



## International Journal of Applied Dental Sciences

ISSN Print: 2394-7489  
ISSN Online: 2394-7497  
IJADS 2021; 7(3): 115-117  
© 2021 IJADS  
[www.oraljournal.com](http://www.oraljournal.com)  
Received: 28-05-2021  
Accepted: 30-06-2021

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### Dental herbs: Ethnomedicinal plants in dentistry

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DOI: <https://doi.org/10.22271/oral.2021.v7.i3b.1290>

#### Abstract

Countless research have indicated that spices and herbs can be used for the remedial purposes and also the long times used in correlative & substitute therapy. Apparently it is most supernatural therapies feasible on our earth nowadays. Herbs used in dentistry to reduce swelling and healing as controlling microbial plaque agent in gingivitis and periodontitis to maintain healthy oral environment. Herbs have been used to prevent and treat disease for millennia. Herbal extracts work because they interact with certain chemical receptors in the body, and they are, in a pharmacotherapeutic sense, medications. Patients have avoided many of the negative effects associated with traditional pharmaceuticals by exploit herbal remedies, but this does not mean that side effects do not occur. In every culture herbal medicines had been considered regularly nowadays. The most significant challenge and issue is a lack of knowledge about the effect of herbs on oral tissues, their mechanisms of action, and their adverse effects. Herbs are the source of a number of well-known conventional medications. Herbal medicines have dramatically fewer side effects and are safer to use than conventional drugs. Bloodroot, Caraway, Chamomile, Echinacea, Myrrh, Peppermint, Rosemary, Sage, Thyme Thyme, Aloe Vera, Propolis.

**Keywords:** antibiotic, Ayurveda, botanical therapy, dentistry, germicidal

#### Introduction

Herbs are one of the healing agents created by God for ailing humanity. For thousands of years, herbal extracts have been employed in traditional medicine. Medicinal plant knowledge has been acquired over many years, based on several medicinal systems such as Ayurveda, Unani, and Siddha. Traditional healers in India use 2,500 plant species, with 100 species serving as regular sources of medication, according to reports [1]. Although the importance of plaque in the genesis of caries and periodontal disease is well known, most people believe that mechanical, self-performed plaque removal is of minimal utility. Gum chewing is a common practise in many countries, as it cleans the teeth and gums. Chewing gum has the advantage of staying in the mouth for longer periods of time than mouthwashes and toothpastes.

Dental care was incorporated into the routine work of physicians and surgeons on three levels: Specifically,

(i) Preventive procedures as part of daily life (ii) Reduction in some aspects of daily life drug-induced mild ailments (iii) application a set of surgical procedures for the alleviation of severe pain diseases of the teeth [3].

#### History

Herbs were the first cure available to humanity. It is the world's oldest kind of health care, covering every facet of one's well-being. According to Tamil literature, the earliest medicinal plant, neem or margosa, was introduced by the ancient Siddha system of medicine (10000 B.C. to 4000 B.C.) [4] This herb's distinctiveness was demonstrated by its continued contribution to humanity in the fight against diseases such as leprosy, ulcers, gastro-intestinal disorders, oral care, urinary tract infection, diabetics, blood pressure, and cholesterol. Babylonians in Asia, Africa, South America, and the Middle East introduced one of the most popular herbs Meswak as a chewing stick and toothpicks for preserving dental hygiene circa 3500 B.C [5]. Babylonians in Asia, Africa, South America, and the Middle East introduced one of the most popular herbs Meswak as a chewing stick and toothpicks for preserving dental hygiene circa

3500 B.C. Acacia Arbica became well-known about 1700 B.C. for its use in healing gingivitis and mouth ulcers [8]. Aloe vera was first used pharmaceutically about 1750 B.C [8]. to cure eczema, as a laxative, and as an insect repellent. Gingivitis, denture sore mouth, shingles, herpetic stomatitis, oral lichen planus, small recurring aphthous ulcer, leukoplakia, and oral submucous fibrosis were all known to be treated with aloe vera about 1500 B.C. Garlic, opium, castor oil, coriander, mint, indigo, and other herbs were recognised to be used in ancient Egyptian medicine about 1000 B.C. for various ailments [6]. Clove, which is widely available in every home, has an essential oil with a long track record of safety and was used as a breath refresher by Chinese emperors in the 3rd century B.C. Clove oil has also been used in dentistry since ancient Hindu writings. Avicenna, a teacher of Hippocrates (the Father of Medicine) used clove oil capsules to cure rotting teeth and gums. The Acacia Arabica was also referred to as "the Egyptian Gum" by Theophrastus during the same period [7]. Current research focuses on combining herbs with allopathic drugs to provide more effective treatment outcomes, such as zinc oxide and aloe vera (2014) as a primary teeth obturating material, apacaries gel (2014), a combination of papain and mangosteen stem as a chemo-mechanical carious removal agent, and so on. These research have given us optimism that herbs will become the material of choice in a variety of therapy techniques, ushering in a global 'Herbal Renaissance.'

### Discussion

The current study discovered an increasing interest in the utilisation of herbs are used in dentistry, especially in periodontal disease. Herbal remedies have been utilised for a long time. The history of Dantamulagata rogas knowledge in Ayurveda may be traced back to the age of syshruta. We can count up to eight diseases in this category. Dantamulagata roga is a close relative of Dantamulagata roga with connection to chronic gingivitis and chronic periodontitis. Because of the synergy of their active compounds, several plants have been demonstrated to be more effective than pharmaceuticals at mending the entire body promote the regulatory action of the immune system to have a preventative effect body's defence mechanisms, and prepare for potential action external adversaries. Because of increased tolerance and adaptability, side effects are frequently mild, and therapeutic effects are more long-lasting. The use of medicinal plants as anti-inflammatory, antiseptic, or antibacterial agents has resulted in the development of novel toothpastes and new dental products therapeutic substances.

### Conclusion

The use of herbal remedies continues to grow around the world, and based on research, we can see the antiseptic, antioxidant, antimicrobial, antifungal, antibacterial, antiviral, and analgesic effects of a mix of herbs derived as antiseptics, antioxidants, antimicrobials, antifungals, antibacterials, antivirals, and analgesics on diseases of the gums and supporting tissues of teeth. The herbs and spices in this recipe assist to reduce inflammation and soothe discomfort by preventing the release of histamine in the body. This phyotherapy aids in the body's healing and infection. Herbs can be taken orally as pills, syrups, or infusions, or applied topically as poultices, plasters, and lotions to boost our immune system. While it's encouraging to see so many clinical trials of herbal items, further research on their safety and potency will be needed before they may be used for

therapeutic purposes, either alone or in combination with established medications.

### References

1. Rabia A Abu. Urinary diseases and ethnobotany among pastoral nomads in the Middle East. *Journal of Ethnobiology and Ethnomedicine* 2005;1(4):1-4.
2. Murai S, Igarashi A, Ito K, Kanamori S, Otani K, Sato Y. On the inhibitory effect of dental plaque in man by use of dextranase-containing chewing-gum. *Nippon Shishubyo Gakkai Kaishi* 1975, 17
3. Monor A, Lebendiger M, Shiffer A, Tovel H. (Tel Aviv Univ) *J Periodontal*, CTERRIAL Invasion of periodontal Tissues in Advanced periodontitis in Human 1984;55:567-573.
4. Clark DT, Gazi MI, Cox SW, Eley BM, Tinsley GF. The effects of Acacia arabica gum on the *in vitro* growth and protease activities of periodontopathic bacteria. *J Clin Periodontol* 1993;20:238-243.
5. Cai L, Wu DC. Compounds from *Syzygium aromaticum* possessing growth inhibitory activity against oral pathogens. *J. Nat. Prod* 1996;59:987-990.
6. Maurya DK, Mittal N, Sharma KR, Nath G. Role of triphala in the management of periodontal disease. *Ancient Science of Life* 1997;17(2):120-127.
7. Sato S, Yoshinuma N. *et al.* The inhibitory effect of funoran and eucalyptus extract containing chewing gum on plaque formation. *Journal of Oral Science* 1998;40(3):115-117.
8. Pai RM, Acharya LD, Udupa N. Evaluation of antiplaque activity of Azadirachta indica leaf extract gel-a 6-week clinical study. *Journal of Ethnopharmacology* 2004;90:99-103.
9. Bakri IM, Douglas CWI. Inhibitory effect of garlic extract on oral bacteria. *Archives of Oral Biology* 2005;50:645-651.
10. Abraham S, Kumar MS, Sehgal PK, Nitish S, Jayakumar ND. Evaluation of the inhibitory effect of triphala on PMN-Type Matrix Metalloproteinase (MMP-9). *J Periodontol* 2005.
11. Harokopakis E, Mohamad HA, Haase EM, Scannapieco FA, Hajishengallis G. Inhibition of proinflammatory activities of major periodontal pathogens by aqueous extracts from Elder Flower (*Sambucus nigra*). *J Periodontol* 2006.
12. Carounanidy U, Satyanarayan R, Velmurugan A. Use of an aqueous extract of *Terminalia chebula* as an anticaries agent: A clinical study. *Indian J Dent Res* 2007;18(4):152-156.
13. Prashant GM, Chander GN, Murulikrishna KS, Shafiulla MD. The effect of mango and neem extract on four organisms causing dental caries: **Streptococcus mutans**, *Streptococcus salivarius*, *Streptococcus mitis*, and *Streptococcus sanguis*: An *in vitro* study. *Indian J Dent Res* 2007;18(4):148-150.
14. Botelho MA, Santos RA, Martins JG, Carvalho CO, Paz MC, Azenha C *et al.* Efficacy of a mouthrinse based on leaves of the neem tree (*Azadirachta indica*) in the treatment of patients with chronic gingivitis: A double-blind, randomized, controlled trial. *Journal of Medicinal Plants Research* 2008;2(11):341-346.
15. Chaturvedi TP. Uses of turmeric in dentistry: An update. *Indian J Dent Res* 2009;20(1):107-109.
16. Asokan S, Emmadi P, Chamudeswari R. Effect of oil pulling on plaque induced gingivitis: A randomized,

- controlled, triple-blind study. *Indian J Dent Res* 2009;20(1):47-51.
17. Fischman S. The history of oral hygiene products: How far have we come in 6000 years. *Periodontology* 1987, 2000;15:7-14.
  18. Dr. Srikanth C, Dr. Swathi Rawal, Dr. Mehta DS. An insight into history of dentistry in ancient India. *JIDA* 1999;70:59-60.
  19. Shikha T, Mehrotra KK, Saimbi CS, Nigam SK. Role of Himalayan plants in dentistry and their effect on dental plaque. *JIDA* 1999;70:12-14.
  20. Akpata ES, Akinrimisi EO, Lagos. Antibacterial activity of extracts from some African chewing sticks. *Oral Surg* 1977;44:717-722.
  21. Wolinsky LE, Sote EO. Inhibiting effect of aqueous extracts of eight Nigerian chewing sticks on bacterial properties favouring plaque formation. *Caries Res* 1983;17:253-257.
  22. Wolinsky LE, Sote EO. Isolation of natural plaque-inhibiting substances from Nigerian chewing sticks. *Caries Res* 1984;18:216-225.