPI for PSC using Bayesian network meta-analysis (NMA).
Methods	Randomized controlled trials assessing eight NPIs—acupuncture therapy (AT), acupoint catgut embedding (ACE), auricular therapy (ART), moxibustion (MT), abdominal massage (AM), point application (PA), physiotherapy (PT), and cognitive behavioral therapy (CBT)—were analyzed. The primary outcome was clinical effective rate (CER), and the secondary outcome was Constipation Scoring System (CCS). SUCRA values were computed to rank relative efficacy.
Results	Fifty-three studies including 5,813 participants were analyzed. ACE ranked highest for both CER (SUCRA = 94.7%) and CCS improvement (SUCRA = 97.8%), followed by physiotherapy (PT; SUCRA = 88.4% and 81.7%). Auricular therapy and abdominal massage showed comparatively lower effectiveness. All interventions were generally well tolerated.
Conclusion	Acupoint catgut embedding (ACE) appears to be the most effective non-pharmacologic treatment for post-stroke constipation, significantly improving both clinical effectiveness and constipation severity. Physiotherapy also showed substantial benefit. Future high-quality, multicenter RCTs are needed to confirm and refine these findings for clinical application.

1.1.2. Sun 2023

Sun T, Wang K, Li L, Yan M, Zou L, Zhang M, Yang S, Wu J, Liu J. Efficacy and safety of acupuncture in post-stroke constipation: a systematic review and meta-analysis. Front Neurosci. 2023 Sep 26;17:1275452. https://doi.org/10.3389/fnins.2023.1275452

Background and objective	Post-stroke constipation (PSC) is a common complication of strokes that seriously affects the recovery and quality of life of patients, and effective treatments are needed. Acupuncture is a viable treatment option, but current evidence is insufficient to support its efficacy and safety. This study aims to evaluate the efficacy and safety of acupuncture in the treatment of PSC.
Methods	A systematic search of eight databases was conducted to identify PSC-related randomized clinical trials from the inception of each database through May 2023. Methodological quality assessment was conducted by RoB 2.0, meta-analysis was conducted by RevMan 5.3 and Stata 15.1, and evidence quality was evaluated by GRADE. Moreover, reporting quality of acupuncture interventions was assessed using the Standards for Reporting Interventions in Clinical Trials of Acupuncture (STRICTA).
Results	**Thirty RCTs involving 2,220 patients** were identified. We found that acupuncture was superior to conventional treatment (CT) in improving total responder rate [risk ratio (RR): 1.16, 95% confidence interval (CI): 1.09 to 1.25, $p < 0.0001$], decreasing constipation symptom scores [standardized mean difference (SMD): -0.65, 95% CI: -0.83 to -0.46, $p < 0.00001$], increasing serum P substance (SP) levels (SMD: 1.92, 95% CI: 0.47 to 3.36, $p = 0.009$), reducing the time to first bowel movement (BM) (SMD: -1.19, 95% CI: -2.13 to -0.25, $p = 0.01$), and lowing serum vasoactive intestinal peptide (VIP) levels (SMD: -2.11, 95% CI: -3.83 to -0.38, $p = 0.02$). Furthermore, acupuncture plus CT was superior regarding total responder rate (RR: 1.26, 95% CI: 1.17 to 1.35, $p < 0.00001$), serum SP levels (SMD: 2.00, 95% CI: 1.65-2.35, $p < 0.00001$), time to first BM (SMD: -2.08, 95% CI: -2.44 to -1.71, $p < 0.00001$), and serum VIP levels (SMD: -1.71, 95% CI: -2.24 to -1.18, $p < 0.00001$). However, regarding Bristol Stool Scale (BSS) score, acupuncture plus CT was superior to CT (SMD: -2.48, 95% CI: -3.22 to -1.73, $p < 0.00001$), while there was no statistically significant difference between acupuncture and CT (SMD: 0.28, 95% CI: -0.02 to 0.58, $p = 0.07$). Acupuncture causes fewer AEs than CT (RR: 0.13, 95% CI: 0.06 to 0.26, $p < 0.00001$), though there was no statistically significant difference between acupuncture plus CT vs. CT (RR: 1.30, 95% CI: 0.60 to 2.84, $p = 0.51$).
Conclusion	Acupuncture may be an effective and safe therapy for PSC. However, given the inferior quality of clinical data, additional well-designed RCTs are required to confirm these findings.

1.1.3. Yang 2014 ☆☆

Yang JP, Liu JY, Gu HY, Lv WL, Zhao H, Li GP. [Randomized controlled trials of acupuncture and moxibustion for post-stroke constipation: a meta analysis]. Zhongguo Zhen Jiu. 2014 Aug;34(8):833-6.[167989]

Purpose	The clinical efficacy of acupuncture and moxibustion for post-stroke constipation was systematically reviewed.
Methods	By computerized and manual retrieval of clinical research literature regarding acupuncture and moxibustion for post-stroke constipation, the randomized control trials (RCTs) that met the inclusive criteria were collected. Cochrane systematic review method was used and Revmen 5.2 software was adopted to perform this Meta analysis.
Results	Totally **8 articles were included, involving 610 cases** of post-stroke constipation. As a result, the total effective rate and cured rate of acupuncture and moxibustion for post-stroke constipation were significantly superior to those of the control group [total effective rate: OR = 2.10, 95% CI (1.25, 3.54), Z = 2.78, P = 0.005; cured rate: OR = 2.37, 95% CI (1.57, 3.58), Z = 4.10, P < 0.0001].
Conclusion	**This result indicated that acupuncture was effective for post-stroke constipation and had some advantages compared with other therapies.**

1.2. Special Acupuncture Techniques

1.2.1. Scalp acupuncture

1.2.1.1. Jiang 2023

Jiang W, Jiang X, Yu T, Gao Y, Sun Y. Efficacy and safety of scalp acupuncture for poststroke depression: A meta-analysis and systematic review. Medicine (Baltimore). 2023 Aug 4;102(31):e34561. https://doi.org/10.1097/MD.0000000000034561

Background	Poststroke depression (PSD) is a common clinical poststroke complication that adversely affects cognitive and physical function rehabilitation. Scalp acupuncture (SA) can significantly improve somatic dysfunction and emotional disorder in stroke patients. This meta-analysis aims to evaluate the effectiveness and safety of SA in the treatment of PSD.
Methods	We conducted a comprehensive search of multiple electronic databases, including PubMed, Cochrane Library, Embase, Web of Science, China National Knowledge Internet, China Science and Technology Journal Database, Wan Fang Data Knowledge Service Platform, and China Biology Medicine databases until December 20, 2022, to identify randomized controlled trials investigating the efficacy of SA in the treatment of PSD. Two independent researchers screened the literature, extracted data, and assessed the risk of bias in the included studies based on the inclusion and exclusion criteria. We performed a meta-analysis of the eligible literature using RevMan 5.4.1 and Stata 15.0 software.
Results	This study comprised a total of **14 randomized controlled trials**, 10 of which used SA and 4 of which used SA in combination with electroacupuncture therapy. The results of the meta-analysis revealed that the effective rate of the SA group was significantly higher than that of the Western medicine group (relative risk = 1.09, 95% confidence interval (CI) [1.02, 1.16], P = .008). Moreover, compared to the Western medicine group, the SA group demonstrated significant improvements in Hamilton depression scale scores (mean difference = -2.29, 95% CI [-3.88, -0.70], P = .005) and neurological function deficit scores (mean difference = -3.06, 95% CI [-5.91, -0.21], P = .04). Additionally, the SA group has a lower incidence of adverse events than the western medicine group (relative risk = 0.12, 95% CI [0.05, 0.29], P < .00001).
Conclusion	SA has superior efficacy and safety compared to Western medicine for PSD. These findings suggest that SA could be a promising alternative treatment for the assessed condition. Due to the limited number and quality of the included literature, the above conclusions must be confirmed by additional high-quality research.

1.2.2. Catgut Embedding

1.2.2.1. Guo 2022

Guo M, Le X, Qin-Yu W, Ye M, Sheng-Qiang Z, Yao X, Da-Hua W, Bai-Yan L. Effectiveness and Safety of Acupoint Catgut Embedding for the Treatment of Poststroke Constipation: A Systematic Review and Meta-Analysis. Evid Based Complement Alternat Med. 2022 Jul 5;2022:8080297. https://doi.org/10.1155/2022/8080297.

Objectives	Acupoint catgut embedding therapy has shown effectiveness in treating functional constipation; however, relevant, high-quality clinical evidence is scarce. This study aimed to systematically assess the effectiveness and safety of acupoint catgut embedding in treating poststroke constipation.
Methods	Correlative randomized controlled trials were identified through a comprehensive literature search of PubMed, Cochrane Library/Cochrane Central Register of Controlled Trials, Web of Science, Embase, China National Knowledge Internet, Chinese Biomedical Literature Database, Wanfang, and VIP databases from inception until February 2022. Meta-analysis was performed using RevMan 5.3 software.
Results	**Fifteen trials involving 1084 patients** were identified. The meta-analysis revealed that the acupoint catgut embedding group was significantly superior to the non-catgut embedding group with regard to the efficacy rate (RR = 1.27, 95% CI (1.19, 1.37), P < 0.05), the first defecation time (MD = -3.08, 95% CI (-4.53, -1.63), P < 0.05), the defecation sensation score (MD = -0.44, 95% CI (-0.61, -0.26), P < 0.05), the degree of difficulty in defecation (MD = -0.73, 95% CI (-1.10, -0.37), P < 0.05), the PAC-QOL scale score (MD = -10.06, 95% CI (-13.47, -6.64), P < 0.05), and the symptom integral (MD = -3.15, 95% CI (-3.60, -2.71), P < 0.05). However, there was no significant difference in the stool property score (MD = 0.06, 95% CI (-0.39, 0.50), P > 0.05) as well as the incidence of adverse reactions (RD = 0.01, 95% CI (-0.01, 0.03), P > 0.05) between the two groups.
Conclusions	The results showed that acupoint catgut embedding is probably an effective and safe acupuncture treatment strategy for poststroke constipation. Nevertheless, more rigorously designed, standardized, large-sample, and multicenter randomized controlled designs are warranted to further verify the findings of this study.

1.2.3. Electroacupuncture

1.2.3.1. Wang 2018

Wang De-Long, Wang Qi , Xiang Dong-Guo , et al. [RCTs Meta- analysis of Electro- acupuncture Treating Post- stroke Constipation]. Journal of Clinical Acupuncture and Moxibustion. 2018;34(3):62. [188707].

Objective	To evaluate the clinical efficacy of electro - acupuncture in the treatment of post - stoke constipation, to analyze the current research status, and to provide reference for its clinical application.
Methods	RCTs of electro - acupuncture treating post - stoke constipation were retrieved from CNKI, Wanfang Data, vIP, Pubmed, Embase, and Cochrane from the establishment of the database to Aug. 2017. The literatures were screened by two reviewers according to the inclusion - exclusion criteria, and the methodological quality was assessed by Cochrane score. Software Review manager 5. 3 was used for Meta - analysis.
Results	A total of **11 literatures were included in the study with 703 patients** involved. The results of Meta - analysis showed that there were significant differences between the electro - acupuncture group and the control group in terms of the total efficacy [RR = 1. 20, 95 % CI(1. 1 1, 1. 30), P< 0. 00001], effective rate [RR:: 2. 03, 95 % CI(1. 50, 2. 73), P< 0. 00001].
Conclusion	Electro - acupuncture has a good therapeutic effect on constipation after stroke. However, the study needs more support with high - quality researches due to the limits of the number and quality of the included literatures.

1.2.4. Abdominal Acupuncture

1.2.4.1. Wulam 2026

Wulam R, Yang H, Li Y, Li X, Xu N, Wu Z. Efficacy of Abdominal Acupuncture in Poststroke Constipation: A Systematic Review and Meta-Analysis With Trial Sequential Analysis. Brain Behav. 2026:e71442. https://doi.org/10.1002/brb3.71442

Background	Poststroke constipation (PSC) is a prevalent and disabling condition that significantly affects patient quality of life. Although abdominal acupuncture (AA) has demonstrated potential therapeutic effects on PSC, its efficacy remains unclear. This meta-analysis evaluated the efficacy of manual AA (MAA) and abdominal electroacupuncture (AEA) combined with conventional therapy (CT) for PSC.
Methods	A comprehensive literature search was conducted to identify randomized controlled trials comparing the effects of MAA + CT or AEA + CT versus CT alone in PSC treatment. Twelve eligible studies (n = 943) were selected. Primary (efficacy and time to first bowel movement [BM]) and secondary (stool shape) outcomes were evaluated. Trial sequential analysis (TSA) was performed to assess cumulative evidence reliability.
Results	Both MAA + CT (relative risk [RR] = 1.26, 95% confidence interval [CI]: 1.13-1.40) and AEA + CT (RR = 1.28, 95% CI: 1.19-1.38) significantly improved efficacy compared with CT alone. Furthermore, MAA + CT (mean difference [MD] = -0.61, 95% CI: -1.02 to -0.19) and AEA + CT (MD = -0.32, 95% CI: -1.09 to -0.46) reduced the time to first BM, albeit evidence regarding stool shape was inconclusive due to significant heterogeneity. TSA demonstrated unclear cumulative evidence and thus could not determine AA efficacy compared with CT.
Conclusion	MAA + CT and AEA + CT may effectively improve PSC by enhancing efficacy and shortening the time to first BM. Given the limited number of studies, small sample sizes, and significant heterogeneity, further high-quality trials are required to confirm these findings and optimize the acupuncture regimen for PSC treatment.