

## Triphala – Used in dentistry

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**ABSTRACT**

India is very rich in medicinal plants. Herbal extracts are used in Indian tradition. In ancient times herbal medicine, herbal extracts were given very importance. This herbal medicine, extracts have been used for several years back. Plants have phytochemical, it has effects on human body. Plants have been known for their aromatic, flavoring and medicinal purpose. Since the birth of modern world herbs are being replaced by artificial and synthetic drugs. These synthetic drugs cause several side effects. In present time people blindly trust on synthetic drugs. Due its side effects people are returning back to natural herbs with hope of security. Triphala is herbal drug used in various pharmacological activities. Triphala is made of three fruits Amalaki or Indian gooseberry, bibhitaki and haritaki. Triphala is used in traditional Indian system. It is used in disorders of all the dosas. Triphala is antioxidant. It prevents various gut related disorders. It may also prevent cancer. This review comprises of triphala medicine in dentistry.

**KEYWORDS :****INTRODUCTION**

Ayurveda is the oldest regenerating science. It focuses on treating the three pillars of life is vath, pitta and kaf. The plant extracts maintain the balance among vath, pita and kaf in human body. The phytochemicals maintain the equilibrium of the human body. It provides protection against infections. Herbs extracts heals the power of human system, and body responds positively towards infections.

Triphala is a drug used to treat many disorders. Thripala is a made of three fruits:

- Terminalia chebula retz (haritaki),
- Terminalia bellerica roxb (bibhitaki),
- Emblica officinalis gaertn (amalaki).

These preparations should be in equal proportions in triphala. Haritaki and bibhitaki have warm energy while amalaka is calm in nature. Triphala is a mixture of all three, hence it is stabilize<sup>[1]</sup>. It makes meaningful as a internal disinfectant and sudden withdrawal formula. It is considered as essential rasayana. It has good laxative in Ayurveda. Pattern for this ancient ayurvedic technic is written in traditional texts. They are Charaka and Susruta samite. The non-identical effects and features of numerous contents of the thriphala are raised below:

**Haritaki**

Latin name - Terminalia chebula Linn.

Family - Combretaceae

Classical name - Haritaki

Sanskrit synonyms - Haritaki, Pathya, Abhaya, Avyatha,

Therapeutic uses – This is useful in asthmatic, soreness of throat, in thrust, vomiting, eye infection, heart disease, bladder disease, inflammation disease, bleeding piles, etc.



**Fig. Fresh Fruit Of Haritaki**



**Fig. Dry Fruit Of Haritaki**

**Vibhitaki**

Latin name - Terminalia bellerica Roxb.

Family - Combretaceae

Classical name - Vibhitaka

Sanskrit synonyms - Aksha, Kaliphala, Bhutavasa, Kalidruma, Karnaphala

Therapeutic use – It is beneficial in asthmatic and skin disease. The fruit is anthelmintic and is for bronchitis, sore throat, disease of eyes and nose. The oil is good for hair. It arrests bleeding.



Fig. Terminalia Bellirica Gaertn Tree



Fig. Fresh Fruit Of Bibhitaki

**Amalaki**

Latin name - Emblica officinalis Gartn.

Family - Euphorbiaceae

Classical name - Amalaki, Dhatri

Hindi name - Awala, Amla, Aonla

Sanskrit synonyns - Amalaki, Dhatri, Vyastha

Therapeutic use – It is the most useful part of the plant. This is the substitute of vitamin especially ascorbic acid and elements too. It is the most favored antidote. It is used in anemia, hyper acidity, peptic ulcer, diarrhea, jaundice. The juice of fresh fruit detoxifies the human body. The oil of fresh fruit is good for hair.



Fig. Emblica Officinalis Gaertn Tree.



Fig. Fresh Fruit Of Amla



Fig. Dried Fruit Of Amla

**Triphala Used In Dentistry**

**1. Role in periodontal diseases**

Oral cavity is full of microorganism. The most common cause of gingival inflammation is the bad oral hygiene. It promotes plaque and calculus formation on teeth. It causes the inflammation around the teeth hence gingivitis occurs. In many cases the good periodontal treatment is not achieve till today this is due to following reason;

- A) Lack of awareness about mechanism of disease
- B) Improper oral hygiene
- C) Adverse effect of modern and synthetic drug

SHUSHRUTA narrated that Triphala clams the kapha and pitta dosha, which is the main causative agent. Shushruta also tells that triphala has anti-inflammatory, hemostatic, analgesic and wound healing proper. Haritaki is famous successfully effective for bleeding gums, gingival ulcers and caries tooth. Another compound amalaka is rich in vitamin c. it is effective in protection against bleeding gums. In recent study it is proven that Triphala has good antibacterial property. It cures the periodontal diseases without any side or adverse effect. when Triphala given with metronidazole then the most effective in periodontal disorder. Some recent studies shows that triphala and metronidazole combine treatment procedure should be used for local [ gargling and mouthwash] and systemic administration is very effective. Triphala also possess the antiplaque activity. Triphala also posses antioxidant activity. It also reduces activity of S.mutans. Triphala inhibits the biofilm evolution and also protects the gums.<sup>[2]</sup>

**Hypertrophy Of Gingiva**

Seasam oil, triphala, alum, khadira can be used to rub on the gums to reduce the size.<sup>[3]</sup>

**Anti-ulcer Properties**

The antiulcer activity of Triphala ayurvedic formulations and Chinnodbhavadi kwath was demonstrated by a decrease in ulcer indices, lipid peroxidation, and hydroxyl radical concentrations, as well as an increase in catalase and superoxide dismutase tiers. Although Triphala identical dosages showed comparable action, the amplitude was substantially lower.

**Triphala As Antiplaque Agent**

Plaque is the initial etiological factor in periodontal disease. Thus, the plaque must be control for any periodontal disease emergence. India has a very vast population thus it is very difficult to control the plaque. When combined with honey, it aids in the rehabilitation of ulcerations due to its anti-oxidant characteristics. The use of 0.6 percent Triphala Disinfectant, which is particularly effective, can help reduce dental plaque formation and gingivitis [14]. Citric acid, a cation exchange component found in Triphala, aids in the removal of the filler particles for root canal irrigation [15]. Triphala is being used as a deep throating agent in oral problems, as per the Sushruta Samhita.

**Antibacterial Efficacy**

Mouthwashes containing 6% Triphala, taken couple of times a day, reduced the number of oral streptococci by 17 percent after 48 hours and 44 percent after seven days. The activity of triphala is nearly identical to that of the "Gold Standard" medication chlorhexidine [17]. Triphala extracts 50 percent and 100 percent revealed a mean diameter of inhibition zone of 4.8 mm and 7.9 mm, respectively, when tested using the disc diffusion technique.

CHLOROHEXIDE is observed as most effective agent in controlling the plaque due its antiplaque activity. Although it has adverse effect on teeth like staining of the teeth and temporary disability of taste sensation of taste. In recent India herbal mouthwash is gaining attention because it contain

natural extracts called phytochemicals that has antimicrobial effects. Herbal formulation does not contain alcohol, artificial drugs.

Herbal product made equal proportion of HARITAKI, BHIBITAKI and amalaka were judged. Ethanol extracts of the above were tested. It shows the antimicrobial property. Thus, triphala can be effective antiplaque agent.<sup>[4]</sup>

#### Triphala As Anticaries Agent

Many anticaries agents are available in market. But the hunt for successful agent is continues. Many agents are show unrelated side effects because they are mostly synthetic. In Indian ancient dental practice, many herbs were used. Now in recent practice ayurvedic, unani, homeopathy is gaining attention. T. Chebula was used in ancient India as anticaries agent. T. chebula can cure many dental problems like bleeding gums, ulcer, gingivitis. T, chebula inhibits the sucrose – induced bonding it encourage the colonization on tooth surface. T. chebula also inhibit formation of streptococcal mutans on the tooth surface. Thus, it is anticaries agent

#### Triphala As Root Canal Irrigant

Initially endodontic treatment is caused by microorganism, it causes the infection in and invade in the pulp thus cause the necrosis of the pulp. repeated dental procedure on the same tooth cause the deep decay. The number of pathogen increases if the pulp became infectious for the longer period of time. sodium hypochlorite is a powerful root canal irrigant which is used for the removal of E.faecalis biofilms in vitro . It has a drawback also that it is highly toxic, bad in taste and not able to remove its smear. Triphala has given its remarkable antibacterial property against biofilms. Triphala has 10% dimethyl sodium sulfoxide which highly effective bactericidal agent. Thus, it is effective root canal irrigant

#### Triphala As Mouth Rinse

Indian Ayurveda is so ancient and very powerful. foreign countries are adapting the Indian Ayurveda as it is having no adverse effect in ancient times people used drink water of ilachi and clove. As we all know clove not only a spice but a medicine also clove oil were used tropically on the pain in oral cavity. As per SHUSHTRA SAMITA triphala can be use as gargling agent. In modern days the chlorohexidine used as mouth wash as it is antibacterial. It possesses the several side effect like staining. Triphala when merge with metronidazole is very effective mouth wash. Many commercial mouths wash can cause demineralization of teeth. Triphala when fuse with scaling and root planning shows effective reduction in plaque and improve the oral hygiene without showing any staining on the teeth. Triphala mouth wash merge with metronidazole. should be use twice a day. it should be 400mg for 1 mouth. It has shown very effects it reduces the microbial concentration. It reduced the chances of mobility. it also reduces the sensitivity to the hot and cold. It also reduces the calculus formation.<sup>[5]</sup>

#### CONCLUSION

Triphala is a very honorable drug. we are so much lucky that we live in a country where our elders have been using these ayurvedic drugs since very long time .as these drugs are highly effective with zero side effects. Our elders gifted us AYURVEDIC science. The herbs are unique source of many types of extracts or compound. Human life can be treated and can be improve in minimal cost. If we just understand our legacy. Dentistry is still in search of drugs with minimal or no side effects. Oral cavity is the mirror of body. Every disease enters from the mouth only. So, its mandatory to maintain a good oral hygiene. It also improves the body system. it also cures the gastric issues. it also reduces the hairfall. It has antioxidant property which make the skin glow and beautiful. Triphala appears to the most hounerable drug. As it

is easily available at minimum cost. Triphala should be encourage in the dentistry not only in dentistry also in medical field also.

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