

Acupressure– A Review with a Current and Future Prospective in Dentistry

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Abstract

Alternative, collaborative, complimentary, integrative, natural, unconventional and holistic are the terms that are used to describe that do not conform to mainstream allopathic/western/orthodox health approaches.

WHO supports traditional and alternative medicines when these have demonstrated benefits for the patient with minimal risks.

In general, the harder a medical problem is to treat, the more treatment strategies exist. Patients and physicians are constantly looking for alternatives to drug therapy.

Empirical and scientific evidence exists to support the benefits of acupuncture, manual therapies and several medicinal plants for chronic or mild conditions. For instance, the effectiveness of acupuncture, a popular treatment for relieving pain, has been demonstrated both through numerous clinical trials and laboratory experiments. As a result, 90% of pain clinics in the United Kingdom and 70% in Germany include acupuncture as a form of treatment.

Acupressure is an easier form of Acupuncture wherein this technique of applying gentle pressure to various 'pressure points' on the body is used to cure various Diseases including relief of Pain.

The aim of this paper is to give a introduction to acupuncture/acupressure to the general dental practitioner and to understand its history, background, current trends, the relevance and the possibilities of its practice in dentistry.

Keywords – *Acupressure, Acupuncture, Traditional Medicine, Dentistry, Alternative*

Introduction

Health care can broadly be divided into modern (conventional, orthodox, Western or allopathic) and traditional (indigenous, complementary, alternative or integrative).

With the effective leadership of WHO, a number of countries have developed traditional medicine policies. Research efforts in Western countries have been largely concerned with the quality, safety and efficacy of only certain forms of TCAM, such as herbal medicine and acupuncture.¹

WHO supports traditional and alternative medicines when these have demonstrated benefits for the patient and minimal risks. But as more people use these medicines, governments should have the tools to ensure all stakeholders have the best information about their

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benefits and their risks.²

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The Acupressure therapy was known in India even 5000 years ago (according to Sushruta Samhita). Unfortunately, it was not preserved properly and went to Sri Lanka in the form of Acupuncture. From Sri Lanka, this therapy was taken to China and Japan by Buddhist Monks or nomadic Aryans and at present China is dominating this field. This therapy was known to the Red Indians way back in the 16th century.³

Acupuncture involves inserting needles into certain locations, called acupoints, on the body. Research has shown that acupuncture may trigger the body to release pain-relieving chemicals in the body called endorphins. According to this traditional medicine, every person has vital energy, called “Qi” flowing through his or her body. This invisible energy, which travels along twelve major pathways called meridians, can become imbalanced, creating areas of deficient (less) and excess (more) Qi. It is thought that imbalanced Qi can cause illness.

Acupuncture/Acupressure works to restore the balance of Qi by stimulating certain points on the body that affect the flow of Qi. As a result, Qi is sent to areas of deficiency and removed from areas of excess, which allows the body to function at its best.

The body has such consists of five basic elements viz., Earth, water, Fire, Air, and space controlled by electricity known as Bioelectricity. As long as this current of electricity flows properly in the body, the body remains fit and healthy. If, for any reason this current does not reach any part of the body, there is malfunctioning of that part accompanied by pain in many cases wherein the illness has been initiated. The Acupressure, thus is the science of nature which teaches us to cure diseases through the inbuilt mechanisms of the body-the technique of how to send the current to all the

desired parts of the body.³

Organized Dentistry has yet to focus attention on alternative medicine anywhere near as much as, say, the American Medical Association, which recently devoted a full issue of its highly regarded Journal to studies on holistic medicine as part of clinical practice. But a growing number of dentists are currently testing and using various alternative therapies in the mouth.⁴

Literature also suggests that Acupressure at its best can be considered also as a “Way of Life” like basic exercises and not just being therapeutic.

Most of the disadvantages of Acupuncture such as by needle usage, precision, time consumption are eliminated by Acupressure wherein the needle usage is replaced by finger pressure without having any side effects. Acupressure is an ancient healing art, parallel to acupuncture, that is easy to learn and suitable for self-management of pain. It does not require expensive equipment and large space to provide treatment to the patient.

Review

Chapman et al⁵ (1977) found that the tooth pain threshold to electrical stimulation was significantly raised by acupuncture. Their research also explained the possible pathway of the relief of the dental pain.

Shimura N et al⁶ (1980) stated in his study that by acupuncture stimulation, the total number of oral streptococci and the caries pathogenic bacteria, *Streptococcus Mutans*, in the rats decreased and the anti RC-20 titre of the rat serum increased as the result of acupuncture stimulation.

Pomeranz⁷ (1989) stated that acupuncture promoted neural regeneration and reduced pain perception in those patients undergoing surgery. He explained the therapeutic effects which might occur because of modulation of the limbic–paralimbic–neocortical network.

Silva⁸ (1989) in his study wherein patients with trigeminal neuralgia were given a course of daily low-frequency EA treatments for 10 days. The treatments were repeated three times, with 1 week intervening between treatments. Thirty-six patients experienced complete relief, 4 patients experienced partial relief, and

the treatment failed in 2 patients.

WHO Draft report⁹ (1996) mentions the details in “Acupuncture: Review and analysis of controlled clinical trials” wherein its applications in Dentistry being mentioned, wherein its states the following;

Acupuncture has been widely used in dentistry. There are reports of randomized controlled trials on the analgesic effect of acupuncture for postoperative pain from various dental procedures, including tooth extraction, pulp devitalisation and acute apical periodontitis. It was concluded that acupuncture should be considered a reasonable alternative or supplement to current dental practice as an analgesic. Its use in the treatment of temporomandibular dysfunction was also supported in these studies.

Ernst E, Pittler MH¹⁰ (1998) and Bensoussan A.¹¹ (1999) in their systematic review concluded that acupuncture can alleviate dental pain.

P Rosted and Palle Rosted¹² (2000) pointed out that Acupressure or acupuncture is not a miracle cure like any other therapies and has its own limitations ; In the general management of pain Acupuncture proves to be a very safe technique in the hands of a properly trained practitioner and hence should be regarded as supplement to conventional treatment.

Zijlstra et al.¹³ (2003) in his review article by suggested the hypothesis for the anti-inflammatory action of acupuncture.

World Health Organization (WHO) in 1979, endorsed the use of acupuncture to treat 43 symptoms, which was later discussed by Wong.¹⁴ In 1996, this was extended to 64 conditions. In the Geneva WHO 2003 report² (2004), pain in dentistry (including dental pain and temporomandibular dysfunction), facial pain and postoperative pain were listed among the conditions for which acupuncture has been proven to be successful through controlled trials, to be an effective treatment

Kavoussi and Ross¹⁵ (2007) hypothesized as how acupuncture may produce its analgesic, antianxiety, and other therapeutic effects.

Tavares et al.¹⁶ (2007) suggested that EA controlled postoperative pain following mandibular third-molar

surgical removal; this could be because of efferent vagus-nerve activation and inflammatory macrophage deactivation.

Karst et al.¹⁷ (2007) concluded that auricular acupuncture and intranasal midazolam were similarly effective for the treatment of dental anxiety.

FDI Policy statement¹⁸ (2008) stated in their policy statement regarding “The Use of Acupuncture in Dentistry” that acupuncture has been used in treatment of a range of diseases/disorders and facilitation of dental treatments, particularly for analgesia associated with dental procedures and for the management of temporomandibular joint disorders, chronic oral-facial and myofacial pain syndromes, prominent gag reflex, and dental anxiety.

Hüseyin Sert, et al¹⁹ (2009) reported a patient with Trigeminal Neuralgia who was treated successfully by acupuncture.

Sari E²⁰ (2010) stated in their study of the role of acupuncture for treating orthodontic patients with a gagging reflex. The researchers concluded that designated acupuncture points were efficient for controlling the gagging reflex.

Albrecht Molsberger²¹ and Gianni Allais et al²² (2012) concluded that, the application of acupressure for the control of Nausea and vomiting during a migraine attack seems to be justified.

Purnachandrarao N. Naik et al²³ (2014) stated in his review article that the role of acupuncture in dental pain may not involve removing the cause of the pain, but rather, serving as an adjunct in achieving pain relief.

Ali Beikmoradi²⁴ (2012) stated that his study provided a bright prospect for using complementary and alternative medicine, especially acupressure, to relieve patients’ anxiety.

Fengxia Liang, et al²⁵ (2015) in their article “Acupuncture and Immunity” stated that acupuncture enhances resistance and is closely related with the immune system. More and more research has revealed that acupuncture enhances anti-cancer and anti-stress immune function and exert anti-inflammation effects.

Rohmetra, Abhimanyu & Tandon, Ragni &

Singh, Kamlesh & Jaiswal, Ankita²⁶ (2017) stated that in their detailed review of acupressure in orthodontics, many of the issues could be curbed in the dental clinics such as gagging, anxiety, TMJ pain in orthodontic and general dental setup.

Priyanka Avisal et al²⁷ (2018) concluded that Acupressure can be a viable alternative to reduce dental anxiety in children undergoing scaling and restorative procedures.

Y. Sivinagini, Ashish R. Jain²⁸ (2018) evaluated the role of role of acupuncture and acupressure in preventing gag reflex during prosthodontics treatment. They found that this method of controlling the gag reflex is simple, fast, and easier technique if the clinicians were trained in it and was found to be productive.

Angela Adams, Joseph Eschman and Weiqing Ge²⁹ (2017) and Susan Murphy, ScD, OTR³⁰ (2019) in their systematic reviews based on randomized controlled trials concluded that acupressure has been shown to be effective for relieving a variety of symptoms such as Low Back pain and can significantly improve function and decrease disability.

Yihan He et al⁴ (2019) systematic review and Meta-analysis found that acupuncture and acupressure was significantly associated with reduced cancer pain and decreased use of analgesics, although the evidence level was moderate.

NCCIH clinical digest³¹ (2020) · For patients with chronic low-back pain, recent evidence-based clinical practice guidelines from the American College of Physicians gave a strong recommendation that clinicians and patients should initially select non-pharmacologic treatment with exercise, multidisciplinary rehabilitation, acupuncture, or mindfulness-based stress reduction.

Legality of Practice: Govt. of India with the lead from chairmanship of Director General ICMR stated in its order no R.14015/25/96-U & H (Pt) dated 25th November 2003, addressing to relevant authorities including Dental Council of India regarding grant of permission for various streams of alternative medicines recommended that certain practices of Acupuncture and hypnotherapy which qualified as modes of therapy could be allowed to be practiced by registered practitioners or

Summary and Conclusion

To summarize, various conditions in dentistry have been regularly studied with and carried out with considerable relief to their symptoms related to Pain, Gagging reflux, Dental caries, Habits, Immunological disorders, Psychological disorders and also Occupational Hazards such as Fatigue, Cervical spondylosis / Neck pain, Insomnia, Chronic Low back ache and Migraines.

Acupressure focusses on the theory that prevention before the onset of the diseases or intervening in an early stage of diseases is much better than treating after the onset. Acupressure may prove to be beneficial to both patients and dentists, when used as an adjunct to conventional therapies. Thus this alternative traditional therapy with the support of WHO, being found to be beneficial in the various departments of dentistry, a further extensive research in these fields definitely would help to establish these therapies into the Medical and dental curriculum.

It's a high time that utmost priority be given to these therapies, revisit, explore and to establish these Indian therapies, before they completely disappear along with its therapeutic benefits, it offers to the scientific world.

Conflict of Interest – Nil

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Ethical Clearance – Not required.

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