Table des matières

Constipation

Constipation : évaluation de l'acupuncture

1. Systematic Reviews and Meta-Analysis

1.1. Generic Acupuncture / Acupuncture générique

1.1.1. Tan 2025 (network meta-analysis)

Tan S, Peng C, Lin X, Peng C, Yang Y, Liu S, Huang L, Bian Y, Li Y, Xu C. Clinical efficacy of non-pharmacological treatment of functional constipation: a systematic review and network meta-analysis. Front Cell Infect Microbiol. 2025 May 29;15:1565801. https://doi.org/10.3389/fcimb.2025.1565801

Background	Functional constipation (FC) is a prevalent gastrointestinal disorder with limited long-term response to pharmacological treatments. This study aimed to compare the relative efficacy and safety of non-pharmacological interventions for FC using network meta-analysis (NMA).
Methods	PubMed, Embase, Cochrane Library, and Web of Science were searched for randomized controlled trials published between 2010 and November 2024. Study quality was assessed using the Cochrane Risk of Bias tool and GRADEPro. NMA was conducted in R Studio, and SUCRA rankings were applied to determine the comparative efficacy of each intervention.
Results	**Twenty-nine RCTs (n = 4,389)** were included, comparing placebo with nine different non-pharmacological treatments. Overall risk of bias was low. The top-ranked interventions by SUCRA were: acupuncture for clinical efficacy, fecal microbiota transplantation (FMT) for spontaneous bowel movement (SBM) and complete spontaneous bowel movement (CSBM), FMT for Bristol Stool Form Scale (BSFS) improvement, vibration capsule for Patient Assessment of Constipation Quality of Life (PAC-QOL), and percutaneous electrical stimulation for Patient Assessment of Constipation Symptoms (PAC-SYM). Probiotics had the lowest rate of adverse events.
Conclusion	FMT demonstrated the best overall improvement in bowel movement frequency, stool form, and safety, while acupuncture ranked highest for global clinical efficacy. Combining FMT and acupuncture may represent an effective and safe therapeutic strategy for functional constipation, warranting confirmation in future high-quality clinical trials.

1.1.2. Tan 2024 (network meta-analysis)

Tan S, Zhang W, Zeng P, Yang Y, Chen S, Li Y, Bian Y, Xu C. Clinical effects of chemical drugs, fecal microbiota transplantation, probiotics, dietary fiber, and acupuncture in the treatment of chronic functional constipation: a systematic review and network meta-analysis. Eur J Gastroenterol Hepatol. 2024 Jul 1;36(7):815-830. https://doi.org/10.1097/MEG.0000000000002786

Background	Currently, there are increasingly diverse treatment modalities for chronic functional constipation (CFC).
Aim	This study aims to compare the relative efficacy and safety of chemical drugs, fecal microbiota transplantation (FMT), probiotics, dietary fiber, and acupuncture in the treatment of patients with CFC.
Methods	We searched relevant randomized controlled trials (RCTs) published in five databases up to November 2023. Network meta-analysis (NMA) was carried out using R Studio 4.2.1. Cumulative ranking probability plots, assessed through the surface under the cumulative ranking (SUCRA), were employed to rank the included drugs for various outcome measures.
Results	We included a total of 45 RCT studies with 17 118 patients with CFC. From the SUCRA values and NMA results FMT showed the best utility in terms of clinical efficacy, Bristol stool form scale scores, patient assessment of constipation quality of life scores, and the treatment modality with the lowest ranked incidence of adverse effects was electroacupuncture. Subgroup analysis of the chemotherapy group showed that sodium A subgroup analysis of the chemical group showed that sodium picosulfate 10 mg had the highest clinical efficacy. FMT is more promising in the treatment of CFC and may be more effective in combination with the relatively safe treatment of **acupuncture**.

1.1.3. Yan 2023 (traditional Chinese medicine external therapy)

Yan L, Liu H, Yan R, Tan L, Tan J, Lei Y. Effect of traditional Chinese medicine external therapy for functional constipation: a meta-analysis. Am J Transl Res. 2023 Jan 15;15(1):13-26. . https://pubmed.ncbi.nlm.nih.gov/36777847

Objective	To systematically review the effectiveness and safety of external treatment with traditional Chinese medicine in patients with functional constipation.
Methods	In this meta-analysis study, we searched for randomized controlled trials (RCTs) on traditional Chinese medicine (TCM) external therapy for treating functional constipation from various databases. Search time was from database establishment to May 2022. The included studies were evaluated for meta-analysis using RevMan 5.3 software.
Results	A total of **18 randomized controlled studies** were included, including **1404 patients**. Results showed the total effective rate [OR = 3.83, 95% CI (2.71, 5.43), P < 0.01] and quality of life [OR = -9.78, 95% CI (-12.32, -7.23), P < 0.01] effectively improved after TCM external therapy; constipation symptoms [OR = -1.64, 95% CI (-2.31, -0.96), P < 0.01] reduced; defecation time [OR = -0.68, 95% CI (-0.99, -0.37), P < 0.01] shortened and spontaneous complete bowel movements (SCBM) [OR = 0.48, 95% CI (0.01, 0.95), P < 0.05] increased; and recurrence rate [OR = 0.25, 95% CI (0.17, 0.38), P < 0.01] reduced. The results of a subgroup analysis of the types of TCM treatment showed acupoint catgut embedding [OR = 3.04, 95% CI (1.10, 8.41), P < 0.05], acupoint application [OR = 3.46, 95% CI (1.74, 6.89), P < 0.01], manipulation [OR = 4.26, 95% CI (0.81, 22.53), P > 0.05], the combination of two external treatment methods [OR = 7.73, 95% CI (3.00, 19.91), P < 0.01], acupuncture [OR = 3.09, 95% CI (1.21, 7.85), P < 0.05], and other external therapies [OR = 3.58, 95% CI (1.89, 6.80), P < 0.01] had certain value in treating functional constipation.
Conclusions	TCM external therapy has good clinical efficacy in treating functional constipation (FC) patients, which can improve main treatment efficacy and life quality, reduce constipation symptoms, shorten defecation time and SCBM, and reduce the recurrence rate. This therapy has no adverse reaction and can be widely applied in clinical practice.

1.1.4. Wang 2021 ☆☆☆

Wang XY, Wang H, Guan YY, Cai RL, Shen GM. Acupuncture for functional gastrointestinal disorders: A systematic review and meta-analysis. J Gastroenterol Hepatol. 2021 Nov;36(11):3015-3026. https://doi.org/10.1111/jgh.15645

Objectives	The therapeutic effect of acupuncture treatments (AT) on functional gastrointestinal disorders (FGIDs) is contentious. A meta-analysis was conducted to assess the efficacy and safety of acupuncture for FGIDs.
Methods	The Cochrane Library, EMBASE, PUBMED, Web of Science, Wanfang Database, China National Knowledge Infrastructure, and VIP Database were searched through December 31, 2019 with no language restrictions. Risk ratio (RR) with 95% confidence interval (CI) was calculated to determine the improvement in symptom severity after treatment.
Results	A total of 61 randomized controlled trials (RCTs) on FGIDs were included. The pooled results illustrated the following: compared to pharmacotherapy (RR 1.13, 95% CI 1.09-1.17), placebo acupuncture (RR 1.69, 95% CI 1.37-2.08), no specific treatment (RR 1.86, 95% CI 1.31-2.62), and AT as an adjuvant intervention to other active treatments (RR 1.25, 95% CI 1.21-1.30), AT had more favorable improvements in symptom severity; **sub-group analysis** results classified according to functional dyspepsia (n=13), irritable bowel syndrome (n=19), and **functional constipation (n=8)** also supported this finding; and the incidence of adverse events was lower in AT than in other treatments (RR 0.75, 95% CI 0.56-0.99).
Conclusions	This meta-analysis found that AT was significantly associated with relief of FGIDs symptoms; however, the evidence level was moderate or low. Further data from rigorously designed and well powered RCTs are needed to verify the effectiveness and safety of AT as a FGIDs treatment.

1.1.5. Wang 2020 ☆☆

Wang L, Xu M, Zheng Q, Zhang W, Li Y. The Effectiveness of Acupuncture in Management of Functional Constipation: A Systematic Review and Meta-Analysis. Evid Based Complement Alternat Med. 2020. [211185]. doi

Objective	The purpose of this study was to assess the effectiveness and safety of acupuncture for functional constipation (FC).
Methods	A rigorous literature search was performed in English (PubMed, Web of Science, the Cochrane Library, and EMBASE) and Chinese (China National Knowledge Infrastructure (CNKI), Chinese Biological Medical (CBM), Wanfang database, and China Science and Technology Journal (VIP)) electronic databases from their inception to October 2019. Included randomized controlled trials (RCTs) compared acupuncture therapy with sham acupuncture or pharmacological therapies. The outcome measures were evaluated, including the primary outcome of complete spontaneous bowel movement (CSBM) and secondary outcomes of Bristol Stool Form Scale (BSFS), constipation symptoms scores (CSS), responder rate, the Patient Assessment of Constipation Quality of Life (PAC-QOL) questionnaire, and safety evaluation. Meta-analysis was performed by using RevMan5.3.

Results	The merged data of **28 RCTs with 3525 participants** indicated that acupuncture may be efficient for FC by increasing CSBMs ($p < 0.00001$; MD = 0.84 [95% CI, 0.65 to 1.03]; $I^2 = 0\%$) and improving constipation symptoms (p=0.03; SMD = -0.4 [95% CI, -0.78 to -0.03]; $I^2 = 74\%$), stool formation ($p < 0.00001$; MD = 0.24 [95% CI, 0.15 to 0.34]; $I^2 = 0\%$), quality of life ($p < 0.00001$; N = 1, MD = -0.33 [95% CI, -0.45 to -0.21]), and responder rates (p=0.02; RR = 2.16; [95% CI, 1.1 to 4.24]; $I^2 = 69\%$) compared with the effects of sham treatment. No increased risk of adverse events was observed (p=0.44; RR = 1.18; [95% CI, 0.77 to 1.81]; $I^2 = 0\%$). With regard to medication comparisons, the pooled data indicated that acupuncture was more effective in increasing CSBMs (p=0.004; MD = 0.53 [95% CI, 0.17 to 0.88]; $I^2 = 88\%$) and improving patients' quality of life ($p < 0.00001$; SMD = -0.73 [95% CI, -1.02 to -0.44]; $I^2 = 64\%$), with high heterogeneity. However, there were no significant differences in responder rate (p=0.12; RR = 1.31; [95% CI, 0.94 to 1.82]; $I^2 = 53\%$), BSFS (p=0.5; MD = 0.17 [95% CI, -0.33 to 0.68]; $I^2 = 93\%$), or CSS (p=0.05; SMD = -0.62 [95% CI, -1.23 to -0.01]; $I^2 = 89\%$). Regarding safety evaluation, acupuncture was safer than medications ($p < 0.0001$; RR = 0.3; [95% CI, 0.18 to 0.52]; $I^2 = 30\%$).
Conclusions	Current evidence suggests that acupuncture is an efficient and safe treatment for FC. Acupuncture increased stool frequency, improved stool formation, alleviated constipation symptoms, and improved quality of life. However, the evidence quality was relatively low and the relationship between acupuncture and drugs is not clear. More high-quality trials are recommended in the future.

1.1.6. Zheng 2019 ☆☆

Zheng H , Chen Q , Chen M , Wu X , She TW , Li J , Huang DQ , Yue L, Fang JQ. Nonpharmacological conservative treatments for chronic functional constipation: A systematic review and network meta-analysis. Neurogastroenterol Motil. 2019;31(1). [204455]. DOI

Background	Patients with functional chronic constipation (CFC) often select nonpharmacological treatments. We aimed to examine the comparative effectiveness of nonpharmacological conservative treatments in treating CFC.
Methods	We searched MEDLINE, EMBASE, Cochrane library, CINAHL, AMED, ISI web of knowledge, and conference proceedings from January 2000 to June 2016. Randomized controlled trials comparing nonpharmacological conservative treatments with placebo, sham interventions, or conventional treatments were included. Nonpharmacological conservative treatments were defined as interventions without involvement of medication or surgery. We extracted trial data in duplicate and assessed the risk of bias. We pooled continuous data using standard mean differences (SMDs) and binary data using risk ratios (RRs), and we provided their 95% confidence intervals.
Key results	We included 33 trials (4324 participants and 8 nonpharmacological treatments). Compared with placebo interventions, TENS (SMD 1.60, 95% CI 0.28-2.92), probiotic (SMD 1.40, 95% CI 0.94-1.86), and acupuncture (SMD 1.00, 95% CI 0.39-1.60) had significantly larger effect on stool frequency; acupuncture (RR 1.56, 95% CI 1.14-2.14) had significantly higher responder rate; and moxibustion (SMD 2.50, 95% CI 0.05-4.95) had significant larger effect on Bristol score. Compared with laxative, acupuncture had significantly larger effect on stool frequency (RR 2.01, 95% CI 1.16-3.49) and had lower rate of adverse events (RR 0.38, 95% CI 0.18-0.80).
Conclusions	TENS and acupuncture relatively ranked the best in managing CFC, but the results should be interpreted with caution due to small study effects.

1.1.7. Zhu 2018 ☆☆

Retracted Publication

Zhu L, Ma Y, Deng X. Comparison of acupuncture and other drugs for chronic constipation: A network meta-analysis. PLoS One. 2018;13(4). [164748].

Objectives	The objective of this study was to compare the efficacy and side effects of acupuncture, sham acupuncture and drugs in the treatment of chronic constipation.
Methods	Randomized controlled trials (RCTs) assessing the effects of acupuncture and drugs for chronic constipation were comprehensively retrieved from electronic databases (such as PubMed, Cochrane Library, Embase, CNKI, Wanfang Database, VIP Database and CBM) up to December 2017. Additional references were obtained from review articles. With quality evaluations and data extraction, a network meta-analysis (NMA) was performed using a random-effects model under a frequentist framework.
Results	A total of **40 studies (n = 11032)** were included: 39 were high-quality studies and 1 was a low-quality study. NMA showed that (1) acupuncture improved the symptoms of chronic constipation more effectively than drugs; (2) the ranking of treatments in terms of efficacy in diarrhoea-predominant irritable bowel syndrome was acupuncture, polyethylene glycol, lactulose, linaclotide, lubiprostone, bisacodyl, prucalopride, sham acupuncture, tegaserod, and placebo; (3) the ranking of side effects were as follows: lactulose, lubiprostone, bisacodyl, polyethylene glycol, prucalopride, linaclotide, placebo and tegaserod; and (4) the most commonly used acupuncture point for chronic constipation was ST25.
Conclusions	**Acupuncture is more effective than drugs in improving chronic constipation and has the least side effects**. In the future, large-scale randomized controlled trials are needed to prove this. Sham acupuncture may have curative effects that are greater than the placebo effect. In the future, it is necessary to perform high-quality studies to support this finding. Polyethylene glycol also has acceptable curative effects with fewer side effects than other drugs.

1.1.8. Zhang W 2014 ☆

Zhang Wei, Sun Jian-hua, Pei Li-xia, et al. Systematic Review of Acupuncture for Functional Constipation. Journal of Acupuncture and Tuina Science. 2014;12(2):89. [187184].

Objectives	To systematically analyze the therapeutic efficacy and safety of acupuncture in treating functional constipation (FC).
Methods	By searching the Cochrane Library, PubMed, Web of Science, Embase, CBM, CNKI, WanFang databases, the randomized controlled trials (RCTs) comparing acupuncture with Western medication in treating FC were retrieved, from the inception of the databases to September 2013. When the literatures were arranged according to the inclusion and exclusion criteria, and the methodological qualities were evaluated, RevMan 5.2 was adopted for meta-analysis.
Results	**Ten RCTs were included, covering 1 041 cases of FC**. The meta-analysis showed that there was no significant difference in comparing spontaneous bowel movements per week between shallow acupuncture at Tianshu (ST 25) and Western medication [MD= —0.47, 95% CI (-1.28, 0.34)]; there was a significant difference in comparing the spontaneous bowel movements per week between deep acupuncture at Tianshu (ST 25) and Western medication [MD = 0.53, 95% CI (0.13, 0.92)], but the difference was insignificant according to the sensitivity analysis [MD=0.38, 95% CI (-0.03, 0.80)], indicating the low reliability of the conclusion. Regarding the Cleveland clinic score (CCS), the difference between shallow acupuncture at Tianshu (ST 25) and Western medication was insignificant [MD = 0.39, 95% CI (— 1.13, 1.91)]; the difference between deep acupuncture at Tianshu (ST 25) and Western medication was significant [MD=2.64, 95% CI (1.32, 3.97)]. In the evaluation of security, the incidence rate of adverse events in acupuncture treatment (0.31%) was significantly lower than that in Western medication treatment (3.4%).

Conclusions	Although the present systematic review showed that **deep acupuncture at Tianshu (ST 25) should have better therapeutic efficacy than Western medication**, the reliability and quality of the evidences were poor, and thus the above results require proving by more RCTs of higher.

1.1.9. Zhang HL 2014

Zhang Hong-Li, Zhang Hong, Zhu Yuan. [Systematice Evaluation of Acupuncture and Drug Control for the Treatment of Simple Functional Constipation]. Journal of Clinical Acupuncture and Moxibustion. 2014;30(10):56. [173869].

Objectives	Evaluate the effect of acupuncture and drug control for the treatment for simple functional constipation.
Methods	According to the requirements of Evidence-based medicine,we research domestic and foreign literature overall about acupuncture treatment for simple functional constipation,and choose the qualified randomized controlled trial(RCT) and controlled clinical trials(CCT) for the systematic evaluation,and use special statistical software for Meta-analysis.
Results	The results show that **acupuncture is not inferior to the drug control group** both in the recent effective rate , the markedly effective rate,including improving the symptoms of independent stool frequency, CCS and symptoms scale,and in the forward efficient, what is more,it is safe and the follow-up recurrence rate is low. The deep acupuncture method at Tianshu (ST 25) in improving the CCS is superior to the drug controll group,but has the equivalent efficacy in the independent defecation. And the effect of routine acupuncture method at Tianshu (ST 25) in improving the CCS is similar compared with drug control group. But due to the less literature,sensitivity analysis,publication bias exists,and there is no difference analysis on most rating scales.
Conclusions	Meta analysis has some difficulty,and it remains to be a larger sample of multicenter controiled trial and further standardization of clinical indicators.

1.1.10. Zhang 2013 ☆

Zhang T, Chon TY, Liu B, Do A, Li G, Bauer B, Wang L, Liu Z. Efficacy of acupuncture for chronic constipation: a systematic review. Am J Chin Med. 2013;41(4):717-42. [143677].

Objectives	This study was to evaluate the efficacy and safety of acupuncture for chronic functional constipation.
Methods	Randomized controlled trials were searched in several databases. The primary outcome was a change in the number of weekly spontaneous bowel movements. The secondary outcomes included colonic transit activity, effective rate, Cleveland Clinic Score, and health-related quality of life score. Meta-analysis was done by using RevMan 5.1.
Results	After strict screening, **15 RCTs were included, containing 1256 participants**. All of them were conducted in China and published in Chinese journals. Meta-analysis indicated that acupuncture for chronic functional constipation was probably as effective as conventional medical therapy in the change of bowel movements. For the colonic transit activity, acupuncture might be the same as conventional medical therapy and could be better than sham acupuncture. For the Cleveland Clinic Score, acupuncture was unlikely inferior to conventional medical therapy and the deep acupuncture was better than normal depth acupuncture in abdominal region. No obvious adverse event was associated with acupuncture for constipation.

Conclusions	In conclusion, **acupuncture for chronic functional constipation is safe and may improve weekly spontaneous bowel movements, quality of life, and relevant symptoms**. However, the evidence was limited by the small sample size and the methodological quality-

1.1.11. Du 2012 ☆☆

Du WF, Yu L, Yan XK, Wang FC. [Met-analysis on randomized controlled clinical trials of acupuncture and moxibustion on constipation]. Chinese Acupuncture and Moxibustion. 2012;32(1):92-6.[169348].

Purpose	To assess the efficacy of acupuncture and moxibustion on constipation. .
Methods	A retrieval on literatures concerning treatment of constipation wjth acupuncture was carried Out ifl databases of VIP, CNKI, WANFANG and PubMed. And meta-analyses were conducted on randomized controlled trial (RCT) and controlled clinical trial (CCT) which met the enrolling requirements.
Results	A total number of **15 papers involving 1052 patients** were concluded. The result indicated that the curative rate of acupuncture and moxibustion on constipation is better than ordinary medication (RR = 1. 92, 95% CI 1.61~2. 30, Z=7.18, P<0.000 01). And statistical significance can be found between acupuncture-moxibustion treatment and the routine medicine treatment (RR=1.26, 95%CI 1.18~1.34, Z=7.26, P<0.000 01). In the comparison of abdominal pain, defecation duration and general symptom scores, statistical significance can be found between the djfferences of acupuncture and moxibustion group and control group (abdominal pain: WMD = -0.22, 95%C10. 32~ 0.12, Z=4.28, P<0.0001; defecation duration: WMD = - 0.47, 95 % CI 0.79~- 0.15, Z = 2.85, P<0.004; general symptom scores: WMD = -0.41, 95%CI -0.79 = -0.03 , Z = 2.13, P = 0.03).
Conclusion	**Acupuncture and moxibustion is effective to treat constipation. It has certain advantage when compare with the routine medication treatment.**

1.1.12. Lin 2009 ☆☆

Lin LW, Fu YT, Dunning T, Zhang AL, Ho TH, Duke M, Lo SK. Efficacy of Traditional Chinese Medicine for the Management of Constipation: A Systematic Review. J Altern Complement Med. 2009;15(12):1335-46. [160293].

Objectives	The aim of this systematic review was to critically appraise published clinical trials designed to assess the effect of Traditional Chinese Medicine (TCM) on the management of constipation.
Methods	Databases searched included both English and non-English articles published in the Cochrane library, MEDLINE, CINAHL, AMED, EMBASE, China National Knowledge Infrastructure (CNKI), and the Chinese Electronic Periodical Services (CEPS). Studies reviewed included randomized controlled trials and controlled clinical trials. Methodological quality was assessed using the modified Jadad scale.

Results	One hundred and thirty-seven (137) studies met the inclusion criteria, of which 21 were high-quality trials (n = 2449). Eighteen (18) were Chinese herbal medicine (CHM) and **3 were acupuncture trials.** The primary outcome measure was total effective rate. CHM was more effective than conventional medicines in eight trials. Of the 10 remaining CHM trials, 9 compared the study CHM with another CHM and the results were significant in 4 trials. The effective rate was significantly higher in the intervention group than in the placebo group in the last CHM study. One (1) of the three acupuncture trials compared acupuncture with a conventional medicine, one trial with Sennae folium, and one trial with deeper acupuncture on Tianshu (ST 25). The therapeutic effect in the treatment group was more effective than that in the control group in all three studies.
Conclusions	**TCM interventions appear to be useful to manage constipation. Significant positive results were found in 15 high-quality studies**. However, only 21 of the 137 publications identified attained high Jadad scores. There was heterogeneity in diagnostic procedures and interventions among the studies. Outcome indicators were also different. Hence, the results should be interpreted cautiously.

1.2. Special acupuncture techniques

1.2.1. Different acupuncture courses

1.2.1.1. Wang 2023

Wang L, Chen Y, Cao W, Xu M, Yao J, Liu Y, Zheng Q, Li Y. Comparative effectiveness of different acupuncture courses in functional constipation: A Bayesian network meta-analysis of clinical trials. Appl Nurs Res. 2023 Apr;70:151651. https://doi.org/10.1016/j.apnr.2022.151651

Aim	The purpose of this study was to examine the comparative effectiveness of different acupuncture courses for functional constipation (FC).
Background	There is a need to optimize the treatment course of acupuncture for FC to improve efficacy and save health resources.
Methods	We performed a systematic electronic search of eight databases from inception to April 2021. Randomized controlled trials comparing acupuncture treatment with sham acupuncture were included. The main outcome indicators were complete spontaneous bowel movement (CSBM), spontaneous bowel movement, Bristol Stool Form Scale (BSFS), responder rate and safety evaluation (SE).
Results	In this network meta-analysis, **19 studies with 1753 participants** and 8 different acupuncture treatments were included. Using the consistency model via Monte Carlo simulation iterations, we found that the effect of acupuncture treatment at 3/4 weeks may be better in terms of CSBM and BSFS. The results of rank probability analysis showed that 6 weeks of treatment may be better for the responder rate, and 2 weeks of treatment may be better for SE. And, subgroup analysis found that, for patients with chronic severe functional constipation (CSFC), 8 weeks of acupuncture treatment may be the best for CSBM.
Conclusions	By indirect comparison, 3/4 weeks of acupuncture treatment may be the optimal course of treatment for FC in terms of improving bowel frequency and stool shape. And for CSFC, 8 weeks of acupuncture treatment may be the best. However, there is still a lack of direct comparison and publication bias that affects the accuracy of research results.

1.2.2. Acupuncture at Tianshu (ST25)

1.2.2.1. Li 2020

Li P, Luo Y, Wang Q, Shu S, Chen K, Yu D, Fan C. Efficacy and Safety of Acupuncture at Tianshu (ST25) for Functional Constipation: Evidence from 10 Randomized Controlled Trials. Evid Based Complement Alternat Med. 2020. [214005]. doi

Objective	To evaluate the evidence for the efficacy and safety of acupuncture at Tianshu (ST25) for functional constipation (FC).
Methods	We systematically searched seven databases to identify randomized controlled trials of acupuncture at ST25 alone or in combination with conventional therapy in the treatment of FC. Risk ratios (RRs) and mean differences (MDs) were calculated using RevMan 5.3 with 95% confidence interval (CI).
Results	The study included **ten trials with 1568 participants**. Meta-analysis showed that the Cleveland Constipation Score (CCS) for deep needling was significantly lower than that for lactulose (deep needling with low-frequency dilatational wave: MD -0.58, 95% CI -0.94 to -0.22; deep needling with sparse wave: MD -3.67, 95% CI -6.40 to -0.94; deep needling with high-frequency dilatational wave: MD -3.42, 95% CI -5.03 to -1.81). Furthermore, CCS for shallow needling with high-frequency dilatational wave was lower than that for lactulose (MD -1.77, 95% CI -3.40 to -0.14). In addition, when deep needling was combined with high-frequency dilatational wave, the weekly frequency of spontaneous defecation (FSD) was significantly higher than that for lactulose (MD 1.57, 95% CI 0.93 to 2.21). Colonic Transit Time (CTT) scores were significantly higher when deep needling was combined with sparse wave (MD -14.36, 95% CI -18.31 to -10.41) or high-frequency dilatational wave (MD -11.53, 95% CI -19.25 to -3.81). The time of first defecation after treatment (TFD) of the shallow needling therapy was significantly longer than that of the lactulose (MD 13.67, 95% CI 5.66 to 21.67). The CCS 6 months after treatment (CCS6m) for deep needling was significantly lower than that for lactulose (MD -4.90, 95% CI -5.97 to -3.84). Moreover, the FSD 6 months after treatment (FSD6m) for shallow needling was significantly higher than that for lactulose (MD 0.49, 95% CI 0.02 to 0.97). The adverse event (AE) rate for lactulose was significantly higher than that achieved with the needling treatments, and this held true for both deep needling therapy (RR 0.41, 95% CI 0.23 to 0.72) and shallow needling therapy (RR 0.33, 95% CI 0.15 to 0.77).
Conclusions	The meta-analysis demonstrates that acupuncture at ST25 appears to be more effective than lactulose in the treatment of functional constipation. This was found to be especially true for deep needling with high-frequency dilatational wave, which had a greater impact on improving CCS, FSD, CTT, and CCS6m. Additionally, acupuncture at ST25 was shown to be safer than conventional treatment, with the rate of AE being significantly lower for both deep needling and shallow needling.

1.2.3. Electroacupuncture

1.2.3.1. Xu 2024

Xu S, Li J, Wang A. Electroacupuncture versus 5-HT4 receptor agonist for functional constipation: A systematic review and meta-analysis of randomized controlled trials. Medicine (Baltimore). 2024 Nov 29;103(48):e40634. https://doi.org/10.1097/MD.0000000000040634

Backgound	Functional constipation (FC) has been found as a chronic gastrointestinal disease that is commonly diagnosed in patients. However, patients have a low satisfaction level with the treatment of constipation drugs (e.g., 5-HT4 agonists). A meta-analysis was performed to compare the efficacy and safety between electroacupuncture and 5-HT4 agonists.
Methods	The included study were randomized controlled trials (RCTs), in which EA was used in the experimental group and 5-HT4 receptor agonist was used in the control group. Four English databases (PubMed, Cochrane Library, Web of Science, Embase) and 4 Chinese databases (China National Knowledge Infrastructure, CBM, WanFang, VIP) were searched. Relevant studies retrieved were published before September 30, 2024. The risk of bias was assessed by tool of Cochrane and GRADEpro. The Review Manager 5.4 was used for analyzing Data analysis, and Endnote X9 for screening studies.
Results	In this paper, we included **12 studies, involving 1473 participants**. We found that EA significantly improved patient assessment of cab quality of life questionnaire (PAC-QOL) (MD = -0.52, P = .03), self-rating anxiety scale (SAS) (MD = -3.00, P < .00001) and self-rating depression scale (SDS) (MD = -4.13, P < .00001) compared with 5-HT4 receptor agonists. In addition, we failed to identify any significant difference in Stool consistency, the number of weekly complete spontaneous bowel movements and weekly spontaneous bowel movements (SBMs) between the 2 groups.
Conclusion	EA has been indicated to be better than 5-HT4 receptor agonists since it can more effectively improve FC patients' life quality and mental state without an increased risk of adverse even. However, the previous evidence is characterized by low quality and small sample size, which should be further confirmed by high-quality and large-sample multicenter RCTs.

1.2.3.2. Jie 2023

Jie L, Shiping L, Yue X, Fuli Z. Efficacy and safety of electroacupuncture for secondary constipation: a systematic review and meta-analysis. Int J Colorectal Dis. 2023 Jul 15;38(1):196. https://doi.org/10.1007/s00384-023-04487-6

Objective	Secondary constipation refers to constipation that occurs after certain diseases or medications, such as acute stroke or opioids, and the efficacy of electroacupuncture for secondary constipation is controversial. So, this study aimed to explore the efficacy and safety of electroacupuncture for secondary constipation through a meta-analysis and systematic review.
Method	We retrieved articles from PubMed, Embase, Cochrane Library, Web of Science, CNKI, Wanfang, and VIP databases up to 28 February 2023. The study was screened strictly according to inclusion and exclusion criteria. Revman5.4 was used for quality evaluation; grade rating was used for index evaluation, and stata15.0 was used for data consolidation analysis.
Result	**Thirteen randomized controlled studies, involving a total of 1437 people** (722 electroacupuncture and 715 control groups), were included in this review. Meta-analysis results indicated that electroacupuncture significantly improved constipation overall response (RR = 1.31, 95%CI: 1.11, 1.55, P < 0.001), reduced defecation straining score (MD = - 0.46, 95%CI: - 0.67, - 0.251, P < 0.001), increased weekly complete spontaneous bowel movements (MD = 0.41, 95%CI: 0.20, 0.63, P = 0.002), and increased in the weekly spontaneous bowel movements (MD = 0.80, 95%CI (0.49, 01.11), P < 0.001), and electroacupuncture had no effect on change stool consistency score compared (MD = - 0.03, 95%CI (- 0.38, 0.33), P = 0.88) and did not increase adverse events (RR = 0.50, 95%CI: 0.18, 1.44, P = 0.20).

Conclusion	According to the current studies, the overall relief rate of patients with secondary constipation after electroacupuncture treatment was improved, the defecation pressure score was reduced, the weekly natural defecation was more complete, and adverse reactions were not increased. Electroacupuncture therefore shows potential for treating constipation, but more high-quality studies are needed to confirm these findings.

1.2.3.3. Huang 2020

Huang X, Shen Y, Li XH. [Systematic review on the treatment of functional constipation with electroacupuncture and gastro-kinetic drugs]. Acupuncture Research. 2020;45(7):592-8. [212437]. doi

Objective	To compare the therapeutic effect and safety in treatment of functional constipation between electroacupuncture (EA) and gastro-kinetic drugs.
Methods	Using “functional constipation”， “prucalopride”， “mosapridecitrate”， “electro-acupuncture” and “randomized controlled trial”， both in Chinese and English, as search terms, the articles of randomized controlled trial (RCT) regarding to the comparison of therapeutic effect on functional constipation in the patients between EA and gastro-kinetic drugs were retrieved from CMB, Wanfang, VIP, CNKI, OpenGrey, CINAHL, Cochrane Library, JBI, PubMed, WOS and Ovid databases. The retrieval time was from the establishment date to June 2018. The two researchers screened articles, extracted data and assessed literature quality in reference to Cochrane Handbook. Using RevMan 5.3 software, the meta-analysis was conducted.
Results	A total of **11 articles were included finally, with 744 patients involved**. It was found after meta-analysis that in EA group, the weekly spontaneous defecation frequency, constipation related quality of life in patients, depression relief and incidence of adverse reaction were all better than those in gastro-kinetic medication group. The therapeutic effect of the improvements in stool character and defecation difficulty in EA group were better or similar to that in gastro-kinetic medication group.
Conclusion	Regarding the therapeutic effect and safety in treatment of functional constipation, the results of electroacupuncture are superior or similar to gastro-kinetic medication, presenting a satisfactory therapeutic prospect.

1.2.3.4. Zhang 2020

Zhang N, Hou L, Yan P, Li X, Wang Y, Niu J, Feng L, Li J, Yang K, Liu X. Electro-acupuncture vs. sham electro-acupuncture for chronic severe functional constipation: A systematic review and meta-analysis. Complement Ther Med. 2020. [214010]. doi

Objectives	To assess the efficacy of electro-acupuncture (EA) relative to sham electro-acupuncture (sham EA) in treating chronic severe functional constipation (CSFC).
Methods	A comprehensive search for relevant studies published between January 1, 1951 and May 14, 2020 was conducted in PubMed, the Cochrane Library, Chinese Biomedical Literature Database, Web of Science, and EMbase. Two investigators independently selected studies, extracted data, and assessed the quality of the included studies. The software Endnote X9 was used for screening articles, and the Review Manager 5.3 for analyzing data.

Results	The meta-analyses involved 6 studies and 1457 individuals. The pooled results favored the EA group for the increase of complete spontaneous bowel movements (CSBMs) per week in the fourth week (MD = 0.80, P = 0.001) during treatment, and further improved in the eight weeks (MD = 1.25, P < 0.001). During the follow-up period, significant changes in CSBMs per week were seen in the experimental group (MD = 1.38, P = 0.008); the effect decreased in the twelfth week (MD = 0.87, P < 0.001). There was no significant difference in the Bristol stool scale score between the two groups in the fourth week (MD = 0.40, P = 0.08), but significant differences were observed in the eighth week (MD = 0.40, P = 0.03). A significant reduction in patient assessment of constipation quality of life (PAC-QOL) score were observed in the EA group during treatment (SMD = -0.83, P < 0.001). No serious adverse events were reported.
Conclusions	EA had favorable effects on CSFC, and the longer the treatment duration was, the better was the effect, but the effect showed a certain period of validity. However, the results may be influenced by the clinical heterogeneity of acupuncture points, depth of needling, intensity, and frequency of EA.

1.2.3.5. Zhou 2017 ☆☆

Zhou SL, Zhang XL, Wang JH. Comparison of electroacupuncture and medical treatment for functional constipation: a systematic review and meta-analysis. Acupunct Med. 2017;35(5):324-331. [100123].

Objectives	To assess the effectiveness of electroacupuncture (EA) relative to conventional medication in functional constipation (FC).
Methods	DESIGN: Systematic review and meta-analysis. SETTING: To be included, studies needed to: (1) have been randomised controlled trials; (2) have recruited adult patients diagnosed with FC according to the Rome II/III criteria or the American Gastroenterological Association guideline for chronic FC; and (3) have randomised patients to be treated with EA or anti-constipation medication. We searched Medline, the Cochrane Library and Embase databases for articles published up to 30 June 2016. INTERVENTION: EA or anti-constipation medication. PRIMARY AND SECONDARY OUTCOME MEASURES: The primary outcome was the change in the number of weekly spontaneous bowel movements. Secondary outcomes were total response rate (or total effective rate), symptom reduction and Cleveland Clinic constipation scores.
Results	The pooled results showed significantly more improvement in the frequency of spontaneous bowel movements in the EA treatment group compared with the medicine-treated group (pooled SMD 0.244, 95% CI 0.065 to 0.424, P=0.008). Deep-needling EA was significantly more effective than treatment with medication at increasing the frequency of spontaneous bowel movements (p=0.019). Significantly greater improvement was also seen for total response rates (p=0.018) and reductions in symptom score (p<0.001) in EA-treated patients.
Conclusions	**EA was more effective than medication at improving spontaneous bowel movements and total response rate, and reducing the symptoms of FC.**

1.2.4. Auricular Acupuncture

1.2.4.1. Saleh 2026 (Vagal Nerve Stimulation)

Saleh AO, Awashra A, Abouelmagd AAA, Elkholy M, Hasanin EH, Aldohni AAA, Elkhattib I, Abuelazm M, Elnaggar M. Vagal Nerve Stimulation for Chronic Constipation: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. Neuromodulation. 2026 Feb 27:S1094-7159(26)00010-3. https://doi.org/10.1016/j.neurom.2026.01.005

Introduction	Chronic constipation is a prevalent and heterogeneous disorder, affecting approximately 10% to 14% of adults and significantly influencing quality of life. Neuromodulation has been explored as a potential treatment; however, evidence remains limited. Therefore, this meta-analysis of randomized controlled trials (RCTs) aims to assess the efficacy and safety of vagus nerve-based neuromodulation techniques for chronic constipation, specifically **transcutaneous auricular vagus nerve stimulation (taVNS)** and **transcutaneous electroacupuncture (TEA)**.
Materials and methods	A comprehensive search of PubMed, Scopus, Web of Science, and Cochrane Central Register of Controlled Trials was performed from inception to June 2025. Data were pooled using risk ratios for dichotomous outcomes and mean differences (MD) or standardized mean differences (SMD) for continuous outcomes, with 95% CIs, applying a random-effects model. Statistical analyses were conducted using R (version 4.4.2) in R-Studio, International Prospective Register of Systematic Reviews identification: (CRD420251132888).
Results	**Six RCTs involving 356 participants** were included. Vagal nerve stimulation (VNS) significantly improved the visual analog pain scale (MD: -1.76 [95% CI: -2.92 to -0.60], p = 0.003), Bristol stool form scale (BSFS) (MD: 0.99 [95% CI: 0.30-1.68], p = 0.005), weekly spontaneous bowel movements (SBM) frequencies (MD: 1.75 [95% CI: 0.93-2.58], p < 0.0001), weekly complete spontaneous bowel movements (CSBM) frequencies (MD of 1.10 [95% CI: 0.40-1.80]), p = 0.002), and irritable bowel syndrome symptom severity (IBS-SSS) score (SMD of -1.68 [95% CI: -3.13; -0.24], p = 0.023). Still, there was no significant difference between the groups regarding Self-Rating Anxiety Scale (MD: -1.84 [95% CI: -6.19 to 2.52], p = 0.41), Self-Rating Depression Scale (SDS) scores (MD: -2.06 [95% CI: -6.14 to 2.02], p = 0.32), and anorectal function (p > 0.05).
Conclusion	VNS substantially improves VAS, BSFS, weekly SBM, weekly CSBM, and IBS-SSS scores.

1.2.4.2. Ding 2020

Ding Weibin. [Systematic review of auricular plaster therapy for prevention and treatment of opioid induced constipation]. Chinese General Practice Nursing. 2020. [212936].

Objective	To systematically evaluate the effectiveness and safety of auricular plaster therapy to prevent opioid induced constipation, and to explore the rule of acupoint selection for the prevention and treatment of opioid induced constipation.
Methods	Randomized controlled trials (RCTs) of auricular plaster therapy for preventing and treating constipation caused by opioids in patients with cancer pain were retrieved from China National Knowledge Infrastructure (CNKI), Chongqing Weipu Database (VIP), China Biomedical Database (CBM), Wanfang Database, PubMed, Embase, and The Cochrane Library.
Results	A total of **9 studies were included, involving 870 patients**. The results of the meta-analysis showed that the total effective rate of auricular plaster therapy for preventing and treating opioid-induced constipation in cancer patients was better than that in the control group [OR=4. 09, 95%CI (2. 91, 5. 75), Z=8. 13, P<0. 01]. Ear acupuncture points were counted more than 5 times including the large intestine, spleen, lower rectum, constipation points, and Sanjiao.
Conclusions	Auricular plaster therapy could effectively prevent opioid-induced constipation in cancer patients and avoid gastrointestinal irritation caused by oral drugs, which had more advantages in safety. The acupoints were mostly selected from the large intestine, spleen, lower rectum, constipation point, and Sanjiao, in order to achieve the role of regulating intestinal, stimulate the intestinal peristalsis.

1.2.4.3. Yang 2014

Yang LH, Duan PB, Du SZ, Sun JF, Mei SJ, Wang XQ et al. Efficacy of Auriculotherapy for Constipation in Adults: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. J Altern Complement Med. 2014;20(8):590-605. [181269].

Objectives	To assess the clinical evidence of auriculotherapy for constipation treatment and to identify the efficacy of groups using Semen vaccariae or magnetic pellets as taped objects in managing constipation.
Methods	Databases were searched, including five English-language databases (the Cochrane Library, PubMed, Embase, CINAHL, and AMED) and four Chinese medical databases. Only randomized controlled trials were included in the review process. Critical appraisal was conducted using the Cochrane risk of bias tool.
Results	Seventeen randomized, controlled trials (RCTs) met the inclusion criteria, of which 2 had low risk of bias. The primary outcome measures were the improvement rate and total effective rate. A meta-analysis of 15 RCTs showed a moderate, significant effect of auriculotherapy in managing constipation compared with controls (relative risk [RR], 2.06; 95 % confidence interval [CI], 1.52–2.79; $p < 0.00001$). The 15 RCTs also showed a moderate, significant effect of auriculotherapy in relieving constipation (RR, 1.28; 95 % CI, 1.13–1.44; $p < 0.0001$). For other symptoms associated with constipation, such as abdominal distension or anorexia, results of the meta-analyses showed no statistical significance. Subgroup analysis revealed that use of S. vaccariae and use of magnetic pellets were both statistically favored over the control in relieving constipation.
Conclusions	**Current evidence illustrated that auriculotherapy, a relatively safe strategy, is probably beneficial** in managing constipation. However, most of the eligible RCTs had a high risk of bias, and all were conducted in China. No definitive conclusion can be made because of cultural and geographic differences. Further rigorous RCTs from around the world are warranted to confirm the effect and safety of auriculotherapy for constipation.

1.2.4.4. Li 2010

Li MK, Lee TF, Suen KP. A Review on the Complementary Effects of Auriculotherapy in Managing Constipation. J Altern Complement Med. 2010;16(4):435-47. [160225]

Objectifs	Constipation is a common health problem that adversely affects an individual's general health and quality of life. Constipated people usually manage the problem by taking laxatives and by modifying their lifestyle even if such have questionable therapeutic effects. Auriculotherapy, a safe treatment modality in Chinese medicine, has been reported to be effective in managing constipation. Despite previous studies reported encouraging results in using auriculotherapy, its effectiveness in managing constipation has not been systematically reviewed. This review, therefore, examines previous studies that have investigated the effectiveness of auriculotherapy in managing constipation.
Méthodes	A search in the databases of MEDLINE EMBASE, AMED, and China Academic Journals Full-text Database and manual searching were performed to identify relevant clinical studies.

Résultats	A total of **29 relevant clinical studies** conducted from 1994 to 2008 were identified. All of the studies reported that auriculotherapy was effective in managing constipation. However, generalization of their findings was limited because of two significant methodological flaws: (1) uncertainty in accurate acupoints identification and subjects' compliance to instructions resulted in varied doses of intervention received; and (2) inconsistent intervention protocols and therapeutic outcome criteria made comparison among different studies difficult.
Conclusions	The findings of this review could provide pertinent information for researchers in terms of study designs and methodologies that may be used for future studies. The use of randomized controlled trials on a sample of sufficient size and of standard intervention protocol is recommended to provide empirical evidence that will support auriculotherapy as a complementary strategy in managing constipation.

1.2.5. Acupuncture + biofeedback

1.2.5.1. Tang 2020

Tang Liyao. [A Meta-analysis of Acupuncture Combined with Biofeedback in the Treatment of Functional Constipation]. Asia-Pacific Traditional Medicine. 2020. [212918].

Objective	To systematic review of the efficacy of Acupuncture combined with biofeedback in the Treatment of Functional Constipation (FC).
Methods	The literatures on clinical randomized controlled trials of acupuncture combined with biofeedback for FC in CNKI, Wanfang database, VIP database, CBM, Pubmed, Web of science, Embase and Cochrane library were searched by computer. The retrieval time was before December 25, 2019. The original literature was screened according to the proposed inclusion and exclusion criteria, and data were analyzed by RevMan 5. 3.
Results	A total of **19 articles and 1479 patients** were included in the study. The Meta analysis results indicated that the experimental group showed better efficacy than the control group in terms of efficiency rate[RR=1. 24, 95% CI (1. 18, 1. 30), Z=7. 62, P<0. 000 01]and the lowest threshold of rectum [MD=-11. 34, 95%CI (-15. 16, -7. 53), Z=5. 83, P<0. 000 01]. The results were statistically significant.
Conclusion	Acupuncture combined with biofeedback is an effective treatment for functional constipation, which is superior to biofeedback. However, the evidences to decrease the anal resting pressure, anal systolic pressure and the maximum tolerance of the rectum are still not certain. More high-quality randomized controlled trials are needed in the future.

1.2.6. Catgut embedding

1.2.6.1. Li 2025

Li P, Wang F, Zheng R, Chao Y, Zhang Q. Acupoint catgut embedding for functional constipation: a meta-analysis and data mining of randomized controlled trials. Eur J Integr Med. 2025;102593. https://doi.org/10.1016/j.eujim.2025.102593

Background	Functional constipation (FC) is a common gastrointestinal disorder. Acupoint catgut embedding (ACE) is widely used for FC management. This review aimed to investigate the effectiveness, safety and core acupoint combinations of ACE for FC.

Methods	We searched 9 databases and several registration platforms from inception to July 2025 for randomized controlled trials (RCTs) comparing ACE with conventional drugs, manual acupuncture (MA), or sham ACE. Meta-analysis, risk of bias assessment, and GRADE evaluation of evidence certainty were performed. Gephi-0.9.2 was utilized for visualizing the complex networks.
Results	A total of **27 RCTs (n = 2221)** were included. ACE significantly improved complete spontaneous bowel movements (CSBM) compared with MA (MD, 1.12, 95 % CI [0.60, 1.64]) and sham ACE (MD, 1.70, 95 % CI [0.94, 2.46]), with the latter exceeding the minimal clinically important difference (MCID). ACE also demonstrated higher total effective rates compared to conventional drugs. (RR, 1.15, 95 % CI [1.09, 1.21]), MA (RR, 1.17, 95 % CI [1.09, 1.25]) and sham ACE (RR, 1.79, 95 % CI [1.18, 2.70]). Superior total effective rate at follow-up was observed over conventional drugs (RR, 1.46, 95 % CI [1.15, 1.84]) and MA (RR, 1.47, 95 % CI [1.06, 2.03]). Additionally, ACE outperformed conventional drugs in improving stool formation (MD, 0.52, 95 % CI [0.18, 0.86]). ACE exhibited a more significant improvement in quality of life compared to conventional drugs (MD, -6.95, 95 % CI [-10.36, -3.54]), MA (MD, -3.11, 95 % CI [-6.06, -0.16], p = 0.04) and sham ACE (MD, -8.18, 95 % CI [-11.63, -4.73]), and all the differences reached the MCID. Adverse events were minimal and occurred infrequently. The evidence certainty ranged from very low to moderate. Core acupoints included ST25, SP15, ST37, RN4, RN12, BL25, ST36, RN6, SJ6.
Conclusion	ACE may be an effective and safe option for FC, and the analysis of core acupoints provided important treatment direction. Nevertheless, the review highlighted the necessity for well-designed, higher-quality experiments.

1.2.6.2. Zhao 2025

Zhao Y, Wang Z, Kuang S, Zhang S. A meta-analysis of the acupoint catgut embedding in the treatment of functional constipation. Front Med (Lausanne). 2025 Aug 20;12:1592220. https://doi.org/10.3389/fmed.2025.1592220

Objective	To evaluate the efficacy and safety of acupoint catgut embedding (ACE) for functional constipation (FC) through meta-analysis and provide evidence-based support for clinical application.
Methods	Randomized controlled trials (RCTs) investigating ACE for FC were retrieved from CNKI, Wanfang, VIP, PubMed, Web of Science, and Cochrane Library databases from inception to November 2024. Study quality was assessed using the modified Jadad scale, and analyses were performed with RevMan 5.4.1 and Stata BE 17.
Results	**Twenty-three RCTs (n = 1,794)** were included. ACE showed significantly higher total effective rates compared with oral Western medicine (OR = 2.71, 95 % CI 1.91–3.83, p < 0.00001), acupuncture (OR = 2.90, 95 % CI 1.68–5.01, p = 0.0001), and placebo (p < 0.05). No significant difference was observed between ACE and oral Chinese medicine (OR = 2.34, 95 % CI 0.79–6.89, p = 0.12). Adverse events were infrequent and mild, primarily local soreness, bruising, or transient pain at insertion sites.
Conclusion	Acupoint catgut embedding offers superior efficacy compared with Western medicine, acupuncture, and placebo for functional constipation, with minimal adverse effects. Nonetheless, high-quality, large-scale RCTs are needed to confirm long-term efficacy and safety.

1.3. Special Clinical Forms

1.3.1. Constipation in children

1.3.1.1. Wegh 2022

Wegh CAM, Baaleman DF, Tabbers MM, Smidt H, Benninga MA. Nonpharmacologic Treatment for Children with Functional Constipation: A Systematic Review and Meta-analysis. J Pediatr. 2022 Jan;240:136-149.e5. https://doi.org/10.1016/j.jpeds.2021.09.010

Objective	To evaluate the effectiveness and safety of nonpharmacologic interventions for the treatment of childhood functional constipation.
Study design	Randomized controlled trials (RCTs) evaluating nonpharmacologic treatments in children with functional constipation which reported at least 1 outcome of the core outcome set for children with functional constipation.
Results	We included 52 RCTs with 4668 children, aged between 2 weeks and 18 years, of whom 47% were females. Studied interventions included gut microbiome-directed interventions, other dietary interventions, oral supplements, pelvic floor-directed interventions, electrical stimulation, dry cupping, and massage therapy. An overall high risk of bias was found across the majority of studies. Meta-analyses for treatment success and/or defecation frequency, including 20 RCTs, showed abdominal electrical stimulation (n = 3), Cassia Fistula emulsion (n = 2), and a cow's milk exclusion diet (n = 2 in a subpopulation with constipation as a possible manifestation of cow's milk allergy) may be effective. Evidence from RCTs not included in the meta-analyses, indicated that some prebiotic and fiber mixtures, Chinese herbal medicine (Xiao'er Biantong granules), and abdominal massage are promising therapies. In contrast, studies showed no benefit for the use of probiotics, synbiotics, an increase in water intake, dry cupping, or additional biofeedback or behavioral therapy. **We found no RCTs on physical movement or acupuncture**.
Conclusions	More well-designed high quality RCTs concerning nonpharmacologic treatments for children with functional constipation are needed before changes in current guidelines are indicated.

1.3.1.2. Ng 2016 (TENS)

Ng RT, Lee WS, Ang HL, Teo KM, Yik YI, Lai NM. Transcutaneous electrical stimulation (TES) for treatment of constipation in children. Cochrane Database Syst Rev. 2016. [188540]. ^BACKGROUND|Childhood constipation is a common problem with substantial health, economic and emotional burdens. Existing therapeutic options, mainly pharmacological, are not consistently effective, and some are associated with adverse effects after prolonged use. Transcutaneous electrical stimulation (TES), a non-pharmacological approach, is postulated to facilitate bowel movement by modulating the nerves of the large bowel via the application of electrical current transmitted through the abdominal wall. |

OBJECTIVES	Our main objective was to evaluate the effectiveness and safety of TES when employed to improve bowel function and constipation-related symptoms in children with constipation.

Methods	SEARCH METHODS: We searched MEDLINE (PubMed) (1950 to July 2015), the Cochrane Central Register of Controlled Trials (CENTRAL) (The Cochrane Library, Issue 7, 2015), EMBASE (1980 to July 2015), the Cochrane IBD Group Specialized Register, trial registries and conference proceedings to identify applicable studies . SELECTION CRITERIA: Randomized controlled trials that assessed any type of TES, administered at home or in a clinical setting, compared to no treatment, a sham TES, other forms of nerve stimulation or any other pharmaceutical or non-pharmaceutical measures used to treat constipation in children were considered for inclusion. DATA COLLECTION AND ANALYSIS: Two authors independently assessed studies for inclusion, extracted data and assessed risk of bias of the included studies. We calculated the risk ratio (RR) and corresponding 95% confidence interval (CI) for categorical outcomes data and the mean difference (MD) and corresponding 95% CI for continuous outcomes.
MAIN RESULTS	One study from Australia including 46 children aged 8 to 18 years was eligible for inclusion. There were multiple reports identified, including one unpublished report, that focused on different outcomes of the same study. The study had unclear risk of selection bias, high risks of performance, detection and attrition biases, and low risks of reporting biases.There were no significant differences between TES and the sham control group for the following outcomes: i).number of children with > 3 complete spontaneous bowel movements (CSBM) per week (RR 1.07, 95% CI 0.74 to 1.53, one study, 42 participants) (QUALITY OF EVIDENCE: very low, due to high risk of bias and serious imprecision), ii). Number of children with improved colonic transit assessed radiologically (RR 5.00, 95% CI 0.79 to 31.63; one study, 21 participants) (QUALITY OF EVIDENCE: very low, due to high risk of bias, serious imprecision and indirectness of the outcome). However, mean colonic transit rate, measured as the position of the geometric centre of the radioactive substance ingested along the intestinal tract, was significantly higher in children who received TES compared to sham (MD 1.05, 95% CI 0.36 to 1.74; one study, 30 participants) (QUALITY OF EVIDENCE: very low, due to high risk of bias , serious imprecision and indirectness of the outcome). There was no significant difference between the two groups in the number of children with improved soiling-related symptoms (RR 2.08, 95% CI 0.86 to 5.00; one study, 25 participants) (QUALITY OF EVIDENCE: very low, due to high risk of bias and serious imprecision). There was no significant difference in the number of children with improved quality of life (QoL) (RR 4.00, 95% CI 0.56 to 28.40; one study, 16 participants) (QUALITY OF EVIDENCE: very low, due to high risk of bias issues and serious imprecision). There were also no significant differences in in self-perceived (MD 5.00, 95% CI -1.21 to 11.21) or parent-perceived QoL (MD -0.20, 95% CI -7.57 to 7.17, one study, 33 participants for both outcomes) (QUALITY OF EVIDENCE for both outcomes: very low, due to high risk of bias and serious imprecision). No adverse effects were reported in the included study.
AUTHORS' CONCLUSIONS	The very low quality evidence gathered in this review does not suggest that TES provides a benefit for children with chronic constipation. Further randomized controlled trials assessing TES for the management of childhood constipation should be conducted. Future trials should include clear documentation of methodologies, especially measures to evaluate the effectiveness of blinding, and incorporate patient-important outcomes such as the number of patients with improved CSBM, improved clinical symptoms and quality of life.

1.3.2. Constipation in elderly

1.3.2.1. Xu 2025

Xu L, Leng Y, Dai P, Gao H, Chu Y, Chen X, Yang M, Li X, Yang T. Nonpharmacologic treatment for

elderly with constipation: a systematic review and meta-analysis. Front Med (Lausanne). 2025 Sep 12;12:1644609. https://doi.org/10.3389/fmed.2025.1644609

Objective	To evaluate the efficacy and safety of non-pharmacological interventions—including acupuncture, abdominal massage, ear acupoints, probiotics, and dietary fiber—for constipation in the elderly population.
Methods	Randomized controlled trials (RCTs) published up to March 2025 were retrieved from Cochrane Library, PubMed, Web of Science, Embase, and major Chinese databases. Study quality was assessed with the Cochrane Risk of Bias tool, and analyses were conducted using RevMan 5.4.1 and Stata. Evidence certainty was evaluated using the GRADE framework.
Results	**Forty-one RCTs involving 3,005 patients** aged ≥60 years were included. Non-pharmacologic treatments were significantly more effective than controls (RR = 1.15, 95 % CI 1.09–1.21, $p < 0.00001$; $I^2 = 58\%$). Subgroup analysis indicated superior outcomes for acupuncture (n = 15), abdominal massage (n = 11), and ear acupoint therapy (n = 3). Adverse event incidence was lower in non-drug therapies (RR = 0.35, 95 % CI 0.16–0.74, p = 0.006). Improvements were also observed in Constipation-Related Quality of Life Scale (CQLS), Bristol Stool Form Scale (SMD = 0.87, 95 % CI 0.14–1.60, p = 0.02), and complete spontaneous bowel movements (SMD = 0.44, 95 % CI –0.52 to –0.12, p = 0.03). Symptom scores—including abdominal pain, stool consistency, and frequency—improved significantly. Sensitivity analyses confirmed result robustness despite some publication bias.
Conclusion	Non-pharmacologic interventions, especially acupuncture and abdominal massage, outperform conventional therapies for constipation in the elderly, with greater effects from long-term treatment. However, high heterogeneity and methodological limitations warrant further large-scale, well-designed RCTs to confirm efficacy and elucidate mechanisms.

1.3.2.2. Song 2024

Song S, Hao W, Fu H. Efficacy of acupuncture for functional constipation in elderly: a systematic review and meta-analysis. Front Med (Lausanne). 2024 Dec 4;11:1473847. https://doi.org/10.3389/fmed.2024.1473847

Backgound	Numerous clinical studies have shown that patients suffering from functional constipation can benefit by combining medication with acupuncture. There have been no published reviews or meta-analyses regarding the use of acupuncture in treating functional constipation in older adults. Therefore, we carried out a meta-analysis to assess the impact of acupuncture on elderly patients dealing with functional constipation.
Methods	This study retrieved randomized controlled trials (RCTs) on acupuncture therapy for functional constipation in the elderly from several electronic databases, including Embase, PubMed, Cochrane Library, Wanfang Database, Chinese BioMedical Literature Database, and China National Knowledge Infrastructure. In these databases, clinical investigators evaluated the effectiveness of acupuncture as a primary treatment for elderly people with functional constipation. The Cochrane Handbook for Systematic Reviews of Interventions was used by researchers to evaluate the quality of the study.

Results	A total of **469 elderly individuals were included in 8 RCTs**. The meta-analysis yielded compelling findings: the application of acupuncture has significantly elevated the rates of treatment effectiveness compared to the control group. Compared with the control group, the treatment group exhibited a statistically significant difference in complete spontaneous bowel movements after treatment. The two groups showed no significant difference in spontaneous bowel movements. However, there was a significant difference in the Bristol Stool Scale scores. The Defecation Difficulty Score and Patient Assessment of Constipation Quality of Life (PAC-QOL) showed p-values that indicated no significant effect. However, acupuncture improved bowel movements, demonstrating a significant difference in the Clinic Constipation Score (CCS) when comparing the two groups. The Nitric Oxide Synthase (NOS) and 5-Hydroxytryptamine (5-HT) contents changed significantly after intervention in both groups. An article reported that the improvement of traditional Chinese medicine (TCM) symptom scores was better in the treatment group than in the control group.
Conclusion	The analysis results indicated that acupuncture can be beneficial for elderly people with functional constipation; however, strong and comprehensive data are not yet obtainable. Given that our study is based on evidence that is of a low-to-moderate quality, further high-quality research is necessary to enhance the feasibility and practicability of this treatment.

1.3.3. Post-Stroke Constipation

see corresponding item

1.3.4. Postpartum Constipation

see corresponding item

1.3.5. Opioid induced constipation

1.3.5.1. Han 2021 ☆☆

Han C, Liu Y, Fan H, Li D, Guo N. Acupuncture Relieves Opioid-Induced Constipation in Clinical Cancer Therapy - A Meta-Analysis and Systematic Review. Clin Epidemiol. 2021:907-919. [222744]. https://doi.org/10.2147/clep.s324193

Background	Cancer pain is a common problem in clinical cancer therapy. Opioid analgesia is one of the most effective drugs for pain relief with satisfying performance besides the side effect of opioid-induced constipation (OIC). Acupuncture, as a Chinese traditional non-invasive intervention, has been applied to clinical cancer pain management and functional constipation therapy. However, only a few studies have adopted this treatment for OIC patients. Due to limited numbers of investigated subjects and variability of application methods, including treatment apparatus, acupoints, durations, and sessions, the interpretation of acupuncture's therapy effects from single-site randomized clinical trials (RCT) is limited.
Methods	Therefore, we conducted a meta-analysis by collecting published data from Pubmed, Embase, Cochrane library, and Web of Science. **Five RCTs** focusing on the application of acupuncture with or without medication in OIC patients were included.

Results	An overall remission rate of 86.8% in the acupuncture-treated group was achieved, higher than the control group (78.9%; RR, 1.10, 95% CI [1.03, 1.18]). The symptom scores, reporting on defecation frequency, defecation straining, abdominal pain, defection time, and stool property, in acupuncture groups were lower than control groups with a standardized mean difference (SMD) of -2.21 [-4.15, -0.27]. The quality of life (QOL) for patients in the acupuncture treated group increased compared to the control group with reduced PAC-QOL scores (SMD, -1.02 [-1.78, -0.26]). Referring to the effects from pure acupuncture treatment (SMD, -0.43 [-0.83, -0.03]), the co-intervention of acupuncture and drugs (SMD, -1.77 [-2.51, -1.02]) improved the life quality of patients more remarkably ($P < 0.05$).
Conclusions	Overall, our data confirmed the therapeutic effects of acupuncture in the treatment of OIC. The co-intervention of acupuncture with drugs improves the outcomes of OIC patients better than a single strategy. Combined therapy with both medicine and acupuncture has insightful potential for future clinical cancer patient management on constipation problems.

1.3.5.2. Ding 2020 (auricular plaster)

Ding Weibin. [Systematic review of auricular plaster therapy for prevention and treatment of opioid induced constipation]. Chinese General Practice Nursing. 2020. [212936].

Objective	To systematically evaluate the effectiveness and safety of auricular plaster therapy to prevent opioid induced constipation, and to explore the rule of acupoint selection for the prevention and treatment of opioid induced constipation.
Methods	Randomized controlled trials (RCTs) of auricular plaster therapy for preventing and treating constipation caused by opioids in patients with cancer pain were retrieved from China National Knowledge Infrastructure (CNKI), Chongqing Weipu Database (VIP), China Biomedical Database (CBM), Wanfang Database, PubMed, Embase, and The Cochrane Library.
Results	A total of **9 studies were included, involving 870 patients**. The results of the meta-analysis showed that the total effective rate of auricular plaster therapy for preventing and treating opioid-induced constipation in cancer patients was better than that in the control group [OR=4. 09, 95%CI (2. 91, 5. 75), Z=8. 13, P<0. 01]. Ear acupuncture points were counted more than 5 times including the large intestine, spleen, lower rectum, constipation points, and Sanjiao.
Conclusions	Auricular plaster therapy could effectively prevent opioid-induced constipation in cancer patients and avoid gastrointestinal irritation caused by oral drugs, which had more advantages in safety. The acupoints were mostly selected from the large intestine, spleen, lower rectum, constipation point, and Sanjiao, in order to achieve the role of regulating intestinal, stimulate the intestinal peristalsis.

1.3.5.3. Zhao 2018 (Acupoint Application)

Zhao Ran, Zeng Liang, Hou Wen-Guang, et al. [Meta-analysis of Randomized Controlled Trials of Acupoint Application for Opioid-induced Constipation]. Shanghai Journal of Acupuncture and Moxibustion. 2018;37(11):1318. [192523].

Objective	To systematically assess the efficacy and safety of acupoint application for opioid-induced constipation.

Method	A computer search of China National Knowledge Infrastructure (CNKI), China VIP database (VIP), Chinese BioMedical Literature Database (CBM) and PubMed was made with the help of manual searching to retrieve randomized controlled trials (RCT) of acupoint application for opioid-induced constipation in patients with cancer pain. The retrieval time limit was from January 2008 to January 2018. Two independent reviewers assessed the quality and bias risk of each included trial using the modified Jadad scale. A meta-analysis was made using Statal3.0.
Result	A total of sixteen studies were included with 1438 patients. The total efficacy rate for opioid-induced constipation was higher in the acupoint application group of patients with cancer pain than in the Chinese patent medicine, blank or placebo group [Chinese patent medicine group OR=2.73, 95%CI (1.53, 4.88), Zor3.39, P<0.01; blank or placebo group OR=12.94, 95%CI (7.85, 21.34), Z=10.04, P<0.01]. The Harbord funnel plot of the total efficacy rate for constipation showed no publication bias. The total cure rate of opioid-induced constipation was higher in the acupoint application group than in the control group [OR=2.24, 95%CI (1.45, 3.47), Z=3.63, P<0.O1]. The total constipation symptom score could be improved [SMD= - 0.59, 95%CI (- 0.76, - 0.42), Z=6.72, P<0.0l]. Difficult defecation could be reduced [SMD= - 0.68, 95%CI (- 0.93, - 0.43), Z=5.36, P〈 0.01]. Defecating time was shortened [SMD= - 1.30, 95%CI (- 2.51, - 0.10), Z=2.11, P=0.034].
Conclusion	Acupoint application is more effective than conventional medication in treating opioid-induced constipation in patients with cancer pain. It can reduce difficult defecation and shorten defecating time.

1.3.6. Constipation in cancer patients

1.3.6.1. Chiaramonte 2023

Chiaramonte R, Bonfiglio M, Caramma S, Condorelli R. The Role of Rehabilitation in the Treatment of Constipation in Oncological Patients. J Clin Med. 2023 Aug 2;12(15):5083. https://doi.org/10.3390/jcm12155083

Background	Chemotherapy, as well as opioid and antiemetic drugs, can contribute to constipation in oncological patients. This systematic review aims to analyse the potential of specific rehabilitation strategies and alternative strategies for improving constipation symptoms, with the goal of incorporating these strategies into a dedicated protocol for managing cancer-related constipation. This could potentially reduce the dosages of or eliminate the need for constipation medications.
Methods	A systematic search was conducted on PubMed, Scopus and Web of Science. The review included studies analysing constipation complaints in cancer patients treated with rehabilitation, acupuncture and osteopathy.

Results	The review included 16 studies in line with PRISMA and PICOS criteria. Most studies showed that physical exercise, abdominal massage, TENS, acupuncture and education on the correct defecation position positively impacted the management of constipation and quality of life in oncological patients. A physiotherapy program involving massages as well as aerobic and resistance training improved constipation in oncological women, regardless of age, sex and frailty. A combination of abdominal massage, abdominal muscle stretching and education on proper defecation position alleviated the severity of constipation and related depression. However, the outcomes regarding TENS were yet inconsistent. Another technique, becoming increasingly common for constipation, and demonstrating positive results, involved stimulating trigger points through **acupressure and acupuncture**. Conversely, osteopathic and superficial manipulations more frequently required constipation medications than did the other alternative approaches. However, no existing studies have proposed a specific protocol to manage cancer-related constipation.
Conclusions	The results of the studies confirm the positive influences of rehabilitation, osteopathy and **acupuncture** on constipation and pain in oncological patients. Nevertheless, further studies are required to establish the best type, timing and duration of treatment, as well as how the stage and location of the cancer and the cause of constipation (drug-induced or functional) impact the results.

1.3.6.2. Ginex 2020

Ginex PK, Hanson BJ, LeFebvre KB, Lin Y, Moriarty KA, Maloney C, Vrabel M, Morgan RL. Management of Opioid-Induced and Non-Opioid-Related Constipation in Patients With Cancer: Systematic Review and Meta-Analysis. Oncol Nurs Forum. 2020;47(6). [212793].

Problem identification	A systematic review and meta-analysis was conducted to inform the development of national clinical practice guidelines on the management of cancer constipation.
Methods	Literature search: PubMed®, Wiley Cochrane Library, and CINAHL® were searched for studies published from May 2009 to May 2019. Data evaluation: Two investigators independently reviewed and extracted data from eligible studies. The Cochrane Collaboration risk-of-bias tool was used, and the GRADE (Grading of Recommendations Assessment, Development and Evaluation) approach was used to assess the certainty of the evidence.
Synthesis	For patients with cancer and opioid-induced constipation, moderate benefit was found for osmotic or stimulant laxatives; small benefit was found for methylnaltrexone, naldemedine, and **electroacupuncture**. For patients with cancer and non-opioid-related constipation, moderate benefit was found for naloxegol, prucalopride, lubiprostone, and linaclotide; trivial benefit was found for acupuncture.
Implications for practice	Effective strategies for managing opioid-induced and non-opioid-related constipation in patients with cancer include lifestyle, pharmacologic, and complementary approaches.

1.3.7. Chemotherapy-induced Constipation

1.3.7.1. Chen 2018

Chen CY, Lin XX, Wang X. Efficacy of Non-Invasive Auricular Acupressure for Treating Constipation in Leukemia Patients Undergoing Chemotherapy: A Systematic Review. Complement Med Res. 2018;25(6):406-412. [201331].

Background	The aim of this systematic review was to evaluate the available evidence from randomized controlled trials (RCTs) of auricular acupressure (AA) therapy for preventing constipation in leukemia patients undergoing chemotherapy.
Methods	We searched 5 English databases and 4 Chinese databases, from their inception until August 2017. Quantitative syntheses of RCTs were conducted using RevMan 5.3 software. Study selection, data extraction, and validation were performed independently by 2 reviewers. Cochrane criteria for risk-of-bias were used to assess the methodological quality of the trials.
Results	Five RCTs met the inclusion criteria, and most were of low methodological quality. All RCTs compared AA + routine care with routine care alone. Our analysis found that complementary effects of AA can improve the scores of the Bristol Stool Form (BSF), the Constipation Assessment Scale (CAS), and the Patient Assessment of Constipation-Quality of Life (PAC-QOL). However, the same positive results were not found in terms of the Fatigue Severity Scale (FSS), the EuroQoL 5-domain (EQ-5D), and the Hospital Anxiety Depression Scale (HADS).
Conclusions	Overall, as a potential safety therapy, AA may be recommended in addition to routine care including use of laxatives to prevent constipation in leukemia patients undergoing chemotherapy. In the future, more rigorous RCTs must be conducted to overcome the limitations of our existing data and to confirm the effect and safety of AA for managing constipation in leukemia patients undergoing chemotherapy.

1.3.8. Constipation in Parkinson's disease

1.3.8.1. Li 2024

Li Z, Niu Q, Yang K, Zhao K, Yin S, Zhu F. Acupuncture for constipation in Parkinson's disease: A systematic review and meta-analysis of randomized controlled trials. Medicine (Baltimore). 2024 Jul 19;103(29):e38937. https://doi.org/10.1097/MD.0000000000038937. PMID: 39029044.

Backgound	Parkinson's disease (PD) is the second most common neurological disease worldwide, and there is a potential interaction between PD and constipation. PD constipation often causes significant trouble for patients and seriously affects their quality of life. Acupuncture is widely used for treating constipation and has been clinically proven. However, it is unclear whether the current evidence is sufficient to support acupuncture to improve PD constipation.
Methods	We searched the Cochrane Central Register of Controlled Trials, Embase, PubMed, Web of Science, China National Knowledge Infrastructure, Wan Fang Data Knowledge Service Platform, and Chinese Scientific Journal Database (VIP database) for randomized controlled trials from inception through July 1, 2023. Randomized controlled trials (RCTs) included acupuncture, sham acupuncture, and medication for PD constipation. Stata 16.0 software and Cochrane RoB2.0 were used for data processing and migration risk analysis.
Results	The **11 studies included a total of 960 patients**. The results showed that acupuncture or acupuncture combined with conventional treatment seemed to have advantages in improving complete spontaneous bowel movements (WMD: 1.49, 95% CI: 0.86, 2.11; P < .00001), Patient-Assessment of Constipation Quality of Life questionnaire (WMD: -11.83, 95% CI: -15.67, -7.99; P < .00001), the chronic constipation severity scale (CCS) (SMD: -0.99, 95% CI: -1.40, -0.58; P < .01), and c(RRP) (WMD: 2.13, 95% CI: 0.44, 3.82; P < .05).

Conclusion	The present results show that compared with conventional treatment, acupuncture combined with conventional treatment seems to increase the number of spontaneous defecations in PD patients, improve quality of life, increase rectal resting pressure, and alleviate the severity of chronic constipation. Thus, acupuncture has the potential to treat PD constipation. However, due to the study's limitations, higher-quality RCTs are needed for verification.

2. Overview of systematic reviews

2.1. Yao 2022

Yao JP, Chen LP, Xiao XJ, Hou TH, Zhou SY, Xu MM, Wang K, Hou YJ, Zhang L, Li Y. Effectiveness and safety of acupuncture for treating functional constipation: An overview of systematic reviews. J Integr Med. 2022 Jan;20(1):13-25. https://doi.org/10.1016/j.joim.2021.11.001

Background	Functional constipation (FC) is one of the most prevalent functional gastrointestinal disorders. Dissatisfaction with medications prescribed to treat FC may lead patients to seek alternative treatments. Numerous systematic reviews (SRs) examining the use of acupuncture to treat FC have reported inconsistent results, and the quality of these studies has not been fully evaluated.
Objective	In this overview, we evaluated and summarized clinical evidence on the effectiveness and safety of acupuncture for treating FC and evaluated the quality and bias of the SRs we reviewed.
Mehtods	Search strategy. The search strategy was structured by medical subject headings and search terms such as “acupuncture therapy” and “functional constipation.” Electronic searches were conducted in eight databases from their inception to September 2020. Inclusion criteria : SRs that investigated the effectiveness and safety of acupuncture for managing FC were included. Data extraction and analysis : Two authors independently extracted information and appraised the methodology, reporting accuracy, quality of evidence, and risk of bias using the following critical appraisal tools: (1) A Measurement Tool to Assess Systematic Reviews 2 (AMSTAR 2); (2) Risk of Bias in Systematic Reviews (ROBIS); (3) Preferred Reporting Items for Systematic Reviews and Meta-analyses for Acupuncture (PRISMA-A); and (4) the Grading of Recommendations, Assessment, Development and Evaluations (GRADE). A κ index was used to score the level of agreement between the 2 reviewers.
Results	**Thirteen SRs** that examined the clinical utility of acupuncture for treating FC were identified. Using the AMSTAR 2 tool, we rated 92.3% (12/13) of the SRs as “critically low” confidence and one study as “low” confidence. Using the ROBIS criteria, 38.5% (5/13) of the SRs were considered to have “low risk” of bias. Based on PRISMA-A, 76.9% (10/13) of the SRs had over 70% compliance with reporting standards. The inter-rater agreement was good for AMSTAR 2, ROBIS, and PRISMA-A. Using the GRADE tool, we classified 22.5% (9/40) of the measured outcomes as “moderate” quality, 57.5% (23/40) as “low” quality, and 20.0% (8/40) as “very low” quality. The inter-rater agreement was moderate when using GRADE. Descriptive analyses indicated that acupuncture was more efficacious than sham acupuncture for improving weekly complete spontaneous bowel movements (CSBMs) and for raising the Bristol Stool Form Scale (BSFS) score. Acupuncture appeared to be superior to anti-constipation drugs for improving weekly spontaneous bowel movements, the total effective rate, and the Patient Assessment of Constipation Quality of Life score. Although ten SRs mentioned the occurrence of adverse events, serious adverse events were not associated with acupuncture treatment.

Conclusion	Acupuncture may be more efficacious than sham acupuncture for improving CSBMs and BSFS scores and may be superior to anti-constipation drugs for improving bowel movement frequency, as well as quality of life. Limitations to current studies and inconsistent evidence suggest a need for more rigorous and methodologically sound SRs to draw definitive conclusions.

3. Clinical Practice Guidelines / Recommandations de bonne pratique

⊕ positive recommendation (regardless of the level of evidence reported)
Ø negative recommendation (or lack of evidence)

3.1. American Gastroenterological Association (AGA, USA) 2026 ⊕

Staller K, Neshatian L, Lembo A, Bharucha AE. AGA Clinical Practice Update on Evaluation and Management of Refractory Constipation: Expert Review. Clin Gastroenterol Hepatol. 2026 Feb;24(2):296-305. https://doi.org/10.1016/j.cgh.2025.09.031

Best Practice Advice 9. Trials of adjunct, nonpharmacologic approaches including transanal irrigation for RC with neurogenic bowel dysfunction, a vibrating capsule, or **electroacupuncture** are reasonable in patients with Refractory Constipation.

3.2. Deutsche Gesellschaft für Neurogastroenterologie & Motilität (DGNM, Germany), Deutschen Gesellschaft für Gastroenterologie, Verdauungs- und Stoffwechselkrankheiten (DGVS, Germany) 2022 ⊕

Aktualisierte S2k-Leitlinie chronische Obstipation der Deutschen Gesellschaft für Gastroenterologie, Verdauungs- und Stoffwechselkrankheiten (DGVS) und der Deutsche Gesellschaft für Neurogastroenterologie & Motilität (DGNM). 2022. URL

Recommendation 11-1. Acupuncture procedures (acupuncture, acupressure, moxibustion, ear acupuncture, electroacupuncture) can be used in chronic constipation. [Recommendation open, Strong consensus] (2021)

3.3. Oncology Nursing Society (ONS, USA) 2020 (constipation in cancer patient) Ø

Rogers B, Ginex PK, Anbari A, Hanson BJ, LeFebvre KB, Lopez R, Thorpe DM, Wolles B, Moriarty KA, Maloney C, Vrabel M, Morgan RL. ONS Guidelines™ for Opioid-Induced and Non-Opioid-Related Cancer Constipation. Oncol Nurs Forum. 2020;47(6):671-691. [212792]. doi

Acupuncture and electroacupuncture for non-opioid-related constipation are recommended in the context of a clinical trial. No recommendation; knowledge gap

3.4. Chinese Society of Coloproctology (CSCP, Chine) 2017 ⊕

Liu B. [Interpretation of Chinese guidelines for the diagnosis and treatment of constipation surgery (2017)]. Zhonghua Wei Chang Wai Ke Za Zhi. 2017;20(12):1331-1333. [58718].

Micro ecological preparations, promoting dynamic drugs and promoting secretion drugs as well as psychological treatment and acupuncture treatment are added in non-surgical treatment of constipation

3.5. Sociedad Española de Patología Digestiva (SEPD, Espagne) 2016 Ø

- Mearin F, Ciriza C, Mínguez M, Rey E, Mascort JJ, Peña E, Cañones P, Júdez J. Clinical Practice Guideline: Irritable bowel syndrome with constipation and functional constipation in the adult. Rev Esp Enferm Dig. 2016;108(6):332-63. [98987].
- Mearin F, Ciriza C, Mínguez M, Rey E, Mascort JJ, Peña E, Cañones P, Júdez J; en nombre de la SEPD, la semFYC, la SEMERGEN y la SEMG. [Irritable bowel syndrome with constipation and functional constipation in adults: Treatment (Part 2 of 2)]. Aten Primaria. 2017;49(2):177-194. [191417].

No evidence supports recommending acupuncture to improve symptoms or quality of life in patients with IBS-C or FC.

3.6. Société Nationale Française de Colo-Proctologie (SNFCP) 2016 ⊕

- Vitton V, Damon H, Siproudhis L. Prise en charge de la constipation (texte court). Paris: Société Nationale Française de Colo-Proctologie (SNFCP). 2016. ¤4P. [49126].
- Vitton V, Damon H, Siproudhis L. Recommandations pour la pratique clinique de la prise en charge de la constipation. Paris: Société Nationale Française de Colo-Proctologie (SNFCP). 2017:232P. [167076]. doi

Les thérapies non conventionnelles dites alternatives sont toutes basées sur des essais de niveau de preuve faible avec de nombreux biais méthodologiques. Leur recours peut cependant être recommandé chez des patients en échec des traitements conventionnels (ou les refusant) en fonction du contexte ou de leur « sensibilité » et « confiance » en telle ou telle approche. (Niveau II, Grade B)

3.7. European Society for Pediatric Gastroenterology, Hepatology, and Nutrition; North American Society for Pediatric Gastroenterology 2014 Ø

Tabbers MM, DiLorenzo C, Berger MY, Faure C, Langendam MW, Nurko S, Staiano A, Vandenplas Y, Benninga MA et al. Evaluation and treatment of functional constipation in infants and children: evidence-based recommendations from ESPGHAN and NASPGHAN. J Pediatr Gastroenterol Nutr. 2014;58(2):258-74. [197571].

6.9 Alternative Medicine (Including Acupuncture, Homeopathy, Mind-Body Therapy, Musculoskeletal Manipulations Such As Osteopathic and Chiropractic and Yoga) No RCTs were found.
Based on expert opinion, we do not recommend the use of alternative treatments in childhood constipation.

3.8. Société Nationale Française de Gastroentérologie (SNFGE) 2007 Ø

Piche T et al. Recommandations pour la pratique clinique dans la prise en charge et le traitement de la constipation chronique de l'adulte. Gastroenterol Clin Biol. 2007; 31:125-35. [48977].

L'intérêt de l'acupuncture, de l'hypnose et des massages abdominaux n'est pas démontré (accord professionnel).