Herbal Therapy in Dentistry: A Review

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INTRODUCTION

An herb is any plant that lacks the woody tissue characteristic of shrubs or trees. Herbs are plants used medicinally or for their flavor or scent. Herbs with medicinal properties are useful and effective source of treatment for various disease processes. Many allopathic medicine-have their origin in medicinal plants. Use of alternative therapies is common among patients with serious, chronic, or degenerative illness and to combat side effects with allopathic medicine. Herbal preparations can be derived from the root, leaves, seeds, and flowers. The preparations often contain a concoction of chemical substances may contain minerals and vitamins, and determining a specific active ingredient. This paper includes few herbs which can be used as remedies in dentistry alternative to allopathic medicine.

CAYENNE (Capsium annum l.)

Uses
Saturate cotton with oil of cayenne and place it on an aching tooth for emergency relief. Cayenne has an antiseptic action, since its constituents show antimicrobial effects against certain Clostridium, Streptococcus, and Bacillus organisms, as well as bactericidal activity against Helicobacter pylori, the troublesome bacteria found in the stomach of some persons. Cayenne also contains the dark-red pigment capsanthin, as well as other carotenoid which may enhance immune function.

- Topical application of capsicum extract used to treat herpes zoster, recurrent apthous stomatitis. For sports injuries and arthritic pain, the capsicum in cayenne acts as a counter irritant, causing temporary pain to the skin that depletes the chemical messengers of pain for the joint. Capsicum permeates the skin, enters the nerve, and eliminates substance P, stopping the pain message from reaching the brain. However; don’t leave a concentrated form on the skin for a long time as it can become an irritant.1

Chickweed (Stellaria sps)
The most common of weeds, chickweed is found throughout the world. Its leaves are used to soothe skin irritations.

Uses
Chickweed mouthwash soothes inflamed, irritated mouth tissues associated with oral cancer; it also helps to relieve pain from canker sores and other mouth sores.2

Cloves (Laung) (Syzygium aromatium)
The dried flower buds of an East Indian evergreen tree, cloves are popularly used as a spice. They also yield a volatile oil used medicinally and in perfumes. Cloves have antiseptic, stimulant, and antiemetic (vomiting preventive) properties and are used to treat the mouth, stomach, intestines, circulation, and lungs.

Uses
- Rub oil of cloves on sore gums and teeth to ease pain.
- Chew whole cloves to diminish bad breath.3

Comfrey (Symphytum asperum)
The comfrey plant grows in rich, moist areas and has prickly green leaves along its stalk. Its leaves and roots have traditionally been used to treat the lungs, stomach, and intestines. Comfrey contains phosphorus, potassium, starch, tannins, and vitamins A, C, and E.

Uses
- Do not use comfrey for longer than three months at a time as it may cause liver damage.
- Soak a washcloth in warm comfrey tea and use as a compress to ease jaw tension and relieve the pain of jaw and tooth fractures or adjustments to braces.4
Dandelion (Taraxacum officinale)
Commonly thought of as a weed, the dandelion flowers from April to November. It has long been used to make tea and wine and is a popular seasoning in old English recipes. The leaves, roots, and tops are used to treat a variety of internal organs and to purify blood. It also increases the production of bile and urine. Dandelion contains biotin, calcium, choline, fats, iron, magnesium, niacin, PABA, phosphorus, proteins, sulfur, zinc, and a variety of vitamins. Uses
• Dandelion is useful for treating abscesses in the oral cavity.  
• Used as a blood purifier.  
Elderberry (Sambousus)
The small edible fruit of the elder-a plant grows in damp ground-elderberries are a rich source of vitamin C. The dark purple berries are often used to make wine or preserves and have traditionally been used to treat colic, diarrhea, rheumatism, coughs, and colds. Uses
• Prepare elderberry mouthwash after gum surgery or after sutures have been placed. The rinse will help tissues to heal properly, thereby preventing scars. 
Eucalyptus (Eucalyptus globulus)
A tall tree native to Australia, the eucalyptus yields a powerfully antiseptic essential oil that has long been used medicinally. As its leaves have commonly been used to lower fevers, the eucalyptus is sometimes known as the "fever tree." Uses
• Rub eucalyptus oil on sore, inflamed gums for temporary relief. 
Garlic (Lasun) Allium sativum
Garlic has been used for centuries to prevent and treat a variety of illnesses and to ensure longevity. Today, it is used as a natural antibiotic that is good for fighting infections caused by fungi or bacteria. It helps strengthen the immune system and is used to lower blood pressure. Garlic is also used to treat arteriosclerosis, asthma, arthritis, and digestive and circulatory problems. Garlic contains calcium, copper, germanium, iron, magnesium, manganes, phosphorus, vitamins A, B1, B2, and C, and a variety of other chemicals. Uses
• Fresh oil of garlic or raw cloves are considered the most effective forms.  
• Odorless garlic extract, sold in health-food stores under the name Kyolic, is available. 
Ginseng (Adrak) Panax
There are two varieties of ginseng, one native to eastern Asia and the other native to North America. Both have small greenish flowers and a forked root. It is the root that has medicinal properties. It promotes appetite and is used for digestive disturbances and in cases of impotence. It contains calcium, camphor, iron, starch, and vitamins A, B12, and E, along with other chemicals. Uses
• Large amounts of ginseng should not be used by elderly or weak people who have high fevers.  
• Use in a tonic to promote circulation and to help repair irritated gum tissue.  
Horsetail (Equisetum)
The prehistoric horsetail plant is rich in healing and is commonly used to reduce fever. It also has antinflammatory properties, stops bleeding, and repairs damaged tissue. Uses
• Use a horsetail mouthwash to relieve mouth and gum infections.  
Kelp (Laminariales)
Large brown seaweed, kelp contains biotin, bromine, calcium, choline, copper, iodine, PABA, potassium, a variety of B vitamins, vitamins C and E, and other chemicals and nutrients. It is used to treat the sensory nerves, goiter, ulcers, and obesity, and to protect people against the effects of radiation. Kelp is available in tablet or powder form. Uses
• One of the richest sources of vitamins, minerals, and trace elements, kelp taken daily will help ensure healthy gums and bone. 
Licorice Root (Glycyrrhiza glabra)
Beneficial as an anti-inflammatory for arthritic or allergic conditions, licorice root is also used as a digestive stimulant and a soothing expectorant for lung disorders, such as asthma and bronchitis. Its antibiotic properties are effective in the treatment of ulcers. Sweet and flavorful, licorice is often added to toothpaste and mouthwash. Uses
• active ingredient in licorice, inhibits plaque growth  
• do not take licorice if you have high blood pressure, heart problems, or if you are taking digoxin-based drugs. 
Marigold (Calendelula officinalis)
An annual herb where flowers are yellow or orange-yellow colour, and the fruit is semicircular with a strong, unpleasant odor. Commonly used as a homeopathic remedy (Calendula, called "the homeopathic antiseptic"), marigold flowers have been used internally as a diuretic, a stimulant, and an antispasmodic. Externally, they are used in the treatment of burns, wounds, and impetigo of the scalp. Use: marigold as a mouthwash to relieve ulcers, wounds, or inflamed areas and to relax muscles associated with tension in the jaw joint and pressure from braces. 
Marjoram (Origanum _majorana)
Marjoram, have a pyramidal shape, faded and aromatic rose-colored flowers, and leaves with downy undersides. The flowering tips are used to flavor foods and prepare home remedies. In ancient times, marjoram was used to combat acidity and flatulence. It is considered an antispasmodic, expectorant, antiseptic, and stomachic. Uses
• Marjoram used to ease headaches and relieve toothache pain. 
Myrrh (Commiphara abopalsamm)
A gum obtained from the trees and shrubs of the genus Commiphora, myrrh may be known as one of the gifts the Wise Men brought to the Infant Jesus. Myrrh is a powerful antiseptic that has long been used to treat stomach and lung disorders. Uses
Myrrh helps promote healing in cases of pyorrhea. Rinse the mouth with myrrh tea and brush with the powder when gum disease exists. 
Parsley (Petroselinium crispum)
An aromatic herb commonly used as a garnish or seasoning.
for food, parsley contains potassium and vitamins A and C. It is also a natural diuretic. Uses: Chewing on a sprig of sweet, aromatic parsley will help eliminate bad breath.

- Excessive amounts of parsley may stop milk production in nursing mothers.13

Peppermint (Mentha piperita)

This mint grows in moist, open areas to a height of three feet and has dark green, lance-shaped leaves and purple flowers. One of the oldest of household remedies, it has been used to treat the stomach, intestines, and muscles, and to improve circulation. The leaves and flowering tops are now used to treat colic, fever, convulsions, and especially nausea and diarrhea. Peppermint contains menthol, methyl acetate, tannic acid, and vitamin C.

Uses:
- Peppermint may interfere with iron absorption.
- Use peppermint oil for toothache. Soak a cotton ball in the oil and place it in the cavity or rub it on the tooth.
- Use peppermint mouthwash to relieve gum inflammation.14

Red Clover (Trifolium pretense)

Used mainly as a blood purifier, the blossoms of the red clover are also helpful in treating acne, boils, and skin infections. It is also effective as a mild sedative.

Uses:
- Red clover mouthwash is healing for irritated, diseased gums.
- After making red clover tea, prepare an ointment from the strained blossoms and leaves. Rub the ointment, which has antibiotic properties, on gums that are abscessed from disease, or sore and inflamed from root canal therapy or other dental procedures.15

Rockrose (Cistus fumena)

Sometimes referred to as sun rose, this low-growing evergreen of the genus Helianthemum loves the sun. It is helpful in reducing anxiety.

Uses:
- Use rockrose mouthwash to soothe and heal canker sores and mouth ulcers.
- Drink rockrose tea to promote relaxation.16

Rosemary (Rosmarinus officinalis)

Native to the Mediterranean region, this evergreen shrub is widely grown for its aromatic leaves, which are used as a seasoning, in perfume, and for medicinal purposes. Long used to treat the stomach, intestines, liver, nerves, and lungs, rosemary increases the pro-duction of bile and raises blood pressure.

Uses:
- Use rosemary mouthwash for the treatment of gum disease and bad breath.17

Sanicle (Sanicula spp)

Sanicle has finely toothed leaves and pale flowers. The seeds are contained in round burst. This herb was used long ago to dissipate "evil humours," and was considered a panacea. Today, the flowering tips and leaves-rich in tannin, resin, and essential oil-are used for their antiseptic, anti-inflammatory, stomachic, and astringent properties.

Uses:
- Use sanicle as an antioxidant.
- Use as a salve or ointment to heal septic wounds.18

Shepherd’s Purse (Capsella bursa-pastoris)

Also known as St. John’s wort, shepherd’s purse is a very common “weeds” that grows to about eighteen inches in height and has tiny white flowers. The tops are used for their astringent, diuretic, and stimulant properties. As a homeopathic remedy, it is known as Hypencum.

Uses:
- Use the fresh tops of shepherd’s purse to stop bleeding after tooth extraction.19

Sage (Salvia spp)

A member of the mint family, sage grows wild in fields and along roadsides. Today the leaves are used to treat laryngitis, tonsillitis, and sore throats. The herb also has antiflatulent and mildly laxative properties.

Uses:
- Lactating women should not drink sage tea; it can interfere with production of breast milk.
- As a mild antiseptic, this herb will help heal bleeding gums and mouth ulcers (cold sores).
- Drink a cup of hot sage and chamomile tea to ease apprehension before dental treatment.20

Circuma longa (Turmeric)

Commonly known as turmeric which is perennial plant with orange, oblong tubers. When dried, it is made into a yellow powder with a bitter, slightly acrid, yet sweet taste. Turmeric has range of therapeutic actions like antioxidant, anti-inflammatory and antimutagenic.

Uses:
- Rinsing the mouth with turmeric water (boil 5gm of turmeric powder, two cloves, and two dried leaves of guava in 200gm water) gives instant relief.
- Massaging the aching teeth with roasted, ground turmeric eliminates pain and swelling.
- Applying a paste made from 1tsp of turmeric with ½ tsp of salt and ½ tsp of mustard oil provides relief from gingivitis and periodontitis.21

Psoralea (Psorales corylifolia, f.)

Dry fruits of Leguminous plant Psoralea corylifolia is one of the most popular traditional Chinese Medicine. It’s an annual herb growing throughout the plains of India. The plant is of immense biological importance and it has been widely exploited since ages for its magical effect against several skin diseases like psoriasis, leucoderma and leprosy. It is reported to contain essential oil, coumarins,alkaloids, flavonoids and terpenoids. The drug has also been reported for the treatment of enuresis, various kidney problems, depression osteoporosis and bone fractures, and tuberculosis and lichen planus. (PUVA- theraphy) 22

Jasminum grandiflorum

Jasminum grandiflorum, also known variously as the Spanish jasmine, Royal jasmine, Catalanian jasmine, among others (chameli in Hindi) is a species of jasmine native to South Asia. In India, its leaves are widely used as an Ayurvedic herbal medicine and its flowers are used to adorn the coiffure of women. Leaves are tried in treating oral lesions like lichen planus.6

CONCLUSION

In conclusion herbs are used, to reduce inflammation, and calm and soothe irritation. Herbs may be used internally as pills, syrups, and infusions, or externally as poultices, plasters, and liniments. Moist herbal wraps, either hot or cold, can be used on specific affected parts of the body. These wraps are especially effective for sore, tense muscles such as those in the neck, shoulders, back, or jaw when
temporomandibular joint syndrome (TMJ) is present. So herbs can be used alternatively to allopathic medicine. Since herbal therapies aids in effectiveness, safety, accessibility and control over treatment hence can be tried in Dentistry as they are used in medical disorders.

REFERENCES

1. Christopher, Dr. John R. School of Natural Healing. (11th printing), Christopher Publ., Utah, 1999, pg. 447-449.