Table des matières

1. Présentation 1
2. Techniques 1
3. Sécurité et effets indésirables 1
4. Mécanismes d'action 2
5. Indications 2
6. Evaluation 2
6.1. Evaluation générale 2
6.2. Parkinson 3
6.3. Arthrose 3
6.4. Douleurs musculo-squelettiques 4
6.5. Polyarthrite rhumatoïde 5
6.6. Algies scapulaires post-AVC 6
6.7. Genou douloureux 6
7. Etudes expérimentales 7

Bee Acupuncture

1. Présentation

2. Techniques

3. Sécurité et effets indésirables

- Ko SH, Oh HM, Kwon DY, Yang JE, Kim BJ, Ha HJ, Lim EJ, Oh MS, Son CG, Lee EJ. Incidence Rate of Bee Venom Acupuncture Related Anaphylaxis: A Systematic Review. Toxins (Basel). 2022 Mar 26;14(4):238. doi: 10.3390/toxins14040238. PMID: 35448847.

Background	Bee venom acupuncture (BVA) is an effective treatment method for various diseases. Bee venom, however, can cause adverse effects, even rarely including life-threatening anaphylaxis, so safety-related evidence is required. In this study, we systematically estimated the incidence rate of anaphylaxis in response to BVA.
Methods	We searched eight databases (MEDLINE (Pubmed), EMBASE, Cochrane Central Register of Controlled, KISS, KMBASE, Koreamed, OASIS, and NDSL) and systematically reviewed the articles that met the inclusion/exclusion criteria.
Results	Among 225 potentially relevant articles, 49 were selected for this study. The overall incidence rate of anaphylaxis in response to BVA was 0.045% (95% CI 0.028-0.062). Women (0.083%, 95% CI 0.010-0.157) showed a higher incidence rate than men (0.019%, 95% CI -0.018 to 0.055), while the incidence for patients who had a skin test conducted (0.041%, 95% CI 0.011-0.072) was not significantly different compared to that obtained for patients for which there was no information about a skin test (0.047%, 95% CI 0.026-0.067). The publication year affected the incidence rate: it was highest before 1999 (1.099%, 95% CI -1.043 to 3.241), lower between 2000 and 2009 (0.049%, 95% CI 0.025-0.073), and lowest between 2010 and 2021 (0.037% 95% CI 0.014-0.060).
Conclusions	In this study, we provide reference data about risk size and factors of BVA-related anaphylaxis, which is essentially required for BVA application in clinics.

- Park JH, Yim BK, Lee JH, Lee S, Kim TH. Risk Associated with Bee Venom Therapy: A Systematic Review and Meta-Analysis. PLoS One. 2015;10(5):e0126971. doi: 10.1371/journal.pone.0126971.

Objectives	The safety of bee venom as a therapeutic compound has been extensively studied, resulting in the identification of potential adverse events, which range from trivial skin reactions that usually resolve over several days to life-threating severe immunological responses such as anaphylaxis. In this systematic review, we provide a summary of the types and prevalence of adverse events associated with bee venom therapy.
Methods	We searched the literature using 12 databases from their inception to June 2014, without language restrictions. We included all types of clinical studies in which bee venom was used as a key intervention and adverse events that may have been causally related to bee venom therapy were reported.

Results	A total of 145 studies, including 20 randomized controlled trials, 79 audits and cohort studies, 33 single-case studies, and 13 case series, were evaluated in this review. The median frequency of patients who experienced adverse events related to venom immunotherapy was 28.87% (interquartile range, 14.57-39.74) in the audit studies. Compared with normal saline injection, bee venom acupuncture showed a 261% increased relative risk for the occurrence of adverse events (relative risk, 3.61; 95% confidence interval, 2.10 to 6.20) in the randomized controlled trials, which might be overestimated or underestimated owing to the poor reporting quality of the included studies.
Conclusion	**Adverse events related to bee venom therapy are frequent**; therefore, practitioners of bee venom therapy should be cautious when applying it in daily clinical practice, and the practitioner's education and qualifications regarding the use of bee venom therapy should be ensured.

4. Mécanismes d'action

Son DJ, Lee JW, Lee YH, Song HS, Lee CK, Hong JT. Therapeutic application of anti-arthritis, pain-releasing, and anti-cancer effects of bee venom and its constituent compounds. Pharmacol Ther 2007;115(2):246-70.

> Bee venom (BV) therapy (BVT), the therapeutic application of BV, has been used in traditional medicine to treat diseases, such as arthritis, rheumatism, pain, cancerous tumors, and skin diseases. BV contains a variety of peptides, including melittin, apamin, adolapin, the mast-cell-degranulating (MCD) peptide, enzymes (i.e., phospholipase [PL] A(2)), biologically active amines (i.e., histamine and epinephrine), and nonpeptide components which have a variety of pharmaceutical properties. BV has been reported to have anti-arthritis effects in several arthritis models. Melittin, a major peptide component of BV, has anti-inflammatory and anti-arthritis properties, and its inhibitory activity on nuclear factor kappaB (NF-kappaB) may be essential for the effects of BV. The anti-nociceptive effects of BV have also been demonstrated in thermal, visceral, and inflammatory pain models. Acupoint stimulation (apipuncture) therapy into subcutaneous region may be important in the BV-induced anti-nociceptive effects. Multiple mechanisms, such as activation of the central and spinal opiod receptor, and alpha(2)-adrenergic activity, as well as activation of the descending serotonergic pathway have been suggested. The inhibition of c-Fos expression in the spinal cord by BV apipuncture in several nociceptive models is also reported to be a possible mechanism. BV also has anti-cancer activity. The cell cytotoxic effects through the activation of PLA(2) by melittin have been suggested to be the critical mechanism for the anti-cancer activity of BV. The conjugation of cell lytic peptide (melittin) with hormone receptors and gene therapy carrying melittin can be useful as a novel targeted therapy for some types of cancer, such as prostate and breast cancer.

5. Indications

6. Evaluation

6.1. Evaluation générale

Jang S, Kim KH. Clinical Effectiveness and Adverse Events of Bee Venom Therapy: A Systematic Review of Randomized Controlled Trials. Toxins (Basel). 2020;12(9). [211622]. doi

Background	Bee venom has been used to treat many diseases because of its anti-inflammatory and analgesic effects. However, the secretions of bee venom can also cause life-threatening adverse reactions. The objective of this paper was to review the clinical effectiveness of bee venom and adverse events induced by bee venom, regardless of the disease.
Methods	Four electronic databases were searched in April 2020. The reference lists of the retrieved articles and previous review articles were also hand-searched. Randomized controlled trials (RCTs) using any type of bee venom other than live bee stings for the clinical treatment of any disease other than cancer were included. The studies were selected, the data were extracted, and the quality of the studies was assessed by two authors. Risk of bias was assessed using the Cochrane risk of bias standards.
Results	Twelve RCTs were included in this review-three on Parkinson's disease, four on arthralgia, four on musculoskeletal disorders, and one on polycystic ovary syndrome. The types of bee venom used were acupuncture injections, ultrasound gel, and an ointment. Six studies reported adverse events, and skin reactions such as pruritus and swelling were the most common.
Conclusion	

6.2. Parkinson

- Jeong H, Kim KH, Ko SG. Effectiveness of Bee Venom Injection for Parkinson's Disease: A Systematic Review. Toxins (Basel). 2025 Apr 20;17(4):204. https://doi.org/10.3390/toxins17040204

Background	Parkinson's disease (PD) is the second most common neurodegenerative disorder worldwide, affecting over 8.5 million people as of 2019. While standard pharmacological treatments help alleviate symptoms, their long-term use can lead to side effects such as dyskinesia. Bee venom acupuncture (BVA) involves the use of a natural toxin derived from bees that can be used for pain relief and treating neurological disorders. This study aimed to review the efficacy and safety of BVA for the treatment of PD.
Methods	This review protocol was prospectively registered with PROSPERO (CRD420251000577). We searched eight databases in February 2025 and selected 12 studies involving 215 PD patients treated with BVA. Idiopathic Parkinson's disease (IPD) is the most common diagnosis. The concentration and dosage per session ranged from 0.03 to 0.1 mg/mL and from 0.1 to 1.0 mL, respectively. Twenty-four different outcome measures were used, with the Unified PD Rating Scale employed in 91.7% of the studies.
Results	All studies reported improvements in outcomes. Mild adverse effects such as swelling and itching were noted in four studies (33.3%); however, no severe reactions such as anaphylactic shock occurred.
Conclusion	These findings suggest that BVA has the potential for broader clinical applications in the treatment of PD.

6.3. Arthrose

Lee JD, Park HJ, Chae Y, Lim S. An Overview of Bee Venom Acupuncture in the Treatment of Arthritis. Evid Based Compl Alt Med 2005;2(1):79-84.

Objectives	Bee venom acupuncture (BVA), as a kind of herbal acupuncture, exerts not only pharmacological actions from the bioactive compounds isolated from bee venom but also a mechanical function from acupuncture stimulation. BVA is growing in popularity, especially in Korea, and is used primarily for pain relief in many kinds of diseases.We aimed to summarize and evaluate the available evidence of BVA for rheumatoid arthritis and osteoarthritis.
Methods	Computerized literature searches for experimental studies and clinical trials of BVA for arthritis were performed on the databases from PUBMED, EMBASE and the Cochrane Library. In addition, two leadingKorean journals (The Journal of Korean Society for Acupuncture and Moxibustion and The Journal of Korean Oriental Medicine) were searched for relevant studies.
Results	The search revealed 67 studies, 15 of which met our criteria. The anti-inflammation and analgesic actions of BVA were proved in various kinds of animal arthritic models. Two randomized controlled trials and three uncontrolled clinical trials showed that BVA was effective in the treatment of arthritis.
Conclusion	It is highly likely that the effectiveness of BVA for arthritis is a promising area of future research. However, there is limited evidence demonstrating the efficacy of BVA in arthritis. Rigorous trials with large sample size and adequate design are needed to define the role of BVA for these indications. In addition, studies on the optimal dosage and concentration of BVA are recommended for future trials.

6.4. Douleurs musculo-squelettiques

- Sung SH, Jang S, Lee G, Park JK, Lee S, Shin BC. Bee venom acupuncture for musculoskeletal pain conditions: an updated systematic review and meta-analysis. BMC Complement Med Ther. 2025 Apr 28;25(1):161. https://doi.org/10.1186/s12906-025-04891-1

Background	An updated systematic review of randomized controlled trials (RCTs) was conducted to evaluate the clinical evidence for the use of BVA for musculoskeletal pain.
Methods	We searched 13 electronic databases up to December 2024 with no language restrictions. Since 2008, nine RCTs have been additionally identified, so a total of 20 trials were included in our updated review.
Results	In a meta-analysis of 2 RCTs, pain was significantly reduced with BVA compared to sham injection of normal saline (10-cm visual analog scale [VAS]; mean difference [MD]: -16.93; 95% confidence interval [CI] = -26.35 to -7.51, P = 0.0004, n = 85; heterogeneity: I2 = 0%). The meta-analysis of 5 RCTs comparing BVA plus acupuncture to saline injection plus acupuncture showed significant improvements in the 10-cm VAS (MD: -1.24; 95% CI = -1.63 to -0.85, P < 0.00001, n = 152; heterogeneity: I2 = 16%). No severe side effects such as anaphylaxis were observed in any of the eight trials.
Conclusion	BVA appeared to improve musculoskeletal pain conditions compared to sham injections. However, the meta-analysis included only a limited number of RCTs with small sample sizes, and there was considerable clinical heterogeneity in terms of pain types, dosage, and concentration of BVA, which restricts the ability to draw definitive conclusions.

- Lee MS, Pittler MH, Shin BC, Kong JC, Ernst E. Bee venom acupuncture for musculoskeletal pain: a review. J Pain. 2008. (4):289-97. doi: 10.1016/j.jpain.2007.11.012.[147970].

Purpose	The objective of this systematic review was to evaluate the evidence for the effectiveness of BVA in the treatment of musculoskeletal pain.

Methods	Seventeen electronic databases were systematically searched up to September 2007 with no language restrictions. All randomized clinical trials (RCTs) of BVA for patients with musculoskeletal pain were considered for inclusion if they included placebo controls or were controlled against a comparator intervention. Methodology quality was assessed and, where-possible, statistical pooling of data was performed.
Results	A total of 626 possibly relevant articles were identified, of which **11 RCTs** met our inclusion criteria. Four. RCTs that tested the effects of BVA plus classic acupuncture compared with saline injection plus classic acupuncture were included in the main meta-analysis. Pain was significantly lower with BVA plus classic acupuncture than with saline injection plus classic acupuncture (weighted mean difference: 100-mm visual analog scale, 14.0 mm, 95% Cl = 9.5-18.6, P < .001, n = 112; heterogeneity: 72 = 0, x2 = 1.92, P = .59, 12 = 0%).
Conclusion	Our results provide suggestive evidence for the effectiveness of BVA in treating musculoskeletal pain. However, the total number of RCTs included in the analysis and the total sample size were too small to draw definitive conclusions.

6.5. Polyarthrite rhumatoïde

- Wei Yan-Ying , Tang Chun-Zhi Gu Yu-Mei , Wei Su-Fen. [Bee-sting Therapy for Rheumatoid Arthritis Systematic Review and Meta-analysis]. Journal of Basic Chinese Medicine. 2018;24(8):1113. [181091].

Objective	To evaluate the curative effect and status of Bee-sting therapy in the treatment of Rheumatoid Arthritis.
Methods	A systematic retrieval has been taken in Chinese National Knowledge Infrastructure, Chinese biomedical literature database, VIP journal full text database, wanfang database, MEDLINE, Cochrane Library and Springer. Collect RCT literatures concerning the treatment of Rheumatoid Arthritis with Bee-sting therapy. Two reviewers independently screened Literature extracted data and assessed the risk of bias of included studies. Then meta-analysis was conducted by RevMan 5. 3 software.
Results	A total of 8 RCTs, involving 496 patients were included , the results of Meta-analyses indicated that compared with therapy of western medicine, Bee-sting therapy for RA was superior in the total effective rate (OR=3.37, 95% CI (1.95,5.84), P=0.0001), ESR (MD= -4.25, 95% CI (-7.44, -1.06), P=0. 009), and CRP (MD= - 3. 12, 95% CI (-6. 29-0. 06), P=0. 05) with significant differences.
Conclusion	According to the results of the meta-analysis, Bee-sting therapy for Rheumatoid Arthritis is better than the western medicine treatment. Due to the poor quality and high possibility of bias of the included studies , more well-designed multicentered RCTs should be performed.

- Lee JA, Son MJ, Choi J, Jun JH, Kim JI, Lee MS. Bee venom acupuncture for rheumatoid arthritis: a systematic review of randomised clinical trials. BMJ Open. 2014;4(11):e006140. [001]

Objectives	To assess the clinical evidence for bee venom acupuncture (BVA) for rheumatoid arthritis (RA).
Methods	Design: Systematic review of randomised controlled trials (RCTs). Setting: We searched 14 databases up to March 2014 without a language restriction. Participants: Patients with RA. Intervention: BVA involved injecting purified, diluted BV into acupoints. We included trials on BVA used alone or in combination with a conventional therapy versus the conventional therapy alone. Primary outcomes: Morning stiffness, pain and joint swelling Secondary outcomes: Erythrocyte sedimentation rate (ESR), C reactive protein (CRP), rheumatoid factor, the number of joints affected by RA and adverse effects likely related to RA.

Results	A total of 304 potentially relevant studies were identified; only **one RCT** met our inclusion criteria. Compared with placebo, BVA may more effectively improve joint pain, swollen joint counts, tender joint counts, ESR and CRP but was not shown to improve morning stiffness.
Conclusion	**There is low-quality evidence**, based on one trial, that BVA can significantly reduce pain, morning stiffness, tender joint counts, swollen joint counts and improve the quality of life of patients with RA compared with placebo (normal saline injection) control. However, the number of trials, their quality and the total sample size were too low to draw firm conclusions.

6.6. Algies scapulaires post-AVC

Lim SM, Lee SH. Effectiveness of bee venom acupuncture in alleviating post-stroke shoulder pain: a systematic review and meta-analysis. J Integr Med 2015;13(4):241-7. doi: 10.1016/S2095-4964(15)60178-9.

Objectives	Shoulder pain is a common complication of stroke. Bee venom acupuncture (BVA) is increasingly used in the treatment of post-stroke shoulder pain.
Methods	To summarize and evaluate evidence on the effectiveness of BVA in relieving shoulder pain after stroke.SEARCH STRATEGY:Nine databases, namely MEDLINE, EMBASE, the Cochrane Library, the China National Knowledge Infrastructure (CNKI), the Japan Science and Technology Information Aggregator, Electronic (J-STAGE), and four Korean medical databases, namely, the National Assembly Library, the Research Information Service System, the National Discovery for Science Leaders, and OASIS, were searched from their inception through August 2014 without language restrictions.INCLUSION CRITERIA:Randomized controlled trials (RCTs) were included if BVA was used at acupoints as the sole treatment, or as an adjunct to other treatments, for shoulder pain after stroke.DATA EXTRACTION AND ANALYSIS:Two review authors independently selected trials for inclusion, assessed methodological quality and extracted data.
Results	A total of 138 potentially relevant articles were identified, 4 of which were RCTs that met our inclusion criteria. The quality of studies included was generally low, and a preponderance of positive results was demonstrated. All four trials reported favorable effects of BVA on shoulder pain after stroke. Two RCTs assessing the effects of BVA on post-stroke shoulder pain, as opposed to saline injections, were included in the meta-analysis. Pain was significantly lower for BVA than for saline injections (standardized mean difference on 10-cm visual analog scale: 1.46 cm, 95% CI=0.30-2.62, P= 0.02, n= 86)
Conclusion	This review provided evidence suggesting that BVA is effective in relieving shoulder pain after stroke. However, further studies are needed to confirm the role of BVA in alleviating post-stroke shoulder pain. Future studies should be conducted with large samples and rigorous study designs.

6.7. Genou douloureux

- Li Shaowei, Huang Weihan, Pan Yuanle, Ou Jinming, Huang Zhanhui, Liu Haifeng, Huang Mengfen. [A Meta-analysis of Bee-sting Acupuncture in the Treatment of Knee Osteoarthritis]. Journal of Traditional Chinese Medicine. 2018;5:693-696. [201793].

Objective	To systematically evaluate the effect of bee acupuncture on patients with knee osteoarthritis (KOA).

Methods	Computerized comprehensive search of randomized controlled trials (RCTs) published in domestic and international journals on bee acupuncture for treatment of KOA patients. RevMan5.3 Meta-analysis of the software was carried out using the Cochrane Handbook 5.0 standard.
Results	The results were finally included in **7 literatures totaling 481 patients**. The results of the meta-analysis showed that bee-needle therapy is more effective than conventional western medicine, ordinary acupuncture, and intermediate frequency electrotherapy. (P<0.05); there was no significant difference in the efficiency of bee acupuncture plus oral Chinese medicine and oral Chinese medicine (P>0.05); the overall efficacy of bee acupuncture was better than other therapies (OR=3.68, 95% CI[2.26, 5.98]).
Conclusion	The treatment of knee osteoarthritis (KOA) with bee acupuncture is effective in improving the symptoms, but higher quality clinical research is needed to support its clinical efficacy.

7. Etudes expérimentales

From:
https://www.ebm.wiki-mtc.org/ - **Encyclopédie des sciences médicales chinoises**

Permanent link:
https://www.ebm.wiki-mtc.org/doku.php?id=acupuncture:techniques%20instrumentales:15.%20api-acupuncture

Last update: **14 Dec 2025 14:12**