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Facial paralysis: effectiveness of acupuncture

Paralysie faciale : évaluation de l'acupuncture

Articles connexes: - conduites thérapeutiques - pathologie - acupuncture expérimentale - qigong -

1. Systematic Reviews and Meta-Analysis

1.1. Generic Acupuncture

1.1.1. Shi 2022 (Network Meta-Analysis)

Shi J, Lu D, Chen H, Shu M, Xu Y, Qian J, Ouyang K, Huang H, Luo Z, Wang C, Zhang Y. Efficacy and Safety of Pharmacological and Physical Therapies for Bell's Palsy: A Bayesian Network Meta-Analysis. Front Neurol. 2022 Apr 18;13:868121. https://doi.org/10.3389/fneur.2022.868121

Objective	The objective was to comprehensively assess the efficacy and safety of all pharmacological and physical treatments (short-term, ≤ 1 month) for patients with acute Bell's palsy.
Methods	The electronic databases PubMed, Web of Science, Embase, Cochrane Library, and CNKI were searched for the randomized controlled trials comparing two or more regimens in patients with the Bell's palsy to be included in a Bayesian network meta-analysis. Odds ratios and CIs for the primary outcome of the House-Brackmann scale and secondary outcomes of sequelae (synkinesis and crocodile tears) and adverse events were obtained and subgroup analyses of steroids and antivirals were conducted.
Results	A total of 26 studies representing 3,609 patients having undergone 15 treatments matched our eligibility criteria. For facial recovery, **acupuncture plus electrical stimulation**, steroid plus antiviral plus Kabat treatment, and steroid plus antiviral plus electrical stimulation were the top three options based on analysis of the treatment ranking (probability = 84, 80, and 77%, respectively). Steroid plus antiviral plus electrical stimulation had the lowest rate of sequelae but were more likely to lead to mild adverse events. Subgroup analysis revealed that methylprednisolone and acyclovir were likely to be the preferred option.
Conclusions	This network meta-analysis indicated that combined therapies, especially steroid plus antiviral plus Kabat treatment, were associated with a better facial function recovery outcome than single therapy. Other physical therapies, such as **acupuncture plus electrical stimulation**, may be a good alternative for people with systemic disease or allergies. More high-quality trials of physical regimens are needed in the future.

1.1.2. Zou 2021

Zou Z. Comparison of Efficacy and Safety of Acupuncture and Moxibustion in Acute Phase and Non-acute Phase of Bell's Palsy: a meta-analysis. Neuro Endocrinol Lett. 2021 Nov 30;42(7):438-445. https://www.nel.edu/userfiles/articlesnew/1652381851_42_7_zou_438-pdf.pdf

Objective	To evaluate the efficacy and safety of acupuncture and moxibustion for bell's palsy in the acute phase compared with the non-acute phase.
Methods	Computer retrieval of PubMed, Embase, The Cochrane Library, Web of Science, China National Knowledge Internet (CNKI), Wanfang data, were conducted. According to the inclusion and exclusion criteria, the quality of literature was evaluated, and useful data was extracted. All statistical analyses were performed by RevMan5.3 software.
Results	**17 eligible RCTs** with a total of **2644 patients** were included in this meta-analysis. The meta-analysis results demonstrated the cure rate of acupuncture and moxibustion for Bell's palsy in the acute phase were lower than that in the non-acute phase (P<0.05). The time to cure of acupuncture and moxibustion for Bell's palsy in the acute phase was shorter than that in the non-acute phase (P<0.05), and the incidence of sequelae during the treatment period of acupuncture and moxibustion for Bell's palsy in the acute phase were lower than that in non-acute phase (P<0.05).
Conclusions	Acupuncture and moxibustion were safe and effective stimulation for Bell's palsy in the acute phase compared with the non-acute phase, improving the cure rate of Bell's palsy, shorten the time to cure, and reduce the occurrence of sequelae. However, more multicenter RCTs with a large sample number and high quality should verify the conclusion mentioned above.

1.1.3. Zhang 2019 ☆

Zhang R, Wu T , Wang R , Wang D , Liu Q. Compare the efficacy of acupuncture with drugs in the treatment of Bell's palsy: A systematic review and meta-analysis of RCTs. Medicine (Baltimore). 2019;98(19). [197970].

Background	Bell's palsy or idiopathic facial paralysis is an acute facial paralysis caused by the inflammation of facial nerve. Several previous studies showed that acupuncture was beneficial in the treatment of facial paralysis. However, its effectiveness is still controversial compared with drug therapy. Therefore, this systematic review and meta-analysis was performed to assess the efficacy of acupuncture for Bell's palsy.
Methods	This is a systematic review and meta-analysis of clinical studies among patients with Bell's palsy. We did a systematic literature search in PubMed, Embase, and the Cochrane Register of Controlled Trials to identify studies comparing the efficacy of acupuncture and drug treatment in treating facial paralysis. The search was last updated on July 2018.
Results	The study included **11 randomized controlled trials** with an overall sample of **1258 individuals**. Acupuncture treatment was associated with an increased cure rate [relative risk (RR) =1.77, 95% confidence interval (CI): 1.41–2.21], with significant heterogeneity in the pooled results (I2 =67%, P =.0008). There was a significant difference in total effective rate in acupuncture and drug treatment for Bell's palsy (RR =1.18,95% CI: 1.07–1.31), with substantial heterogeneity (I2 =90%, P<.00001).
Conclusion	Although there was not enough evidence to prove its safety, acupuncture seems to be an effective therapy for Bell's palsy. Results of the present meta-analysis showed that acupuncture was associated with increased cure rate and total effective rate of the treatment of Bell's palsy in comparison with drugs. However, the results should be interpreted cautiously, because of the poor quality and heterogeneity of the included studies. In the future, more and more high quality randomized controlled trials (RCT) are needed to prove the safety and effectiveness of acupuncture.

1.1.4. Li 2015 ☆

Li Jia ,Sun Zhong-Ren , Wei Qing-Shuang , Wei Yan-Bo. [System evaluation of the clinical literature of peripheral facial paralysis acupuncture treatment] Journal of Clinical Acupuncture and Moxibustion. 2015;31 (10):64. [187685].

Objective	To do the clinical evaluation in the last decade for acupuncture treatment of peripheral facial paralysis.
Methods	Article data, CNKI, VIP database were retived, and the retrieval deadline was to 201 5. A total of 1 46 retrieved relevant literatures were involved, and choose 28 met the inclusion criteria by Jadad rating scale for inclusion in the systematic review literature.
Results	The clinical efficacy of acupuncture treatment on peripheral facia1 para1ysis was 28 final documents. From the study, acupuncture treatment for peripheral facial paralysis had a clinical efficacy, and the acupuncture for the treatment of peripheral facial paralysis had a positively affirmative action, and had not found adverse reactions or side effects, with high security.
Conclusion	The clinical efficacy of acupuncture treatment on peripheral facial paralysis was significant and stable. However, the overall poor quality literatures reduce the credibility of this conclusion. Therefore, in the future we still need to carry out more high -quality, authentic trials to prove the clinical efficacy of acupuncture treatment on peripheral facial paralysis.

1.1.5. Yang 2015 ☆

Yang Lifan, Luo Yan, Zheng Jinghui. [Systematic review and meta-analysis in effect of acupuncture combined westem medicine on treating Bell’s palsy]. Journal of Practical Traditional Chinese Internal Medicine. 2015;6:4-7. [187015].

Objectives	It is positive to effect of acupuncture or westem medicine on treating Bell’s palsy. To evaluate effect of acupuncture combined westem medicine on treating Bell’s palsy.
Methods	Datebase had been retrieved from creating of database to October 2014 year in CNKI Data, VIP Data, Wan Fang Data, Pub Med Data, and Cochrane library. At the same time, researching references of randomized controlled trials in subject word and random word. [Selection Criteria] (i)languages belong to Chinese or English of randomized controlled trials (RCT). [Object of Study] the study besides Different age and sex was accepted if it was accorded with diagnostic criteria of Bell’s Palsy. (ii)Intervening Measures: the treatment group was given with acupuncture or westem medicines, the control group was given only to westem. (iii)Outcomes: Clinical Performance Indicators of trials. Data Collection and Analyses: Literatures of homogeneity were strictly filtrated and evaluated through two authors independently according to Selection criteria. literatures of divergence were comed to an agreement by discussion. data were extracted with tables that include sample size, sex, age, course of treatment, intervening measures, and criterion of therapeutical effect and so on.
Results	**Three literatures of two scores and one literature of three scores** were evaluated with JADAD table. the former was analysed quantitatively and the later was analysed qualitatively. Bell’s Palsy was healed completely well (P=0. 01<0. 05), and had marked effect (P=0. 77>0. 05), and had effect (P=0. 25>0. 05) by treating of acupuncture compared with simplex westem medicine. However, comparing acupuncture combined westem medicine with simplex westem medicine. Bell’s Palsy was healed completely well (P=0. 05), and had marked effect (P=0. 009<0. 05), and had effect (P=0. 02<0. 05).

Conclusions	The **recovered effect of acupuncture compared with simplex western medicine was better**, and obvious effect or effective effect was equal. Moreover, it was **better to the obvious effect and effective effect of acupuncture combined western medicine compared with simplex westem medicine**, and the recovered effect was equal. [Questions and Outlooks] The inclusion literatures is low quality, and less quantity. the results need more randomized controlled trials of high-quality and large-scale samples to sustain it.

1.1.6. Li 2015 ☆

Li P, Qiu T, Qin C. Efficacy of Acupuncture for Bell's Palsy: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. PLoS One. 2015. [186610].

Objectives	Acupuncture has emerged as an alternative therapy for Bell's palsy in both adults and children. However, the use of acupuncture is controversial.
Methods	We conducted a systematic review and meta-analysis to assess the efficacy of acupuncture for Bell's palsy. We searched PubMed, Embase, and the Cochrane Central Register of Controlled Trials, irrespective of any language restrictions. Randomized controlled trials comparing acupuncture with other therapies for Bell's palsy in adults or children were included.
Results	**Fourteen randomized controlled trials involving 1541 individuals** were included in this meta-analysis. Significant association was observed in acupuncture with a higher effective response rate for Bell's palsy (relative risk, 1.14; 95% confidence interval, 1.04-1.25; P = 0.005) but there was a heterogeneity among the studies (I2 = 87%). An assessment of the included studies revealed a high risk of bias in methodological quality. An evaluation of the incidence of complications was not available, owing to incomplete data.
Conclusions	Acupuncture seems to be an effective therapy for Bell's palsy, but there was insufficient evidence to support the efficacy and safety of acupuncture. However, the results should be interpreted cautiously, because of the poor quality and heterogeneity of the included studies.

1.1.7. Wang 2014 ☆☆

Wang Li-Fen, Qu Xiao-Xiao, Huang Li-Ping, Dong Qi. [Efficacy study on the treatment of peripheral facial paralysis based on strong evidence support]. World Journal of Integrated Traditional and Western Medicine. 2014;2. [187066].

Objectives	By collecting and analyzing the clinical literatures on the treatment of peripheral facial paralysis with acupuncture and moxibustion, the modified Jadad scale evaluation was adopted to study the quality of literatures on therapeutic effect. The credibility was increased on the study results by selecting high- quality literatures. The recommended grades with acupuncture- moxibustion evidences were applied so as to determine evidence grade and guide clinical application.
Methods	With the overall literature retrieval, all of the included literatures were on randomized controlled trial (RCT). With RevMan 5. 0 software adopted, Meta-analysis was performed on the efficacy evaluation such as curative rate.
Results	According to the guideline on facial paralysis, **4 high-quality studies were included**. With Meta-analysis, the present high-quality literatures proved that acupuncture and moxibustion therapy had the advantages on the clinical curative rate in the treatment of peripheral facial paralysis as compared with hormones [RR merge = 1. 60, 95% CI (1. 29, 1. 98), P < 0. 0001].

Conclusions	The **evidences of high-quality literatures support that acupuncture and moxibustion therapy has the superior clinical curative rate as compared with hormones in treatment of peripheral facial paralysis**. This therapy deserves to promote extensively in clinical application.

1.1.8. Lee 2013 (Korean Literature) Ø

Cham Kyul Lee. [Acupuncture Trials for Peripheral Facial Palsy in Republic of Korea: A Systematic Review]. Journal of Korean Acupuncture and Moxibustion Society. 2013;30(3):51-59. [146967].

Objectives	This study was designed to evaluate clinical evidence of acupuncture treatment for peripheral facial palsy in South Korea.
Methods	All process was independently proceeded by two investigators. Literature search was performed in 9 databases from their inception to February 2013. Searched reports was twice excluded for title, abstract and body. And then, data extract and analysis was done before assessing risk of bias by Cochrane Handbook.
Results	**10 randomized controlled trials(RCT)** were finally included. 4 RCT handled postauricular pain with facial palsy. All articles at least used in combination with two treatments. Interventions like pharmacopuncture, electroacupuncture, scalp acupuncture etcetera were conducted as treatment to evaluate efficacy, and some study reported advantageous effects of treatment group compared to baseline or control group. Adverse events didn’t referd to in any studies. In assessing risk of bias, indefinite and uncertain information made all included trials to have a high risk of bias.
Conclusions	Because of methodological deficit, **there is no sufficient evidence** to allow any conclusion about the efficacy of acupuncture for peripheral facial palsy. Therefore, well designed trials with high quality is needed from now on.

1.1.9. Kim 2012 ☆

Kim JI, Lee MS, Choi TY, Lee H, Kwon HJ. Acupuncture for Bell's palsy: A systematic review and meta-analysis.Chin J Integr Med. 2012 Jan;18(1):48-55. [117482]

Objectifs	To assess the clinical evidence for and against acupuncture as a treatment for Bell's palsy.
Méthodes	We conducted a literature search of 15 databases from their inception to December 2010 without language restrictions. We included all randomized clinical trials (RCTs) regardless of their controls. Methodological quality was evaluated using the Cochrane risk of bias assessment tool.
Résultats	Of the 3 474 articles, only eight RCTs met our inclusion criteria. Four RCTs tested the effects of acupuncture against drug therapy on disease response rate. The meta-analysis of these data showed significant improvements in the acupuncture group [n=463, risk ratio (RR)=1.07, 95% CI: 1.02 to 1.13; P=0.006, I(2)=0%]. Six RCTs tested the effects of acupuncture plus drug therapy versus drug therapy alone. The meta-analysis of this set of RCTs also showed the favorable effects of acupuncture on disease response rate (n=512, RR=1.11, 95% CI: 1.05 to 1.17; P=0.001, I(2)=13%).
Conclusions	The evidence supporting the effectiveness of acupuncture for treating Bell's palsy is limited. The number and quality of trials are too low to form firm conclusions. Further rigorous RCTs are warranted but need to overcome the many limitations of the current evidence.

1.1.10. Chen 2012 ☆

Chen Lu, Li Suhe, Zeng Xiayi. [Systematic review of efficacy and safety of acupuncture for acute Bell's facial paralysis]. Journal of Traditional Chinese Medicine. 2012;53(22):1921-192. [187020].

Objectives	To evaluate the efficacy and safety of acupuncture for acute Bell's facial paralysis.
Methods	The articles on relevant randomized controlled trials of acupuncture for acute Bell's facial paralysis were searched in the Cochrane Library, MEDLINE, EMBASE, Chinese Biomedicine Database (CBM), China National Knowledge Internet (CNKI)and VIP database. The risk of bias was evaluated with Cochrane reviews handbook 5. 0and the efficacy was analyzed based on metaanalysis with Review Manage 5. 0software.
Results	Totally **17 articles and 1 564 cases** were included. The articles existed a high risk of bias with low quality. There was no significant difference in efficacy between acupuncture and western medicine (RR=1. 16, 95%CI [0. 93, 1. 45], Z=1. 28, P=0. 20>0. 05). The **efficacy of acupuncture combined with western medicine was superior to that of simple western medicine** (RR=1. 25, 95%CI [1. 08, 1. 46], Z=2. 91, P=0. 004<0. 05). The efficacy of acupuncture was superior to that of TDP irradiation (RR=1. 67, 95%CI [1. 21, 2. 31], Z=3. 15, P=0. 002<0. 05). No reports on side-effect were described in 17articles.
Conclusions	As a safe and effective therapy, **acupuncutre should be applied in treatment of Bell's facial paralysis in acute stage**, and **combination of acupuncture and western medicine may improve the efficacy**. More high-quality evidences are needed.

1.1.11. Teixeira 2011 Ø

Teixeira LJ, Valbuza JS, Prado GF. Physical therapy for Bell's palsy (idiopathic facial paralysis). Cochrane Database Syst Rev. 2011. [165537].

Objectives	Bell's palsy (idiopathic facial paralysis) is commonly treated by various physical therapy strategies and devices, but there are many questions about their efficacy. OBJECTIVES: To evaluate physical therapies for Bell's palsy (idiopathic facial palsy).
Methods	SEARCH METHODS: We searched the Cochrane Database of Systematic Reviews and the Cochrane Central Register of Controlled Trials (The Cochrane Library, Issue 1, 2011), MEDLINE (January 1966 to February 2011), EMBASE (January 1946 to February 2011), LILACS (January 1982 to February 2011), PEDro (from 1929 to February 2011), and CINAHL (January 1982 to February 2011). We included searches in clinical trials register databases until February 2011. SELECTION CRITERIA: We selected randomised or quasi-randomised controlled trials involving any physical therapy. We included participants of any age with a diagnosis of Bell's palsy and all degrees of severity. The outcome measures were: incomplete recovery six months after randomisation, motor synkinesis, crocodile tears or facial spasm six months after onset, incomplete recovery after one year and adverse effects attributable to the intervention. DATA COLLECTION AND ANALYSIS: Two authors independently scrutinised titles and abstracts identified from the search results. Two authors independently carried out risk of bias assessments, which , took into account secure methods of randomisation, allocation concealment, observer blinding, patient blinding, incomplete outcome data, selective outcome reporting and other bias. Two authors independently extracted data using a specially constructed data extraction form. We undertook separate subgroup analyses of participants with more and less severe disability.

Results	For this update to the original review, the search identified 65 potentially relevant articles. **Twelve studies met the inclusion criteria (872 participants)**. Four trials studied the efficacy of electrical stimulation (313 participants), three trials studied exercises (199 participants), and five studies compared or combined some form of physical therapy with acupuncture (360 participants). For most outcomes we were unable to perform meta-analysis because the interventions and outcomes were not comparable.For the primary outcome of incomplete recovery after six months, electrostimulation produced no benefit over placebo (moderate quality evidence from one study with 86 participants). Low quality comparisons of electrostimulation with prednisolone (an active treatment)(149 participants), or the addition of electrostimulation to hot packs, massage and facial exercises (22 participants), reported no significant differences. Similarly a meta-analysis from two studies, one of three months and the other of six months duration, (142 participants) found no statistically significant difference in synkinesis, a complication of Bell's palsy, between participants receiving electrostimulation and controls. A single low quality study (56 participants), which reported at three months, found worse functional recovery with electrostimulation (mean difference (MD) 12.00 points (scale of 0 to 100) 95% confidence interval (CI) 1.26 to 22.74).Two trials of facial exercises, both at high risk of bias, found no difference in incomplete recovery at six months when exercises were compared to waiting list controls or conventional therapy. There is evidence from a single small study (34 participants) of moderate quality that exercises are beneficial on measures of facial disability to people with chronic facial palsy when compared with controls (MD 20.40 points (scale of 0 to 100), 95% CI 8.76 to 32.04) and from another single low quality study with 145 people with acute cases treated for three months where significantly fewer participants developed facial motor synkinesis after exercise (risk ratio 0.24, 95% CI 0.08 to 0.69). The same study showed statistically significant reduction in time for complete recovery, mainly in more severe cases (47 participants, MD -2.10 weeks, 95% CI -3.15 to -1.05) but this was not a prespecified outcome in this meta analysis. **Acupuncture studies did not provide useful data as all were short and at high risk of bias**. None of the studies included adverse events as an outcome.
Conclusions	There is no high quality evidence to support significant benefit or harm from any physical therapy for idiopathic facial paralysis. There is low quality evidence that tailored facial exercises can help to improve facial function, mainly for people with moderate paralysis and chronic cases. There is low quality evidence that facial exercise reduces sequelae in acute cases. The suggested effects of tailored facial exercises need to be confirmed with good quality randomised controlled trials

1.1.12. Chen 2010 Ø

Chen N, Zhou M, He L, Zhou D, Li N. Acupuncture for bell's palsy. Cochrane Database Syst Rev. 2010. [160296].

Background	Bell's palsy or idiopathic facial palsy is an acute facial paralysis due to inflammation of the facial nerve. A number of studies published in China have suggested acupuncture is beneficial for facial palsy.
Objectives	The objective of this review was to examine the efficacy of acupuncture in hastening recovery and reducing long-term morbidity from Bell's palsy.

Methods	Search strategy: We updated the searches of the Cochrane Neuromuscular Disease Group Trials Specialized Register (24 May 2010), The Cochrane Central Register of Controlled Trials (CENTRAL) (Issue 2, 2010), MEDLINE (January 1966 to May 2010), EMBASE (January 1980 to May 2010), AMED (January 1985 to May 2010), LILACS (from January 1982 to May 2010) and the Chinese Biomedical Retrieval System (January 1978 to May 2010) for randomised controlled trials using 'Bell's palsy' and its synonyms, 'idiopathic facial paralysis' or 'facial palsy' as well as search terms including 'acupuncture'. Chinese journals in which we thought we might find randomised controlled trials relevant to our study were handsearched. We reviewed the bibliographies of the randomised trials and contacted the authors and known experts in the field to identify additional published or unpublished data. Selection criteria: We included all randomised controlled trials involving acupuncture by needle insertion in the treatment of Bell's palsy irrespective of any language restrictions. Data collection and analysis: Two review authors identified potential articles from the literature search, extracted data and assessed quality of each trial independently. All disagreements were resolved by discussion between the review authors.
Main results:	The literature search and handsearching identified 49 potentially relevant articles. Of these, **six RCTs were included involving 537 participants** with Bell's palsy. Two more possible trials were identified in the update than the previous version of this systematic review, but both were excluded because they were not real RCTs. Of the six included trials, five used acupuncture while the other one used acupuncture combined with drugs. No trial reported on the outcomes specified for this review. Harmful side effects were not reported in any of the trials. Poor quality caused by flaws in study design or reporting (including uncertain method of randomisation, allocation concealment and blinding) and clinical differences between trials prevented reliable conclusions about the efficacy of acupuncture.
Authors' conclusions	The quality of the included trials was inadequate to allow any conclusion about the efficacy of acupuncture. More research with high quality trials is needed.

1.1.13. Zhou 2009 Ø

Zhou M, He L, Zhou D, Wu B, Li N, Kong S, Zhang D, Li Q, Yang J, Zhang X. Acupuncture for Bell's Palsy. J Altern Complement Med. 2009;15(7):759-64. [160392].

Objectives	The objectives of this study were to examine the efficacy of acupuncture in hastening recovery and reducing long-term morbidity from Bell's palsy.
Methods	We searched the Cochrane Neuromuscular Disease Group Trials Register, MEDLINE (January 1966-April 2006), EMBASE (January 1980-April 2006), LILACS (January 1982-April 2006), and the Chinese Biomedical Retrieval System (January 1978-April 2006) for randomized controlled trials using “Bell's palsy” and its synonyms, “idiopathic facial paralysis” or “facial palsy” as well as search terms including “acupuncture.” Chinese journals in which we thought we might find randomized controlled trials or controlled clinical trials relevant to our study were hand searched. We reviewed the bibliographies of the randomized trials and contacted the authors and known experts in the field to identify additional published or unpublished data. We included all randomized or quasi-randomized controlled trials involving acupuncture in the treatment of Bell's palsy, irrespective of any language restrictions. Two review authors identified potential articles from the literature search and extracted data independently using a data extraction form. The assessment of methodological quality included allocation concealment, patient blinding, differences at baseline of the experimental groups, and completeness of follow-up. Two (2) review authors assessed quality independently. All disagreements were resolved by discussion between the review authors.

Results	**Six (6) studies including a total of 537 participants** met the inclusion criteria. Five (5) of them used acupuncture while another one used acupuncture combined with drugs. No trials reported on the outcomes specified for this review. Harmful side-effects were not reported in any of the trials. Flaws in study design or reporting (particularly uncertain allocation concealment and substantial loss to follow-up) and clinical differences between trials prevented conclusions about the efficacy of acupuncture.
Conclusions	The quality of the included trials was inadequate to allow any conclusion about the efficacy of acupuncture. More research with high-quality trials is needed.

1.1.14. He 2007 Ø

He L, Zhou M, Zhou D, Wu B, Li N, Kong S, Zhang D, Li Q, Yang J, Zhang X. Acupuncture for bell's palsy. Cochrane Database Syst Rev. 2007. 4:CD002914. [146971].

Background	Bell's palsy or idiopathic facial palsy is an acute facial paralysis due to inflammation of the facial nerve. A number of studies published in China have
Objectives	The objective of this review was to examine the efficacy of
Methods	Search strategy: We searched the Cochrane Neuromuscular Disease Group Trials Register, MEDLINE (January 1966 to April 2006), EMBASE (January 1980 to April 2006), LILACS (from January 1982 to April 2006) and the Chinese Biomedical Retrieval System (January 1978 to April 2006) for randomised controlled trials using 'Bell's palsy' and its synonyms, 'idiopathic facial paralysis' or 'facial palsy' as well as search terms including 'acupuncture'. Chinese journals in which we thought we might find randomised controlled trials or controlled clinical trials relevant to our study were handsearched. We reviewed the bibliographies of the randomised trials and contacted the authors and known experts in the field to identify additional published or unpublished data. Selection criteria: We included all randomised or quasi-randomised controlled trials involving acupuncture in the treatment of Bell's palsy irrespective of any language restrictions. Data collection and analysis: Two review authors identified potential articles from the literature search and extracted data independently using a data extraction form. The assessment of methodological quality included allocation concealment, patient blinding, differences at baseline of the experimental groups and completeness of follow-up. Two review authors assessed quality independently. All disagreements were resolved by discussion between the review authors.
Main results:	**Six studies including a total of 537 participants** met the inclusion criteria. Five of them used acupuncture while another one used acupuncture combined with drugs. No trials reported on the outcomes specified for this review. Harmful side effects were not reported in any of the trials. Flaws in study design or reporting (particularly uncertain allocation concealment and substantial loss to follow-up) and clinical differences between trials prevented conclusions about the efficacy of
Authors' conclusions	The quality of the included trials was inadequate to allow any conclusion about the efficacy of acupuncture. More research with high quality trials is

1.1.15. He 2005 Ø

He Li, Zhou Mu Ke, Zhou Dong, Li Ning, Wu Bin. [Acupuncture for Bell’s Palsy: A Systematic Review]. Chinese Journal of Evidence-Based Medicine. 2005;5(2):106-9. [144697]

Objectives	To examine the efficacy of acupuncture in hastening recovery and reducing long-term morbidity from Bell’s palsy.

Methods	We searched the Cochrane Neuromuscular Disease Group Register Group (Till Feb. 2002), MEDLINE (Jan. 1966 to Dec. 2002); EMBASE (Jan. 1980 to Dec. 2002), LILACS (Jan. 1982 to Dec. 2002) and Chinese Biomedical Retrieval System (Jan. 1978 to Dec. 2002). We also searched grey literature. We identified all randomised or quasi-randomised controlled trials involving acupuncture in the treatment of Bell's palsy, selected the trials ment the inclusion criteria, assessed the methodological quality, extracted data on trials' patients, interventions, outcome measurements and results and undertook analysis.
Results	Three small randomised controlled trials were included but due to some flaws in study designs or reporting and clinical differences between trials, data from trials were not combined in a meta-analysis□and a descriptive analysis was performed.The result indicated a **positive effect of acupuncture** (all P<0.01).
Conclusions	Three small studies in this review suggested a beneficial effect but the poor quality of the trials precludes us from drawing firm conclusions. There is a need for high quality randomized controlled trials (RCTs) using a study design which assures high internal validity.

1.1.16. He 2004 Ø

He L, Zhou D, Wu B, Li N, Zhou MK. Acupuncture for bell's palsy. The Cochrane Database of Systematic Reviews. 2004. [141318].

Background	Bell's palsy or idiopathic facial palsy is an acute facial paralysis due to inflammation of the facial nerve. A number of studies published in China have suggested acupuncture is beneficial for facial palsy.
Objectives	The objective of this review was to examine the efficacy of acupuncture in hastening recovery and reducing long-term morbidity from Bell's palsy.
Methods	Search strategy We searched the Cochrane Neuromuscular Disease Group Register, MEDLINE (January 1966 to December 2002), EMBASE (January 1980 to December 2002), LILACS (from January 1982 to December 2002) and the Chinese Biomedical Retrieval System (January 1978 to December 2002) for randomised controlled trials using 'Bell's palsy' and its synonyms, 'idiopathic facial paralysis' or 'facial palsy' as well as search terms including 'acupuncture'. Chinese journals in which we thought we might _nd randomised controlled trials or controlled clinical trials relevant to our study were hand searched. We reviewed the bibliographies of the randomised trials and contacted the authors and known experts in the field to identify additional published or unpublished data. Selection criteria We included all randomised or quasi-randomised controlled trials involving acupuncture in the treatment of Bell's palsy irrespective of any language restrictions. Data collection and analysis Two reviewers identified potential articles from the literature search and extracted data independently using a data extraction form. The assessment of methodological quality included allocation concealment, patient blinding, differences at baseline of the experimental groups and completeness of follow-up. Two reviewers assessed quality independently. All disagreements were resolved by discussion between the reviewers.
Main results	Three studies including a total of 288 patients met the inclusion criteria. Two of them used acupuncture while the third used acupuncture combined with drugs. No trials reported on the outcomes specified for this review. Three included studies showed that the therapeutic effect of acupuncture alone was superior to that of medication or that acupuncture combined with medication was better than medication alone. Harmful side-effects were not reported in any of the trials. Flaws in study design or reporting (particularly uncertain allocation concealment and substantial loss to follow-up) and clinical differences between trials prevented a meta-analysis.

Authors' conclusions	The quality of the included trials was inadequate to allow any conclusion about the efficacy of acupuncture. More research with high quality trials is needed.

1.2. Special Acupuncture Techniques

1.2.1. Contralateral Needling

1.2.1.1. Wu 2018 (vs ipsilateral needling)

Wu Bi-Wen , Yao Wen , Zhang Jiang-Song , et al. [Meta-analysis of the Clinical Efficacy of Contralateral Needling in Treating Acute-stage Peripheral Facial Paralysis]. Shanghai Journal of Acupuncture and Moxibustion. 2018;37(3):338. [188147].

Objective	To compare the clinical efficacy between contralateral needling and homolateral (the affected side) needling in treating acute-stage peripheral facial paralysis by using systematic evaluation.
Method	By computer and manual retrieval, literatures about clinical trials on contralateral needling in treating acute-stage peripheral facial paralysis published before March of 20 1 7 were collected from China National Knowledge Infrastructure (CNKI), WanFang database, Vip database, China Biology Medicine disc (CBMdisc), Pubmed, Web of Science, Embase and The Cochrane Library. By adopting the Cochrane systematic evaluation, the collected data underwent meta-analysis by using RevMen 5.3 software.
Result	A total of 276 articles were retrieved and 1 1 articles were finally recruited, including 761 patients with acute-stage facial paralysis, 394 cases treated by contralateral needling and 367 by homolateral needling. The meta-analysis showed that contralateral needling produced more significant effective rate and recovery rate than homolateral needling [effective rate: RR=1.06, 95%CI(1.01,1.11), Z=2.32, P=O.02; recovery rate: RR=1.53, 95%CI(1.31,1.78), Z=5.42, P=C0.01]. Moreover, contralateral needling produced a better effect in improving facial nerve function, showing an advantage in ameliorating facial movement [HB: WMD=0.26, 95%CI(0.04,0.48), Z=2.34, P=0.02; FDIP: WMD=3.77, 95%CI(1.53,6.01), Z=3.30, P<0.01].
Conclusion	Contralateral needling is worth applying in treating acute-stage peripheral facial paralysis. However, due to the small amount and unsatisfactory quality of the recruited literatures in this systematic evaluation, multiple-centered randomized trials with high quality and large sample size are expected for further verification.

1.2.2. Acupoint embedding

1.2.2.1. Guo 2025

Guo X, Zai F, Tang X, Deng Y, Cheng J. Effectiveness and safety of acupoint embedding therapy for treating intractable facial paralysis: A systematic review and meta-analysis. Complement Ther Med. 2025 Mar 11:103162. https://doi.org/10.1016/j.ctim.2025.103162

Objective	Limited systematic reviews have explored the impact of acupoint embedding (AE) therapy on intractable facial paralysis (IFP). This review presents the current evidence on the efficacy and safety of AE therapy in the treatment of IFP.

Methods	PubMed, Embase, Cochrane Library, Web of Science, Chinese Biomedical Literature Database, VIP Database for Chinese Technical Periodicals, China National Knowledge Infrastructure, and Wanfang databases were systematically searched from inception to February 2024 to identify randomized controlled trials (RCTs) without language restrictions. Data extraction and analysis were independently conducted by two reviewers. The Risk of Bias was assessed using the Risk of Bias tool (version 2.0), and a meta-analysis was performed using the RevMan software (V5.4).
Results	Eighteen RCTs involving 1881 patients were included in the analysis. AE therapy demonstrated a higher total effective rate (relative risk [RR]: 1.28; 95% confidence interval [CI]: 1.13-1.44; P < 0.0001), cure rate (RR: 1.81; 95% CI: 1.05-3.12; P = 0.03), and facial nerve function score (standardized mean differences [SMD]: 1.57; 95% CI: 1.16-1.99; P < 0.00001) compared to that of manual acupuncture. Additionally, AE therapy showed a higher total effective rate (RR: 1.16; 95% CI: 1.10-1.22; P < 0.00001) and cure rate (RR: 1.70; 95% CI: 1.46-1.98; P < 0.00001) in comparison to that of electroacupuncture. However, there were no significant differences in facial nerve function scores(SMD:2.04; 95% CI: -1.25-5.32; P = 0.22) or adverse reactions(RR: 1.16; 95% CI: 0.35-3.78; P = 0.81) between AE therapy and electroacupuncture therapy. Evidence supporting the efficacy and safety of AE treatment is also insufficient.
Conclusion	Most of the included studies indicated that AE therapy was more effective than MA/EA therapy for IFP. However, the quality of evidence for the majority of these studies was low, and all were conducted in China, where limited information has been reported regarding the safety of AE therapy.

1.2.3. Moxibustion

1.2.3.1. Yan 2018

Yan Miao-Miao, He Jun. [The meta-analysis of clinical efficacy of the moxibustion for intractable facial paralysis]. Lishizhen Medicine and Materia Medica Research. 2018;(8):. [182016].

Objective	To assess the clinical curative effect of moxibustion for intractable facial paralysis with evidence-based medicine method, in order to provide strong evidence for the clinical treatment of intractable facial paralysis.
Methods	Computer retrieval of full-text database before October 1, 2017, including Cochrane Library, CNKI, CMB, VIP, WANFANG DATA and Pubmed. Meta-analysis was conducted on randomized controlled trials(RCT) or half-randomized controlled trial which met the enrolling requirements. Using Review Manager 5. 3 software to evaluate the research methodology of included literatures and bias risk, at the same time to conduct meta-analysis to the main outcome measure(cure rate and obvious effective rate) and secondary outcome measures(House-Brackmann facial nerve function rating and incidence of facial paralysis sequelae).
Results	A total number of 11 papers involving 984 patients were included. The result show that the treatment group was more effective than the control group, OR = 3. 77, 95% CI was [2. 66, 5. 35], the combined effect test Z = 7. 45, with statistical significance(P <0. 00001); Treatment group improved House-Brackmann facial nerve function classification better than that of control group, heterogeneity test χ~2= 1. 98, P = 0. 16, I2= 50%, choose fixed effects model, MD = 0. 96, 95% CI was [1. 05, 0. 86], the combined effect quantity inspection Z = 19. 05, the difference was statistically significant(P < 0. 00001); The incidence of facial paralysis sequelae in the treatment group was better than that in the control group, OR = 0. 42, 95% CI was [0. 17, 1. 03], Z = 1. 89, P = 0. 06, difference was statistical significance.

Conclusion	The effect of moxibustion has better treatment of intractable facial paralysis, which can effectively improve the House-Brackmann grade of facial nerve function and reduce the incidence of facial paralysis sequelae. However, due to the small quantity and low quality of included studies, more high-quality clinical studies are needed to validate the result.

1.2.3.2. Chen 2016 ☆☆

Chen Xin Yu, Wu Zhi-Yan , Zhang Shi-Ying et al. [Systematic Review of the Curative Effect of Heat - sensitive Moxibustion Treatment on Facial Paralysis] Journal of Clinical Acupuncture and Moxibustion. 2016;32(10):61. [188520].

Objective	To systematically assess the clinical effect of heat sensitive moxibustion (HSM) treatment on facial paralysis.
Methods	Log in PubMed, EMbase, Cochrane Library, (NKJ, VIP, Wanfang Data Knowledge Service Platform and China Biology Medicine disc (CBM) and search the literatures relevant to FISM treatment on facial paralysis and screen and eliminate the literatures we received. Use Review Manager 5.3 software version for Meta-analysis of research literatures alter screening.
Results	The result of Meta-analysis showed that compared with the conventional therapy, the HSM had a higher explicit efficiency [OR = 3. 45,95% CI (2.22,5.35), P <0.0001]; the score of facial nerve function symptom had improved more obviously [MD = 7. 21 ,95% CI(5. 85 ,8. 57), P <0. 0001] ;Portmann score had improved more significantly [MD =3. 06,95% -0.05,6. 18), P =0. 05].
Conclusion	HSM in the treatment of facial paralysis, whether for the conventional Chinese therapy or the conventional western medicine therapy the efficiency and the improvement clinical symptoms am more obvious.

1.2.4. Fire Needle

1.2.4.1. Sun 2022

Sun CY, Yuan Y, Yan SY. [Clinical effect and safety of filiform-fire needle in treatment of peripheral facial paralysis: a Meta-analysis]. Zhen Ci Yan Jiu. 2022 Mar 25;47(3):274-81. Chinese. https://doi.org/10.10372/j.1000-0607.20210559

Objective	To systematically evaluate the clinical effect and safety of filiform-fire needle in the treatment of peripheral facial paralysis at different stages.
Methods	Articles of the randomized controlled clinical trials (RCTs) about filiform fire needle treatment of peripheral facial paralysis published from the inception of the databases of CNKI, Wanfang, VIP, SinoMed, PubMed, Embase and Cochrane Library to December 20th, 2021 were retrieved first. The Cochrane Handbook 5.1 system was used to extract data and evaluate the quality (risk of bias) of the included papers. The overall effective rate, cure rate, Sunnybrook facial nerve function score, facial disability index scale, physical and social function score and related adverse reactions were used as the outcome indicators. The RevMan5.3 software was used for heterogeneity test and Meta-analysis was performed on papers with little clinical heterogeneity.

Results	A total of eligible **9 RCTs** were included, involving **519 patients**. The results of Meta-analysis showed that: compared with the conventional acupuncture therapy, the filiform fire needle in the treatment of peripheral facial paralysis had significant advantages in raising the overall effective rate (RR=1.14, 95%CI[1.07,1.21], P<0.000 1) and cure rate (RR=1.59, 95%CI[1.29,1.97], P<0.000 1),and in improving Sunnybrook facial neurological function score (MD=17.85, 95%CI[15.72,19.97], P<0.000 01), physical function score of facial disability index scale (MD=4.16, 95%CI[3.15,5.16], P<0.000 01) and social function score (MD=2.47, 95%CI[1.53,3.41], P<0.000 01). Safety analysis showed that there was no obvious adverse reaction during the filiform fire needle therapy, and the patients' tolerance to pain had no statistical difference relevant to the conventional acupuncture treatment (P>0.05).
Conclusion	Filiform fire needle is superior to conventional acupuncture in the treatment of facial paralysis in all stages, but its reliability is limited due to fewer high-quality literature with scientific and rigorous methods and trial designs. Therefore, more large-sample and high-quality RCT studies are warranted for further verification.

1.2.5. Electroacupuncture

1.2.5.1. Zhou 2023

Zhou Y, Dong X, Xing Y, Wang R, Yang S, Han Y, Wang D. Effects of electroacupuncture therapy on intractable facial paralysis: A systematic review and meta-analysis. PLoS One. 2023 Jul 13;18(7):e0288606. https://doi.org/10.1371/journal.pone.0288606

Objective	This systematic review and meta-analysis aimed to assessment effects of electroacupuncture (EA) therapy on intractable facial paralysis.
Methods	The articles of EA treatment for intractable facial paralysis were retrieved from seven databases, the publication period was from its inception to November 30, 2022. Primary measure was the total effective rate, and other measures included the cure rate, Portmann scores, House-Brackmann scores, Sunnybrook scores and adverse events. The effect size of meta-analysis was expressed using relative risk (RR) or standardized mean difference (SMD) with 95% confidence interval (CI).
Results	A total of **18 studies with 1,119 participants** were included, all of them had various aspects of bias risk. Meta-analysis results revealed that EA ways improved total effective rate more effectively compared with non-EA counterparts (RR 1.23, 95% CI 1.17-1.31, I2 = 0%, 18 studies, 1119 participants), and improved cure rate more significantly than non-EA groups (RR 2.04, 95% CI 1.70-2.44, I2 = 0%, 18 studies, 1119 participants). None of studies reported adverse events.
Conclusion	EA therapy is more beneficial for patients with intractable facial paralysis than non-EA, but we lack sufficient evidence to evaluate its safety and follow-up effect. Therefore, more clinical trials with high quality methodologies are needed to further verify long-term effects of EA for IFP and improve the level of evidence.

1.2.5.2. Wang 2020 ☆

Wang WH, Jiang RW, Liu NC. Electroacupuncture Is Effective for Peripheral Facial Paralysis: A Meta-Analysis. Evid Based Complement Alternat Med. 2020. [208663]. doi

Objective	To explore the status of electroacupuncture (EA) among other treatments for peripheral facial paralysis (PFP).

Methods	Randomized controlled trials comparing EA with other treatments that met the eligibility criteria published in databases were included. The differences were observed and quantified through the risk ratio (RR) for dichotomous outcomes and the standardized mean difference (SMD) for continuous outcomes. Then, their 95% confidence intervals (CI) were recorded.
Results	Twenty-three studies involving 1985 participants were included. META-analysis results showed that EA was better than manual acupuncture for PFP (RR: 1.16, 95% CI 1.11 to 1.22, for responding rate; SMD: 2.26, 95% CI 0.15 to 4.37, for facial nerve function) and current promoted recovery (RR: 1.21, 95% CI 1.15 to 1.27, for responding rate; SMD: 2.87, 95% CI 1.16 to 4.58, for facial nerve function). When combined with other treatments, EA improved their effectiveness (RR: 1.19, 95% CI 1.12 to 1.28, responding rate; SMD: 1.85, 95% CI 0.67 to 3.03, facial nerve function).
Conclusion	Patients with PFP received EA (used separately or combined with other treatments) resulting in a better prognosis. However, the quality of evidence was very low-to-moderate. Considering the poor quality of evidence, we are not very confident in the results. We look forward to more research and update results in the future and improve the evidence quality.

1.2.6. Laser Acupuncture

1.2.6.1. Kim 2023

Kim JH, Goo B, Nam SS. Efficacy of Laser Therapy on Paralysis and Disability in Patients with Facial Palsy: A Systematic Review of Randomized Controlled Trials. Healthcare (Basel). 2023 Aug 29;11(17):2419. https://doi.org/10.3390/healthcare11172419. https://pubmed.ncbi.nlm.nih.gov/37685454.

Background	Facial palsy is a common health issue which leads to sequelae and disability. This systematic review aimed to assess the efficacy of laser therapy for the treatment of facial palsy.
Methods	Only randomized controlled trials comparing the effectiveness of laser therapy to non-laser intervention, no intervention, or placebo were searched for. Relevant studies were searched in seven electronic databases. Studies that examined the use of laser modalities for facial palsy management, with or without acupuncture, were also included. Two authors independently read and scored the methodological quality of the selected texts, and any disagreement was resolved by discussion or by intervention from the third author.
Results and conclusions	With five full-text articles, a methodological quality for each included study was assessed (kappa coefficient = 0.75). The laser therapy group in the mean difference measuring FDI showed an effect size of 8.15 compared to the control group; while measuring the paralysis score, an advantage was disclosed with an effect size of 0.22 compared to the control group.

1.2.7. Pharmaco-acupuncture

1.2.7.1. Xie 2020 ☆

Xie Shaohua. [Meta-analysis of Clinical Efficacy of Acupoint Injection for Treatment of Peripheral Facial Paralysis]. Journal of Guangzhou University of TCM. 2020. [212945].

Objective	To systematically evaluate the effectiveness and safety of acupoint injection for the treatment of peripheral facial paralysis.
Methods	The randomized controlled trials (RCTs)involving acupoint injection in treating peripheral facial paralysis were screened out from EMbase, PubMed, The Cochrane Library, CNKI, CBM, Wanfang Data, and VIP. And then the included studies were given assessment for the risk of bias by Cochrane handbook 5. 3. 0 RCT quality evaluation tool. Meta-analysis was carried out by RevMan 5. 3 software.
Results	A total of **8 RCTs** were included, involving **594 cases** (298 in the treatment group and 296 in the control group). Meta-analysis results showed that acupoint injection or combination with other therapies had higher effective rate and cure rate than the control group in treating peripheral facial paralysis (effective rate OR = 4. 41, 95%CI[2. 42, 8. 02], Z = 4. 85;cure rate OR = 2. 50, 95%CI[1. 73, 3. 63], Z = 4. 84), and the difference was significant (P < 0. 01); Secondly, the clinical effect of the acupoint injection group was superior to that of acupuncture group (OR = 5. 44, 95%CI[2. 37, 12. 47], Z = 4. 00), the difference being significant (P < 0. 01).
Conclusion	Acupoint injection exerts certain effects for the treatment of peripheral facial paralysis, which is of higher safety, so it is worthy of clinical popularization. However, due to the limited quality and quantity of included studies, the stability and reliability of the results still need to be treated with caution, and the conclusion still need more high-quality, well-designed and sufficient sample size RCTs to verify.

1.2.7.2. Wang 2015 ☆

Wang Li-li , Guan Ling , Hao Peng-liang , Du Jin-long, Zhang Meng-xue. Acupuncture and vitamin B12 injection for Bell's palsy: no high-quality evidence exists Neural Regeneration Research. 2015;10(5):808-13. [165334].

Objectives	To assess the efficacy of acupuncture combined with vitamin B 12 acupoint injection versus acupuncture alone to reduce incomplete recovery in patients with Bell's palsy.
Methods	A computer-based online retrieval of Medline, Web of Science, CNKI, CBM databases until April 2014 was performed for relevant trials, using the key words “Bell's palsy or idiopathic facial palsy or facial palsy” and “acupuncture or vitamin B 12 or methylcobalamin”. STUDY SELECTION: All randomized controlled trials that compared acupuncture with acupuncture combined with vitamin B 12 in patients with Bell's palsy were included in the meta-analysis. The initial treatment lasted for at least 4 weeks. The outcomes of incomplete facial recovery were monitored. The scoring index varied and the definition of healing was consistent. The combined effect size was calculated by using relative risk (RR) with 95% confidence interval (CI) using the fixed effect model of Review Manager. MAIN OUTCOME MEASURES: Incomplete recovery rates were chosen as the primary outcome.
Results	**Five studies involving 344 patients** were included in the final analysis. Results showed that the incomplete recovery rate of Bell's palsy patients was 44.50% in the acupuncture combined with vitamin B 12 group but 62.57% in the acupuncture alone group. The major acupoints were Taiyang (EX-HN5), Jiache (ST6), Dicang (ST4) and Sibai (ST2). The combined effect size showed that acupuncture combined with vitamin B 12 was better than acupuncture alone for the treatment of Bell's palsy (RR = 0.71, 95%CI: 0.58-0.87; P = 0.001), this result held true when 8 patients lost to follow up in one study were included into the analyses (RR = 0.70, 95%CI: 0.58-0.86; P = 0.0005). In the subgroup analyses, the therapeutic effect in patients of the electroacupuncture subgroup was better than in the non-electroacupuncture subgroup (P = 0.024). There was no significant difference in the incomplete recovery rate by subgroup analysis on drug types and treatment period. Most of the included studies were moderate or low quality, and bias existed.

Conclusions	In patients with Bell's palsy, **acupuncture combined with vitamin B 12 can reduce the risk of incomplete recovery compared with acupuncture alone** in our meta-analysis. Because of study bias and methodological limitations, this conclusion is uncertain and the clinical application of acupuncture combined with vitamin B 12 requires further exploration.

1.2.8. Acupoints Herbal patching

1.2.8.1. Zhou 2005 ☆☆

Zhou XQ, Yang C, Yang LX, Zhong Q. [Meta-analysis on acupoint sticking therapy for facial paralysis]. Chinese Acupuncture and Moxibustion. 2005;25(11):797-802. (chi). [124433]

Objective	To evaluate the therapeutic effect and safety of acupoint sticking therapy for facial paralysis.
Methods	Search the literatures in the whole paper databank of China figure medical library (Jan. 1994-Dec. 2004) and China Biomedical Literature Disk Databank (Jan. 1995-Dec. 2004). Meta-analysis was conducted with RevMan 4. 2. 5 software.
Results	Sixteen controlled trials involving 2 157 patients were included. Meta-analysis indicated that there was high statistically difference between the acupoint sticking therapy and simple acupuncture therapy or Western medicine therapy.
Conclusion	The acupoint sticking therapy is effective and safe for facial paralysis.

1.2.9. Comparison of acupuncture techniques

1.2.9.1. Yu 2020

Yu Ying. [Systematic Review and Network Meta-analysis on Clinical Efficacy of Acupunture-moxibustion in Treatment of Peripheral Facial Paralysis]. Chinese Journal of Basic Medicine in TCM. 2020. [212901].

Objective	To evaluate the clinical efficacy of 11 kinds of acupuncture methods in treatment of peripheral facial paralysis based on the network meta-analysis (NMA).
Methods	We searched the Chinese and English database from inception to 2018, to collect randomized controlled trials (RCTs) about various acupuncture ways for treatment of peripheral facial paralysis. The review on quality and bias risk of included study was done by 5. 1 standard in Cochrane Handbook, R software was used to statistical analysis by means of NMA.
Results	A total of 36 RCTs and 11 intervening measures were included.
Results	The results of NMA showed: electric acupuncture plus direct or indirect or thermal or warm needle moxibustion were better than pure electric acupuncture; acupuncture plus direct or indirect or thunder fire or thermal or warm needling moxibustion were better than pure acupuncture ways. The top 3 in the ranking: electric acupuncture plus thermal moxibustion, acupuncture plus thunder fire moxibustion, acupuncture plus warm needle moxibustion.
Conclusion	Electric acupuncture plus thermal moxibustion, acupuncture plus thunder fire moxibustion, acupuncture plus warm needle moxibustion may be the best ways for peripheral facial paralysis, but this conclusion is still immaturity and needs to be further verified by high-quality RCTs studys.

1.2.10. Korean medicine (KM) vs Korean-Western integrative medicine (KWIM)

1.2.10.1. Da 2021

Da Yoon Oh, Soo Jin Lee, Jae Eun Park, Min Cheol Lee, Myung Kyu Jeon, Cheol Woo Park, Hyo Jung Choi, Noo Ri Hong, Woo Young Kim. Korean-Western Integrative Medicine for Bell's Palsy: A Review of Randomized Controlled Trials. J Acupunct Res. 2020;37(4):233-240. [219963]. doi

Objective	This review aimed to compare the effectiveness of Korean medicine (KM) with Korean-Western integrative medicine (KWIM) at treating Bell's palsy.
Methods	A literature search of several databases for relevant randomized controlled trials was performed.
Results	Six studies that compared KM with KWIM to treat Bell's palsy were included in this review. Acupuncture and steroids were the most commonly used treatments in KWIM. A comparison of the effectiveness of KW with KWIM did not produce consistent results. Both KM and KWIM were useful intreating Bell's palsy. KWIM was more effective than KM when the Western medicine was a steroid and was given in the early stages of treatment. However, these findings are limited due to the low quality and number of included studies.
Conclusions	KM and KWIM are both effective in Bell's palsy, and KWIM is more effective than KM. However, more high-quality randomized controlled trials are required.

1.2.11. Jingjin acupuncture

1.2.11.1. Kang 2024

Kang X, Huang Y, Lv X, Liu X, Chen S, Ma L, Shi S. Systematic evaluation and meta-analysis of the efficacy of Jingjin acupuncture therapy in the treatment of peripheral facial palsy. Front Neurol. 2024 Dec 18;15:1459738. https://doi.org/10.3389/fneur.2024.1459738. PMID: 39748861; PMCID: PMC11693931.|

Objective	This study aimed to systematically evaluate the clinical efficacy of Jingjin (muscle region of the meridian, sinew/tendon/fascia) acupuncture therapy in treating peripheral facial paralysis.
Methods	A computerized search of PubMed, EMBASE, Cochrane Central Register of Controlled Clinical Studies, SCOPUS, Web of Science, PEDro, China Knowledge, Wanfang, and Wipu databases was performed for published randomized controlled trials (RCTs) on the treatment of peripheral facial paralysis using Jingjin acupuncture therapy from the beginning of the construction of the databases until 2 April 2024. After a two-person independent extraction of data, the studies were assessed for paper quality and then analyzed for meta-analysis using RevMan5.4 software.
Results	A total of 19 randomized controlled trials involving 1,436 patients were included. Meta-analysis showed that Jingjin acupuncture therapy for peripheral facial palsy had a higher overall effectiveness rate (OR = 3.93, 95% CI [2.78, 5.56], Z = 7.75, $p < 0.00001$), and cure rates (RR = 1.69, 95% CI [1.51, 1.90], and Z = 8.89, $p < 0.00001$) were higher than those of conventional therapy. Jingjin acupuncture therapy was also superior to conventional acupuncture therapy in terms of Facial Disability Index-Physical (FDIP) scores, Facial Disability Index-Social (FDIS) scores, facial nerve function scores, and Portmann scores on the Facial Disability Index Scale in patients with peripheral facial paralysis.

Conclusion	Jingjin acupuncture therapy is effective in treating peripheral facial paralysis and has better overall efficacy than conventional therapy. However, the reliability is limited by the small number of high-quality studies with scientifically rigorous methods and designs, so more large-sample, high-quality, randomized controlled studies are still needed for further validation.

1.3. Special outcome

1.3.1. Timing factor

1.3.1.1. Yu 2021 [RETRACTED]

RETRACTED : Methods In Medicine CAM. Retracted: Timing of Acupuncture Treatment in Peripheral Facial Paralysis: A Systematic Review and Meta-Analysis. Comput Math Methods Med. 2023 Jun 28;2023:9876415. doi: 10.1155/2023/9876415. PMID: 37416268; PMCID: PMC10322233.

Yu Z, Shen M, Shang W, Wu J, Xuan L. Timing of Acupuncture Treatment in Peripheral Facial Paralysis: A Systematic Review and Meta-Analysis. Comput Math Methods Med. 2021 Dec 15;2021:4221955. https://doi.org/10.1155/2021/4221955

Objective	Investigate the optimum time of acupuncture treatment in peripheral facial paralysis in order to provide evidence for clinical treatment.
Methods	CNKI, Wanfang, PubMed, Cochrane Library, and EMBASE databases were systematically searched from the inception dates to February 20, 2020. Studies limited to participants with acute peripheral facial paralysis treated with acupuncture and patients without information of the stage were excluded. The primary outcomes were effective rate and cure rate (based on facial nerve function scores). This meta-analysis is registered with PROSPERO, number CRD42020169870.
Results	**15 randomized controlled trials that enrolled 2847 participants** met the selection criteria. There was no significant differences in the effective rate (RR, 1.22; 95% CI, 0.70-2.11) when comparing acupuncture to prednisone therapy in acute facial paralysis. Acupuncture treatment in the acute stage increased both the effective rate (RR, 1.03; 95% CI, 1.00-1.07) and the cure rate (RR, 1.34; 95% CI, 1.14-1.58) compared to that in the nonacute stage.
Conclusions	In this meta-analysis, acupuncture showed a better effect in the acute stage than the nonacute stage for participants with peripheral facial paralysis. There was no statistical difference in the effective rate no matter the choice of acupuncture or prednisone therapies in the acute stage. These findings encourage early acupuncture treatment in peripheral facial paralysis.

1.3.1.2. Jin 2020

Jin DD, Ye J, Guo M, Zhou JW. [Efficacy of acupuncture-moxibustion on peripheral facial paralysis at different time points: a Meta-analysis]. Chinese Acupuncture and Moxibustion. 2020;40(6):664-8. [210281].

Objective	To systematically evaluate the efficacy and safety differences between acupuncture-moxibustion at acute stage and non-acute stage for peripheral facial paralysis.

Methods	The clinical trials regarding acupuncture- moxibustion for peripheral facial paralysis published before May 31st 2019 were searched in databases of CNKI, WF, VIP, SinoMed, PubMed, Cochrane Library and Google Scholar. The information of included studies was extracted and the quality was assessed by two independent researchers. The Meta-analysis was performed by using RevMan 5.3 software.
Results	A total of **11 trials were included, involving 1741 patients**. The Meta-analysis results showed that: (1) the curative rate of acupuncture-moxibustion at acute stage was higher than that at non-acute stage (OR=2.45, 95%CI: 1.91-3.14, Z=7.06, P<0.01); (2) the average curative time of acupuncture-moxibustion at acute stage were shorter than that of non-acute stage (WMD=5.26, 95%CI: 3.44, 7.08, Z=5.67, P<0.01); (3) the incidence rate of sequelae in 6-month follow up of acupuncture-moxibustion at acute stage were lower than that of non-acute stage (OR=2.71, 95%CI: 1.26, 5.84, Z=2.56, P<0.05); (4) one study reported that there were no adverse reactions during treatment in both treatment group and control group.
Conclusion	Based on current evidence, the efficacy of acupuncture-moxibustion at acute stage is superior to non-acute stage, which could promote the recovery of the disease and shorten the course of treatment, and reduce the occurrence of sequelae. More high-quality, large-sample randomized controlled trials are needed for further verification.

1.3.1.3. Zhang 2011

Zhang C, Wan J. [Analysis of evidence-based clinical practices on timing factor in acupuncture treatment for facial paralysis]. Chinese Acupuncture and Moxibustion. 2011;31(1):93-6. [161975]. Traduction anglaise : Zhang Chong□张冲□ Wan Jun□万军□. Analysis of evidence-based clinical practices on timing factor in acupuncture for facial paralysis. World Journal of Acupuncture-Moxibustion. 2011;21(2):54. [165111].

Objectifs	By using the evidence-based medicine approach to analyze the optimum timing in acupuncture treatment for facial paralysis, to provide the scientific evidence for acupuncture clinical practices.
Méthodes	Computer searches were conducted in the CNKI literature database from January 1994 to August 2009, using the keywords “facial paralysis”, “acupuncture” and “acupuncture timing/treatment timing”. According to the standard of Cochrane, the literatures were retrieved and conducted with evidence-based analysis. The SPSS 13.0 Software was used for the statistical analysis.
Résultats	Among the 133 retrieved literatures which met the inclusion criteria of the study, there were **11 literatures** on the effect of acupuncture or electroacupuncture treatment in acute phase observation group and conventional medical treatment group. Using Mann-Whitney U test, the difference of treatment effect is statistically significant (P < 0.001).
Conclusions	**Early intervention in acupuncture treatment for facial paralysis in acute phase can improve the efficacy and promote neurological recovery**. In the acute phase, animal experiments and clinical observations provide evidence to support the application of electric needle and traditional acupuncture treatments.

2. Clinical Practice Guidelines

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

2.1. Japan Society of Facial Nerve Research (JSFNR, Japan) 2023 ⊕

Fujiwara T, Hato N, Kasahara T, Kasuya D, Shida K, Tanabe M, Nakano H, Haginomori SI, Hamada M, Hayashi A, Furuta Y, Matsuda K, Morishima N, Yamada T, Nakagawa T. Summary of Japanese clinical practice guidelines for Bell's palsy (idiopathic facial palsy) - 2023 update edited by the Japan Society of Facial Nerve Research. Auris Nasus Larynx. 2024 Jul 29;51(5):840-845. https://doi.org/10.1016/j.anl.2024.07.003

Recommendation 6. Clinicians may prescribe acupuncture for Bell's palsy (Certainty of Evidence: very low, Consensus Rate: 100 %)

2.2. Deutsche Gesellschaft für Neurologie e.V. (DGN, Germany) 2022 Ø

Therapie der idiopathischen Fazialisparese (Bell’s palsy). Deutsche Gesellschaft für Neurologie. 2022. URL

The benefit of acupuncture has not been proven (Chen et al., 2010).

2.3. Société Française ORL et de Chirurgie de la Face et du Cou (SFORL, France) 2020 Ø

Prise en charge de la Paralysie Faciale Idiopathique à la phase aiguë chez l’adulte. Société Française ORL et de Chirurgie de la Face et du Cou. 2020:39p. [183056]. URL.

Recommandation 20. L’acupuncture n’est pas recommandée chez les patients présentant une paralysie faciale idiopathique. Devant le peu d’étude de bon niveau de preuve scientifique, l’acupuncture ne peut être recommandée dans le traitement de la paralysie faciale idiopathique au stade aigu. (Grade C)

2.4. National Institute for Health and Clinical Excellence (NICE, UK) 2019 Ø

Nice CKS Clinical knowledge summaries).. Bell's palsy. London (UK): National Institute for Health and Clinical Excellence (NICE). 2019:26P. [197933].

CKS was unable to make a recommendation on physical therapy [included acupuncture] for Bell's palsy because of a lack of evidence to support its use.

2.5. American Academy of Otolaryngology—Head and Neck Surgery Foundation (AAO-HNSF, USA) 2013 Ø

Baugh RF, Basura GJ, Ishii LE, Schwartz SR, Drumheller CM, Burkholder R, Deckard NA, Dawson C, Driscoll C, Gillespie MB, GurgeL RK, Halperin J. Clinical practice guideline: Bell's palsy. Otolaryngol Head Neck Surg. 2013;149(3 suppl):S1-27. [170251].

No recommendation can be made regarding the effect of acupuncture in patients with Bell’s palsy, (No recommendation based on poorquality trials and an indeterminate ratio of benefit and harm.)

2.6. Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF, Germany) 2012 Ø

Heckmann JG, Lang C, Glocker FX, Urban P, Bischoff C, Weder B, Reiter G, Meier U, Guntinas-Lichius O. [the new S2K AWMF guideline for the treatment of Bell's palsy in commented short form]. Laryngorhinootologie. 2012;91(11):686-92. [166483].

A benefit of acupuncture has not been proven.

2.7. Japan Society of Facial Nerve Research (JSFNR, Japan) 2011 Ø

Japan Society of Facial Nerve Research. Ganmen Shinkei Mahi Shinryo no Tebiki 2011 - Bell Mahi to Hanto Shoko Gun - [Clinical Guidance For Facial Palsy -Bell's Palsy and Hunt syndrome-] . Tokyo: Kanehara & Co. Ltd.; 2011 [in Japanese]. *Cited by* Okawa Y, Yamashita H, Masuyama S, Fukazawa Y, Wakayama I. Quality assessment of Japanese clinical practice guidelines including recommendations for acupuncture. Integr Med Res. 2022 Sep;11(3):100838. https://doi.org/10.1016/j.imr.2022.100838

Facial palsy. Do not recommend because there is no evidence. Grade C2 (out of A to D).