

Herbal Medicines - A Natural Cure In Dentistry

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ABSTRACT

The word education derived from the latin word “educare and educere” which mean to bring out and lead. The natural medicine uses are increasing day by day because of decrease in the effects of the medicines given by normal clinician. Herbal products are purely safe whereas synthetics which are unsafe to humans & environment. Herbal extracts have been used in dentistry as antimicrobial, antiseptics, antibacterial. Herbal extracts have been used in controlling plaque in case of gingivitis, periodontitis. The purpose of this article is to review the uses of herbs in general dentistry.

Key words: Anti-inflammatory effect, antitumor, antioxidant activity,

INTRODUCTION

The word “ayurveda” is derived from ‘ayu’ meaning ‘life’ and ‘veda’ meaning ‘knowledge’. Herbs are one of substitute agents which are given by God. Herbals are in society since long back in medical field and dentistry field. ^(1,2)

There are so many branch of medicine like Allopathy, Ayurveda, Homoeopathy, Naturopathy, Siddha, Unani, and Yoga. Herbal medicines provide antibacterial activity against various microorganisms including bacteria’s responsible for dental caries. They may be use in periodontal related diseases and helped in wound healing. Antimicrobial activities of these have been found to be particularly useful for periodontal diseases. The biggest challenge and problem is the lack of information about the effect of herbs on oral tissues, mechanism of action, and side effects. ⁽³⁾

HERBS IN DENTISTRY

Aloe vera

- It acts as analgesic, antibacterial, antiviral, antifungal, antioxidant immune modulating, antiseptic, anti-inflammatory.
- Aloe vera is used in the sites of periodontal surgery, toothpick injuries, chemical burns, aphthous ulcers, gum abscesses, dry socket, lichen planus, acute monocytic leukemia, xerostomia benign pemphigus and gingival , problems associated with AIDS, leukemia, migratory glossitis, geographic tongue and burning mouth syndrome, denture sore mouth, candidiasis, desquamative gingivitis, vesiculobullous diseases. ^(4,5)

Black Cohosh (Rhizoma Cimicifugae Racemosae)

- It mainly has an anti-inflammatory effect. Studies have been conducted

using its anti-inflammatory property in treating periodontitis, but there is a lack of evidence.

- It is contraindicated in pregnancy or lactation, or in children under the age of 12 years. Minor gastrointestinal upset and headache are some of the adverse effects of black cohosh.
- Dosage - daily dosage: 40-60% isopropyl alcohol or ethanol extracts of the crude drug corresponding to 40 mg drug

Bloodroot (*Sanguinaria Canadensis*)

- It has antibacterial, anti-inflammatory, antifungal property. Mainly used for gingivitis and periodontal disease, remineralization of enamel lesions, acute sore throat.
- It is contraindicated in children and pregnant or lactating women. Long-term use might lead to nausea and vomiting, glaucoma, edema, heart disease, miscarriage, diarrhea, stomach pain, visual changes, and paralysis. (6-8)

Ginger (*Zingiber Officinale*)

- The constituents of ginger are 1-4% essential oil and an oleoresin, zingiberene, curcumin, sesquiphellandrene, bisabolene. Monoterpene aldehydes and alcohols are also present.
- It has antibacterial, anti-inflammatory, analgesic property. It is used to relieve toothache, in the treatment of oral thrush. Ginger may reduce the toxic effects of the chemotherapeutic agent cyclophosphamide.
- It is contraindicated in pregnancy and patients with the biliary disease. Because ginger can interfere with blood clotting, it should be used cautiously in patients on anticoagulant therapies such as heparin. (9,10)

Clove Oil (*Syzygium Aromaticum*)

- It has analgesic, antibacterial, antiviral, anti-inflammatory, antioxidant property.
- It has been used to relieve toothache, in periodontitis, as an anaesthetic and also to treat bleeding gums.

- Use with caution in children, pregnant and lactating women. Allergic contact dermatitis on topical use.

- It is available as a tincture (1:5, 25% ethanol), lozenges and mouthwash.

Cranberry (*Vaccinium Macrocarpon*)

- It consists of polyphenols, flavonoids that have anticarcinogenic, antibacterial, antiviral, antifungal, and antioxidant properties. (11,12)

Green Tea (*Camellia sinensis*)

- It consists of polyphenol contents comprising catechin (C), epicatechin (EC), gallic acid (GA), galloylated catechin (GC), epigallocatechin (EGC) epicatechin gallate (ECG), and epigallocatechin gallate.
- It is anti-inflammatory, antibacterial, antiviral.
- Used in the treatment of periodontal diseases.

Neem (*Azadirachta Indica*)

- It consists of genin, sodium nimbin, salannin, nimbin, azadirachtin, nimbidiol, quercetin and nimbidin. Neem leaves contain fibres, carbohydrates and at least 10 amino acid proteins, calcium, carotenoids, fluoride. (13)
- They are antiviral, antifungal, antimicrobial, antibacterial, antipyretic, anti-inflammatory, antitumor, analgesic, antihelminthic, anticarcinogenic, antioxidant activity. Studies have shown that neem is used in the treatment of dental caries, gingivitis, periodontitis.
- Dosage - Infusion (1:20): 15-30 ml; Tincture (1:5): 4-8 ml. External applications: 70% ethanol extract of the leaves diluted to 40%, apply twice daily. (14,15)

Peppermint (*Mentha Piperita*)

- Peppermint consists of menthol (29-48%) and menthone (20-31%).
- It is analgesic and also has muscle-relaxing action. Peppermint oil application for toothache by soaking a cotton ball in the oil and placing it in the cavity or rubbing it on the tooth.

- **Turmeric (*Curcuma longa*)**
- Chemical constituents of turmeric include volatile oil (6%) composed of a number of monoterpenes and sesquiterpenes, including zingiberene, curcumin, α - and β -turmerone among others. The colouring principles (5%) are curcuminoids, 50-60% of which are a mixture of curcumin, mono des methoxycurcumin and bis des methoxycurcumin.
- It is antimutagenic, anticarcinogenic, antioxidant, antibacterial and used in dental caries, oral lichenplanus, gingivitis, halitosis, pit and fissure sealant, dental plaque detection system. Massaging the aching teeth with roasted, ground turmeric eliminates pain and swelling.

Tulsi (*Ocimum sanctum*)

- It consists of tannins (4.6%) and essential oil (upto 2%), eugenol (up to 62%), methyleugenol (upto 86%), and α - and β -caryophyllene (up to 42%), methylchavicol, linalool and 1,8-cineole.
- It has got antihelminthic, analgesic, antipyretic, immune stimulatory, antiulcer, antimicrobial, anti inflammatory property .Used in periodontitis.
- Contraindicated in pregnant and lactating women. ⁽¹⁶⁾

Triphala

- It is a combination of amalaki, haritakiand bibhitaki. Amalaki contains ascorbic acid, thiamin, riboflavin and niacin.
- It is antioxidant, antimicrobial. Used in dental caries, bleeding and ulcerated gums.

Garlic (*Allium sativum*)

- It has got antibacterial, antiviral, and antifungal, antiseptic, bacteriostatic, anti helminthic effects, also help in to treat dental caries and periodontitis. ⁽¹⁷⁾

CONCLUSION

This article helped us to understand the uses of many home ingredients in day to day life, which are the solutions of many

dental diseases and adverse effects of chemical drugs can be avoided .These herbal medicines are economical wise and health wise are effective for all class of people in the society .More awareness programs for general public are required in future for herbal medicines.

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