Table des matières

Dentistry

Stomatologie générale : évaluation de l'acupuncture

1. Systematic Reviews and Meta-Analysis

1.1. Generic Acupuncture

1.1.1. Gonçalo 2012

Gonçalo, Camila da Silva; Barros, Nelson Filice de. Complementary and integrative practices in oral health: A Systematic Review; Braz. Dent. Sc. 2012;15(4):21-8. [99708].

Objective	To present a systematic literature review on the use of Complementary and Integrative Practices (CIP) in the field of dentistry.
Methods	Randomized, controlled clinical trials (RCT) were selected from the PubMed-MEDLINE database (2000 - 2010). The articles were classified according to type of therapy, level of significance of results, impact factor, and area of knowledge of the periodicals.
Results	Ninety-one RCTs were included: 43 (47%) on Laser therapy, 31 (34%) on Phytotherapy, **14 (16%) on Acupuncture**, 2 (2%) on Homeopathy, and 1(1%) on Hypnosis. The results showed negative evidences, particularly for Laser therapy (n = 27;30%), whereas Phytotherapy (n=20;22%), Acupuncture (n = 12;13%) and Homeopathy (n = 2;2%) presented higher frequency of positive results. The RCTs researched were published in journals related to dentistry (n = 59;64%), medicine (n = 21;23.5%), other areas (n = 7;8%) and CIP (n = 4;4.5%).
Conclusions	It was concluded that there are positive evidences for the use of some types of CIP in oral health. However, they are limited as regards their quality and consistency, with little difference between the positive and negative results, characterizing little strength of evidence, and consequently low potential for clinical application in accordance with the principles of evidence-based dentistry.

1.2. Rosted 1998 ☆

Rosted P. The use of acupuncture in dentistry: a review of the scientific validity of published papers. Oral Diseases. 1998. 4(2):100-4. [58357].

Objective	To review the scientific validity of published papers on the efficacy of acupuncture in dentistry based on predefined methodological criteria.

Methods	A literature search performed by the Royal Society of Medicine and the University Library, Copenhagen, Denmark was able to identify 74 papers written in English, German, Danish, Swedish, Norwegian, Italian, French and Russian published between 1966 and 1996. The search words were: acupuncture and electro-acupuncture, randomised controlled trials (RCT), dental pain, postoperative dental pain, painrelieving in dentistry, and dental analgesia. Among the 74 listed papers, 48 papers were reviewed in the following languages: English, Danish, Swedish, Norwegian and German. Fifteen papers were excluded because they were written in French, Italian or Russian; 11 papers were excluded because the abstract clearly indicated the paper was not a RCT or the paper was of a general nature without relevance to acupuncture. METHODS: To assess the methodological quality of the included papers, all papers were scored on the basis of predefined criteria. A total of 92 points could be achieved and on the basis of this scale papers were rated as: Excellent (85-100%), Good (70-84%), Fair (60-69%) and Bad (< 60%). MAIN OUTCOME: Fifteen out of 48 papers met the inclusion criteria.
Results	Only one study met the criteria with more than 85%. Five studies met the criteria with 70-84%. Three studies met the criteria with 60-69%. Six studies did not meet the criteria. Acupuncture in 11 out of 15 studies proved effective in the treatment of temperomandibular dysfunction (TMD) and as analgesia. Four studies showed no effect of acupuncture.
Conclusion	The value of acupuncture as an analgesic must be questioned. The effect of acupuncture in treating TMD and facial pain seems real and acupuncture could be a valuable alternative to orthodox treatment.

1.2.1. Rosted 1998 ☆

Rosted P. The use of acupuncture in dentistry : a systematic review. Acupuncture in Medicine. 1998. 16(1):43-8. [66534].

Objective	Published studies on the analgesic effect of acupuncture in dentistry are still relatively few, but those which fulfil predefined methodological criteria are reviewed to assess if acupuncture is effective in this field.
Methods	A literature search identified 74 papers published between 1966 and 1996, and 48 are reviewed. Only 15 of the papers fulfil a number of predefined criteria: having a reference group, randomisation, blinding, appropriate statistics, sufficient follow-up, etc. Of the 15 papers only one study meets more than 85% of the criteria, five meet 70-84%, three studies meet 60-69%, and six do not reach 60% of the predefined criteria and are thus considered unreliable.
Results	Eleven out of the 15 studies were in favour of acupuncture and showed standard acupuncture to be more effective than placebo, non-standard (sham) acupuncture, or showed it to be able to produce better or similar results to an accepted treatment procedure. The higher the standard of the paper, the more likely it was to have a positive result in favour of acupuncture: all those in the excellent or good categories gave a favourable result.
Conclusions	Acupuncture proved effective in 73% of the reviewed papers for the treatment of Temperomandibular dysfunction or as an analgesic, and should be considered as a reasonable alternative or supplement to current dental practice in these areas.

1.3. Special Acupuncture Techniques

1.3.1. Laser acupuncture

1.3.1.1. Manente 2023

Manente R, Pedroso GL, Gomes E Moura AP, Borsatto MC, Corona SAM. Laser acupuncture in the treatment of neuropathies in dentistry: a systematic review. Lasers Med Sci. 2023 Mar 25;38(1):92. https://doi.org/10.1007/s10103-023-03754-w

Backgound	Laser acupuncture can be used to treat neurosensory alterations and motor disorders caused by dental treatments. This study aimed to review the existing literature on the effects of laser acupuncture on neuropathies in the context of dentistry and to search for treatment modalities in which this technique is used.
Methods	This systematic review was conducted in accordance with the Cochrane Collaboration guidelines and the PICOS strategy. Randomized clinical trials that evaluated laser acupuncture as a primary intervention for facial neuropathy were included. We searched the database for relevant studies and manually searched the gray literature until April 2022, and finally included four studies. The study was considered eligible if it included patients with paresthesia, facial paralysis, or neuralgia, neuropathies within dentistry, and referred to the application of laser acupuncture as a treatment method. The risk of bias was assessed using the RoB 2 tool.
Results	It was observed that the recommended wavelengths ranged from 790 nm to 810 nm, with a frequency of at least two applications per week, and to a greater or lesser degree, all evaluated studies obtained an improvement in sensory or motor recovery of the facial nerves.
Conclusions	The use of laser acupuncture presented itself as a viable alternative in dentistry for the treatment of paresthesia and facial paralysis due to its therapeutic potential in neuropathic treatment (CRD42022344339).

1.3.1.2. Mira 2023

Mira PCDS, Vilela LD, Corona SAM, Borsatto MC. Effect of low-level laser stimulation of acupuncture points in pediatric dentistry: a systematic review. Lasers Med Sci. 2023 Jan 24;38(1):52. https://doi.org/10.1007/s10103-023-03720-6

Backgound	The biomodulatory potential of low-level laser therapy (LLLT) has prompted investigations of different outcomes in health. One line of research is the stimulation of acupuncture points for the relief of different signs and symptoms related to the stomatognathic system. In dentistry, some studies in pediatric dentistry have demonstrated the benefit of LLLT therapies in the management of dental anxiety in children.
Methods	This systematic review aimed to analyze previous clinical studies on the application of LLLT at acupoints among pediatric dental patients. This systematic review was conducted according to the Cochrane Collaboration guidelines and the population, intervention, comparison, and outcome strategy. A broad literature search up to June 17, 2022, was performed using four electronic databases (PubMed, Scopus, Embase, and Google Scholar). The risk of bias in randomized clinical trials was assessed using the RoB 2 tool.

Results	A total of **four studies** using LLLT for photobiomodulation were included (n = 4). The most common wavelengths used were in the infrared range (variation between 716 nm and 980 nm). There were little variations in the application time (14 s to 1 min) and exposure dose (1 to 5 joules). LLLT acted positively on different acupuncture points. LLLT provided various benefits and optimized dental practice by reducing the gag reflex during radiography and impression taking, preanesthetic pain, and symptoms of sleep bruxism in the pediatric dental population. Only one of the evaluated studies had a high risk of bias.
Conclusion	The LLLT at acupuncture points is associated with positive results on sleep bruxism, preanesthetic pain, and gag reflex in pediatric dentistry. Future research studies should prioritize standardization of the study design and the methods of analysis.