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REVIEW ARTICLE

Triphala: An Alternative Therapy in Periodontics – A Critical Review

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ABSTRACT

Oral health is an integral part of general health. In spite of extensive development of modern medical science, satisfactory treatment of “oral diseases” by newer drugs is into achieved, some drugs causes side effects in excessive use and therefore, there is interest to find out effective treatment of any disease by harmless herbal drugs. Ayurveda is considered as the “science of life,” because the ancient Indian system of health care focused views of man and his illness. Conventional drugs usually provide effective antibiotic therapy; problem like antibiotic resistance are increased and new solutions are needed. Hence, now herbal drugs are being preferred to synthetic antibiotics. ‘Triphala’ is a well-known powdered preparation in the Indian system of medicine. It consists of equal parts of the *Emblica officinalis*, *Terminalia chebula* and *Terminalia bellerica*. Currently, Triphala is being extensively researched for its various therapeutic effects including its anticaries, antioxidant, anticollagenase and antimicrobial activities. The present article will focus on the critically review of Triphala and its several applications in periodontics a branch of dentistry.

KEYWORDS Triphala, ayurveda, periodontal disease, antimicrobial, anti-inflammatory, antioxidant, periodontitis, periodontics, alternative therapy, *Emblica officinalis*, *Terminalia chebula*, *Terminalia bellerica*, mouthwash, dentistry

INTRODUCTION

The Ayurvedic concept appeared and developed between 2500 and 500 BC in India. It developed from youngest of Vedas, the Atharva Veda, and is considered to be the mother of healing system in India by scholars. The literal meaning of Ayurveda is “science of life,” because ancient Indian system of health care focused views of man and his illness. It promotes the use of herbal compounds, Special diets and other unique health practices. Herbal medicines were in great demand in the developed as well as in developing countries for primary health care because of their wide biological and medicinal activities, higher safety margin, and lower costs. The World Health Organization estimates that about 80% of the populations living in the developing countries rely almost exclusively on traditional medicine for their primary health care needs. There are some side effects with drugs which are used in allopathy. To overcome such side effects the World Health Organization (WHO) advice researchers to investigate the possible use of natural products such as herb and plant extracts. Herbs and plant extract have been used in oral hygiene products for many years.¹ In recent years, there has been focus on plants or plant products used in folk dental practice or presumed in Unani, homeopathic or Ayurvedic remedies. Natural compounds

contained in the herbal cocktail can act in a synergetic manner within the human body and can provide unique therapeutic properties with minimum or no undesirable side effects. Recently there is renewed interest in use of various Ayurvedic drugs for oral and dental health. Even though dentistry was not a specialized branch of Ayurveda, it is included in its Shalakyta tantra. Problems such as deformities of the oral cavity and oral infections were managed in ancient India. Ayurvedic medical texts have not just indicated the herbs that could halt the oral diseases and trigger the natural remineralisation of decayed tooth, but also documented the oldest history of implants. Ayurveda aims to integrate and balance the body mind and soul.

“Triphala” is among the most common formulas used in traditional ayurvedic medicine. It is a Rasayana Drug used in Indian System of Medicine. It is composed of the fruits of three trees, Indian gooseberry Amalaki (*Emblica officinalis*), Bibhitaki (*Terminalia belleria*) and Haritaki (*Terminalia chebula*), Triphala is mentioned throughout the ancient literature of Ayurvedic medicine as a tonic, highly prized for its ability to regulate the process of digestion and elimination.

It is one of the Ayurvedic medicinal herbal formulations prescribed by most healthcare practitioners. It is gentle for people of all ages from children to adults. In Ayurveda, Triphala is termed

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a as tridoshic rasayana and to have balancing and rejuvenating effects on the three constitutional elements that govern human life (Vata, Pitta and Kapha). It is employed to treat conditions like headache, dyspepsia, ascites and leucorrhoea. It is also used as a blood purifier and possesses anti-inflammatory, analgesic, anti-arthritis hypoglycemic and anti-aging properties. It is claimed to have antiviral and antibacterial effect. It is prescribed for various symptoms of fatigue, assimilation and infectious diseases such as tuberculosis, pneumonia, AIDS, periodontal diseases. It is reported to reduce considerably the damage due to oxidative stress. It inhibits the growth of Gram positive and Gram negative bacteria. It is rich in gallic acid, Vitamin C, ellagic acid, chebulic acid, bellericanin, β -sitosterol and flavonoids.³

INGREDIENTS OF TRIPHALA

Emblica officinalis (Amalaki)

Amalaki or Indian gooseberry consists of fresh fruit pulp of *Emblica officinalis*, a small or medium sized tree found in mixed deciduous forests. Seeds of Amalaki contain fixed oil, phosphatides and an essential oil whereas fruits, bark and leaves are rich in Tannins.⁴ Fruit has one of the highest concentrations of vitamin C. Usually, while storing dry or in other forms, vitamin C gets destroyed due to exposure to heat, but in Amalaki, it stays protected due to the presence of tannins which protects it from being destroyed. It is therefore accepted as a prime anti-oxidant.⁵

Therapeutic Uses

According to the Ayurveda Encyclopaedia, Amalaki acts as an “aphrodisiac, astringent, haemostatic, laxative, nutritive tonic, rejuvenative and stomachic”.⁶ Amalaki is good for all diseases where there is an inflammation as it doubles the “natural killer cells” within three days. It acts on the blood, bones, liver and heart, rebuilds and maintains new tissues, increases red blood cell count. Amalaki also acts as a blood sugar regulator and a heart tonic, therefore used for blood diseases such as anaemia and diabetes. It cleanses the mouth, strengthens teeth, nourishes bones, aids nail and hair growth, improves eyesight, stops bleeding gums, and also improves appetite. In the digestive system, Amalaki cleanses the intestines and stops inflammation of the colon and stomach.⁶ Apart from this, stress induced brain damage is also prevented due to the presence of tannins.⁵ It has application as immunomodulatory, anti-pyretic, analgesic, cytoprotective, antitussive and gastroprotective agent. Additionally, it is useful in memory enhancing, ophthalmic disorders, and lowering cholesterol level. It is also helpful in neutralising snake venom and as an anti-microbial agent against *Escherichia coli*, *K. ozaenae*, *Klebsiella pneumoniae*, *Proteus mirabilis*, *Pseudomonas aeruginosa*, *S. paratyphi* A, *S. paratyphi* B and *Serratia marcescens*. The drug is not reported to have any side-effects even after prolonged use.⁷

Terminalia belerica (Bibhitaki)

Bibhitaki consists of pericarp of dried ripe fruits of *Terminalia belerica* (family-Combretaceae), a large deciduous tree, 10–12 m or more in height, commonly found in plains. Fruit of Bibhitaki contains 17% tannins, gallo-tannic acid and resin whereas seeds are rich in greenish yellow oil.⁴

Therapeutic uses

Bibhitaki is a strong laxative herb, and being an astringent, cleanses and tonifies the bowel. Further, the actions of Bibhitaki are “anthelmintic, antiseptic, astringent, expectorant, laxative, lithotriptic, rejuvenative and tonic.”⁶ It is good for conditions of chronic diarrhoea and dysentery and increases appetite. It is also effective in cold and cough, and can be taken with honey for sore throats. Apart from this, it is also involved in antioxidant, antidiabetic, analgesic, immune-modulatory, antihypertensive, hepatoprotective, antispasmodic and bronchodilator activities.⁶

Terminalia chebula (Haritaki)

Haritaki consists of the pericarp of mature fruits of *T. chebula* (family - Combretaceae), a moderate or large sized tree found throughout India, chiefly in deciduous forests and areas of light rainfall. Fruit contains up to 30% Tannins, chebulic acid, gallic acid and some purgative constituents of the nature of Anthraquinone.⁴

Therapeutic Uses

Charaka-Samhita describes Haritaki as having all tastes except saline. The actions are “rejuvenative, tonic, astringent, laxative, nervine, expectorant and anthelmintic” Haritaki is a good digestive herb, regulating the function of the colon. *T. chebula* exhibited anti-bacterial activity against a number of Gram-positive and Gram-negative human pathogenic bacterial species. Haritaki also improves the absorption, and has a dual property, based on dosage, of correcting both the diarrhoea and constipation. It has antibacterial, antifungal, antiviral and anticarcinogenic, anti-oxidant, anti-anaphylactic, cytoprotective and radio-protective properties as well.⁶

INGREDIENT-WISE MAIN CHEMICAL CONSTITUENTS OF TRIPHALA

Tannins

“Tannin” is a general descriptive name for a group of polymeric phenolic substances capable of tanning leather or precipitating gelatin from solution, a property known as astringency. This group of compounds, especially green teas and red wines, has received a great

deal of attention in recent years since they can cure or prevent a variety of ills. Many human physiological activities, such as stimulation of phagocytic cells, host-mediated tumour activity, and a wide range of anti-infective actions, have been assigned to tannins. One of their molecular actions is to complex with proteins through so-called non-specific forces such as hydrogen-bonding and hydrophobic effects, as well as by covalent bond formation. Thus, their mode of anti-microbial action may be related to their ability to inactivate microbial adhesins, enzymes and cell envelope transport proteins.⁸

Quinones

Quinones are aromatic rings with two ketone substitutions. They are ubiquitous in nature and are characteristically highly reactive. The individual redox potential of the particular quinone-hydroquinone pair is very important in many biological systems. Vitamin K is a complex naphthoquinone with anti-haemorrhagic activity. In addition to providing a source of stable free radicals, quinones are known to complex irreversibly with nucleophilic amino acids in proteins, often leading to inactivation of the protein and loss of function. For that reason, the potential range of quinone anti-microbial effects is great. Probable targets in the microbial cell are surface-exposed adhesins, cell wall polypeptides, and membrane-bound enzymes. Quinones may also render substrates unavailable to the microorganism.⁸

Flavones, Flavonoids and Flavonols

Flavones are phenolic structures containing one carbonyl group (as opposed to the two carbonyls in quinones). The addition of a 3-hydroxyl group yields a flavonol. Flavonoids are also hydroxylated phenolic substances, but occur as a C6-C3 unit linked to an aromatic ring. Since they are known to be synthesized by plants in response to microbial infection, it should not be surprising that they have been found in vitro to be effective anti-microbial substances against a wide array of microorganisms. Their activity is probably due to their ability to complex with extracellular and soluble proteins and to complex with bacterial cell walls. More lipophilic flavonoids may also disrupt microbial membranes. These compounds have been shown to inhibit *Vibrio cholera* O1, *Shigella*, *Streptococcus mutans* in vitro. Inhibition of isolated bacterial glucosyl transferases in *S. mutans*, and reduction of fissure caries by about 40% has also been demonstrated.⁸

Gallic Acid

Gallic acid is a common phyto-constituent present in all three herbs used in Triphala. It is reported to possess hepatoprotective and antioxidant activity. It also suppresses growth of cancer cells.⁷

Vitamin C

Fruit juice of *Emblica officinalis* (EO) contains the highest vitamin C (478.56 mg/100 mL) content. The fruit when blended with other fruits boosted their nutritional quality in terms of vitamin C content. Vitamin C in EO accounts for approximately 45–70% of the antioxidant activity.⁷ Evidences have been reported for the relation between vitamin C and periodontal disease. Significant gum bleeding can occur in vitamin C deficiency. Vitamin C along with bioflavonoid helps to speed up the healing process.⁹

DIFFERENT AVAILABLE FORMULATION OF TRIPHALA

- Triphala tablet, Triphala choorna
- Formulation of choornam: This is a dry fine powder form of the drug choornam, which can be used both internally and externally.
- Decoction form: This form can be used as an eye-wash or mouthwash.

ROLE OF TRIPHALA IN PERIODONTICS

Triphala in Periodontal Diseases

Observation reveals that the number of organism increases when gingival inflammation and periodontal pockets are present. Even though there are several no of researches performed but no specific organism or group of organisms has yet been identified as causals. It is assumed that the toxic products of bacterial origin produce periodontal disease. However, there is some evidence that key pathogens may be associated.

Bacterial plaque is known to have an etiologic role in inflammatory periodontal disease, and bacterial invasion may be an important aspect of chronic periodontal disease. The history of knowledge about Dantamulagata rogas in Ayurveda is traced back to the period of sushruta. Dantamulagata roga have close relation to the chronic gingivitis and chronic periodontitis. In many cases the satisfactory periodontal treatment has not been achieved by the practioners till now. Which may be due to – (1) lack of knowledge concerning the details of the definitive mechanism which plays role in progression of such disease; (2) difficulty to maintain proper oral hygiene and (3) side effects of the modern drugs which limit their prolonged use for the permanent cure of disease. Sushruta has described that Triphala pacifies that kapha and pitta dosha, which are the main causative factors of the periodontal diseases. Sushruta has also emphasised that the triphala has haemostatic, anti-inflammatory, analgesic and wound healing properties. Haritaki is most efficacious for bleeding gums and gingival ulcers and carious teeth and on the other hand Amalaki contains enormous vitamin C which is most essential to prevent the bleeding from gums.¹¹

In bacteriological study with the Triphala decoction, results demonstrated that Triphala has a good antibacterial property and it is sensitive to 16 (72.7%) bacteria out of 22. Although Triphala cured periodontal disease without any side effects or toxicity, yet a detailed scientific enquiry is required into various aspects of its pharmacological and clinical effects before this drug could be recommended for the treatment of periodontal disease. It is also to be mentioned that a broad antibacteriological study can be made upon various bacteria. Triphala alone is capable to provide partial relief but when used in combination with other drugs such as metronidazole, more effective for the treatment of periodontal disease. However, it is further suggested that triphala and metronidazole as a combined treatment regimen should be used for local (like gargling and mouthwash) and systemic administration.¹² Triphala also possess an effective antiplaque activity. The ethonolic extract of the formulation has higher antioxidant activity and inhibits *S. mutans*. Triphala extract inhibits the biofilm formation and protects gum cells due to antioxidant activity.

Hypertrophy of Gingiva

Sesame oil, triphala, alum, kshara (alkali), khadira (acacia catechu) can be used to massage the gums in hypertrophy of gingiva.³

Triphala as an Antiplaque Agent

Plaque is considered as primary etiological factor in periodontal disease. Thus, control of dental plaque may inhibit progression of periodontal disease. Since a majority of population is not able to perform plaque control effectively, various chemical plaque control agents are used adjunct to oral hygiene aid. Chemotherapeutic mouth rinses provide chemically significant benefit in the reduction of plaque induced gingivitis.

Chlorhexidine is considered as the gold standard in reducing dental plaque as it has antiplaque as well as antibacterial properties. However, it has few undesirable side effects primarily brown staining of the teeth and transient impairment of taste sensation. Recently herbal mouthwashes are gaining popularity as they contain natural ingredients which are called as Phytochemicals that delivered antimicrobial and anti-inflammatory effects. Herbal formulations may be more appealing because they work without alcohol, artificial preservatives, flavours or colours.¹³

The herbal product made of equal proportion of *T. chebula*, *T. bellerica* and *E. officinalis* were evaluated. Ethanol extracts of the formulation were tested for its total antioxidant activity using improved ABTS radical cation decolorising assay and antibiotic assay against *S. mutans* (predominantly involved in bio-film formation on human teeth). Study was conducted to evaluate antiplaque activity using an in-vitro assay (conditions were kept similar to oral cavity) with Triphala and two

commercial toothpastes. The herbal extract effectively inhibited the bio-film formation and the better antioxidant activity exhibited by the extract might protect the gum cells effectively from free radicals than the commercial toothpastes. Thus Triphala can be used as an effective antiplaque agent.¹⁴

Triphala as a Mouth Rinse

Among the mouthwashes available, chlorhexidine (CHX) has been highly effective in reducing the oral microbial load and hence considered as the “Gold Standard”.¹⁵ However, long-term use of chlorhexidine mouthwash shows some side effects like- staining of teeth and composite restorations, altered taste perception, metallic taste, burning sensation, etc. In addition, the relative unavailability and non-affordability of chlorhexidine in the rural and peri-urban areas of India drives the need of a mouthwash which is easily available, acceptable and affordable.

Periodontal diseases have been treated with Ayurvedic drugs. The 20th Shloka of Sushruta Samhita states that Triphala can be utilised as a gargling agent in dental diseases because of its antibacterial, antiseptic and anti-inflammatory properties.⁶

Triphala mouth rinse in conjunction with scaling and root planning showed statistically significant reduction in the plaque index, gingival index, and oral hygiene index which was comparable to chlorhexidine at 7, 30, and 45 days with no evidence of staining of teeth.⁹

About 0.6% Triphala mouthwash and 0.1% CHX exhibited a similar trend in preventing formation of plaque with progressive decrease in the plaque scores from the baseline till the end of 9 months. Both groups also showed similar outcomes on gingival health and inhibitory effects on microbial counts, except Lactobacillus count where Triphala showed better results than Chlorhexidine.¹⁶

Triphala of 6% used twice a day brought down the oral streptococci count by 17% and 44% compared to 0.2% chlorhexidine group which showed 16% and 45% reduction at the end of 48 h and 7 days, respectively, suggesting that the anti-oral-streptococci efficacy of Triphala is comparable to that of chlorhexidine.¹⁷

Advantages of Triphala Mouthwash over Gold standard “Chlorhexidine”

Triphala mouthwash does not cause staining of teeth & tastes like a raw fruit and this taste disappears within a few minutes following rinsing of the mouth.¹⁸ On the other side, long term use of chlorhexidine results in altered taste sensation as well as some amount of yellowish staining of teeth.

Triphala is highly valued in Indian folk medicine and has many potential systemic benefits. It has been prescribed by Ayurvedic practitioners because of its wide array of actions to cure a host of systemic illnesses.

Thus, instead of causing side-effects, if consumed, it provides systemic benefits. Thus it might prove to be favourable for disabled and bedridden patients, and those unable to maintain adequate oral hygiene.¹⁷

Also, the dried and powdered mixture of triphala constituted by locally available fruits - Amla, Vibhitakai, and Haritakai in a 1:1:1 ratio is quite cost effective. Thus, it is a promising alternative especially for developing countries where majority of the population finds the commercially available mouth rinses quite unaffordable.

Triphala as Antimicrobial and Antioxidant

In vitro studies demonstrated Triphala may have antibacterial activity against several bacterial isolates, including various species of *Pseudomonas*, *Klebsiella*, *Clostridium*, *Shigella*, *Staphylococcus* (including beta-lactamase-producing methicillin-resistant *Staphylococcus aureus*), *Vibrio*, *Salmonella* (including multidrug-resistant *Salmonella typhi*), *Escherichia*, *Enterobacteria*, *Corynebacteria*, *Enterococcus*, *Bacillus*, *Proteus*, and *Helicobacter pylori*.¹⁹ In in vitro study also showed antibacterial efficacy against periopathogens (*P. gingivalis*, *P. intermedia*, *T. forsythia*, *A. actinomycetemcomitans*). Antibacterial activity of Triphala also varies with different constituents. The complex mechanisms of antibacterial activity of Triphala include either inhibition of the cell division or damage to the cell walls of the bacterium.²⁰

Ethanol extract of Triphala showed potent antioxidant and antimicrobial activity showing minimal inhibitory and minimal bactericidal concentration at 50 µg/ml itself. It has also controlled the plaque formation effectively by inhibiting 83.72% growth of *S. mutans* in 5% solution.²¹

The strong antioxidant activity of Triphala may be attributed to *T. bellirica*, which is the most active antioxidant followed by *E. officinalis* and *T. chebula*. The major ingredients of *T. bellirica* are ellagic and gallic-acid; *E. officinalis* has several gallic acid derivatives including epigallocatechin gallate and in *T. chebula*, gallic acid is the major ingredient. The presence of these active ingredients of phenolic nature may be responsible for scavenging the free radicals.²¹

Anticollagenase Activity of Triphala

Matrix metalloproteinases play a vital role in periodontal destruction, and this knowledge lead to a new concept involving the chemotherapeutic inhibition of these enzymes. Doxycycline is the most potent tetracycline for collagenase/gelatinase inhibition. However, long-term tetracycline therapy has certain disadvantages. Use of plant-derived inhibitors of collagenase as an adjunct in the treatment of periodontal disease does not produce side effects of tetracycline compounds as well as other synthetic drugs.

Triphala formulation inhibits the collagenase enzyme activity in a dose-dependent manner. Each of the

components of Triphala causes significant and reproducible inhibition of collagenase. The *T. chebula* component of Triphala is the most potent collagenase type 2 inhibitor. Water extracts of Triphala decoction (0.15 mg/ml) cause complete collagenase inhibition.¹⁸

Triphala produces significant inhibitions of MMPs at 1,500 µg/ml concentration but well within the safety profile confirmed by toxicological studies. All these properties along with biological activities of Triphala make it a prospective Ayurvedic drug for the treatment of periodontal diseases.²²

Triphala as Antifungal Agent

Based on in vitro studies, extracts of *T. chebula* may inhibit the growth of Trichophyton species, *Candida* species (including clotrimazole-resistant *Candida albicans*), *Aspergillus* species and *Torulopsis glabrata*. It can be used in fungal infections of oral cavity.^{23,24}

Triphala as Antiviral Agent

In vitro study demonstrated extracts of *T. chebula* may inhibit human immunodeficiency virus-1 reverse transcriptase, and *T. chebula* and Ledretan-96 (an herbal formula containing *T. chebula*) may protect against damage caused by influenza A virus.²⁵ Animal study on mice demonstrated *T. chebula* may inhibit replication of human cytomegalovirus (CMV) and murine CMV (MCMV) in MCMV infection models of immunosuppressed mice, and the combination of acyclovir with *T. chebula* may have strong therapeutic antiherpes simplex virus type 1 activity in mice.²⁶ The role of viral etiology and periodontitis in human is established so that trials should be needed on human to evaluate role of Triphala on virus in humans.

Triphala in Oral Ulcers, Stomatitis and Halitosis

Combination of several natural ingredients like Triphala, Neem, Babool, Meswak, Tumburu or toothache tree, pomegranate and natural flouride makes Himalaya's Dental Cream unique in addressing adult dental problems like bleeding gums or gingivitis, bad breath and plaque among others. Triphala is rich in tannins and phenolic compounds which are responsible for antioxidant properties. It also helps in healing mouth ulcers.³

Analgesic, Antipyretic and Anti-inflammatory Activities

Increased body temperature and pain are two most important cardinal signs of inflammation. Most of the currently available anti-inflammatory drugs are associated with analgesic and antipyretic effects, but most of them may lead to gastric damage as an adverse effect. Therefore, attempts are being made to ascertain whether any herbal product exhibit analgesic and antipyretic

activities without any gastric damage. When these activities of Triphala (500/1000 mg/kg body wt) were compared with then non-steroidal anti-inflammatory drug Indomethacin (10 mg/kg body wt) on the experimental models in mice, it was seen that Triphala produced excellent analgesic and antipyretic effect at both the dose levels, without any gastric injury.²⁷

The analgesic action of the Triphala is attributed to the blockade of the effect or release of the endogenous substances that stimulate pain nerve endings as seen in non-steroidal anti-inflammatory drugs.²⁸ Studies indicated that gallic acid is a selective inhibitor of COX-2. Being a small natural product with selective and reversible inhibition of COX-2, gallic acid would form a lead molecule for developing a potent anti-inflammatory drug.²⁹

Tissue Regeneration

In Ayurveda, the well-known Rasayana herb, Amla (the fruit of a tree) which is ingredient of Triphala is considered a general builder of oral health. Amla works well as a mouth rinse as a decoction. One to two grams per day can be taken orally in capsules for long-term benefit to the teeth and gums. Herbs such as Amla that support the healing and development of connective tissue when taken internally also benefit the gums. The healing effect of these tonics takes longer to become apparent since they must saturate the whole body in order to work on the gums. The results, however, are more lasting.³⁰

Triphala in Wound Healing

The ointments prepared from Triphala extracts show significant wound closure in vivo. The granulation tissue shows reduced bacterial count, increase in collagen.³¹ Triphala has also shown in vitro wound healing activity.³¹ Collagen sponges incorporated with Triphala when used to close wounds showed increase thermal stability, water uptake capability, faster wound closure, improved tissue regeneration. Epigallocatechin gallate interaction with collagen contributes to this quick wound healing activity.³² *T. chebulu* is one of the ingredients in the commercially available Triphala along with *T. bellerica* and Amla. It is considered to be a strong healing agent when applied topically.

Pericoronitis

In Ayurveda pericoronitis is called as Adhimamsa in dantha moola vyadhis (disease of gum). Its treatment includes mukhadhavana (wash, gargle with decoction of patola, triphala and nimbatwak)³³

ANUG

In Ayurveda ANUG is called as Saushira in dantha moola vyadhis (disease of gum). Its treatment includes

pratisarana (mouthpaste) with lodra, musta, shatapushpi, triphala, rasanjan, patong, phalapushpa and katphala + madhu.³³

CONCLUSION

Natural compounds contained in the herbal cocktail can act in a synergetic manner within the human body. Triphala is a gift from ancient Ayurveda having therapeutic activities. It has potential to treat a variety of human ills with minimal or no side-effects. Dentistry is still in search of a drug for diseases affecting hard and soft tissues of oral cavity. Triphala seems to fulfill most of these requirements without any adverse effect on oral tissues and at very minimal cost as compared to commercially available products today. Ayurveda is not a substitute for contemporary dentistry but can be used as in conjunction with it or as alternative therapy. This amalgamation of the two streams of treatment will work together for overall benefit of the patient, recognising the fact that mouth impacts the overall health of a person. Hence, further research exploring various therapeutic actions of Triphala should be encouraged in dentistry as well as in periodontics.

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