

An Effective Remedial Measures For Prevention of Oral Mucositis

Mrs. Vidhyalakshmi. D¹, Dr. Jeyalakshmi², Dr. Anuradha Kudrimoti³

^{1,2} Dept of Medical Profession

^{1,2} Rani Meyyammai College of Nursing, Chidambaram, Tamilnadu

³ M.B.B.S. M.D. Paediatrics, Deepak Hospital, Jalna, Maharashtra.

(Secretary of Vasantnaik College of Nursing, Jalna, Maharashtra)

I. INTRODUCTION

Herbal Remedies Represent some of the most ancient medicines in healthcare and are historically considered among the most powerful means of maintaining human health and homeostasis. Ayurveda, a Sanskrit word meaning the knowledge of life or the science of perfect health, is the traditional system of personalized medicine from India, which emphasizes disease prevention and health promotion.

II. AYURVEDIC PHARMACOLOGY

Dravya guna or Ayurvedic pharmacology describes the attributes of herbs. The rasa or taste of Triphala is sweet, sour, pungent, bitter, and astringent; the only taste not contained within the formula is salty. The virya, or potency and action, is neutral, and the vipaka, or postdigestive effect of the formula, is sweet. Triphala has a prabhav, meaning special action or trophism, for all doshas (energetics and mind–body types) and thus is balancing for all doshas and constitutions. The gunas, or qualities, of Amalaki are heavy and dry, and both Haritaki and Bhibhitaki are considered light and dry.

III. AYURVEDIC PROPERTIES OF TRIPHALA

The word ‘phala’ in Sanskrit means fruit. Fruit is the essence of the tree itself and these three fruits have different healing properties in part due to its five different tastes. Triphala is an Ayurvedic herbal formula composed of the powder of three fruits:

1. Amalaki (Phyllanthus Emblica)
2. Bibhitaki (Terminalia Bellirica)
3. Haritaki (Terminalia Chebula)

There are very few herbs in Ayurveda which include all five different tastes (sweet, sour, salty, bitter and pungent). The more concentrated the taste, the more effective and broad spectrum the formula is for balancing the three Ayurvedic doshas.

IV. WHAT IS TRIPHALA?

As stated above, triphala is a combination of three fruits: amalaki, bibhitaki and haritaki.

- Amalaki is good for Pitta Dosha
- Bibhitaki is good for Kapha Dosha
- Haritaki is good for Vata Dosha

Pitta, kapha and vata are the three Ayurvedic doshas or fundamental principles of Ayurvedic physiology. When these doshas are in balance, the human experience good health. When they are out of balance, the human experience disease. Triphala is an Ayurvedic formula that benefits many imbalances of the doshas.

The three fruits of triphala contain five different tastes. This makes it a highly potent formula. Amalaki is the only cooling potency, useful for pitta dosha. Haritaki and bibhitaki are more warming or heating and useful for vata and kapha dosha respectively.

Amalaki is beneficial for the heart, haritaki benefits the liver and bibhitaki is a good tonic for the brain. Together all three will work on all parts of the body from the brain, kidneys and spleen to everything in between, connecting all the dots.

V. THERAPEUTIC USES OF TRIPHALA

Ayurvedic medicine uses Triphala as a pillar of gastrointestinal treatment; however, the complexity of the three rasayanas, or rejuvenative herbs, in the formulation allows for many applications. Moreover, studies have validated a number of potential uses of Triphala, which include free radical scavenging, antioxidant, anti-inflammatory, immunomodulating, appetite stimulation, gastric hyperacidity reduction, dental caries prevention, antipyretic, analgesic, antibacterial, antimutagenic, wound healing, anticariogenic, antistress, adaptogenic, hypoglycemic, anticancer, hepatoprotective, chemoprotective, radioprotective, and chemopreventive effects.

VI. BENEFITS OF TRIPHALA IN RELATION WITH CANCER

Research on triphala demonstrates its anti-cancer activity. It has antioxidant benefits and free radical scavenging activity, galic acid, malic acid, and anti mutagenic activity, which prevents and reduces cancer.

At the DNA level it has a gene regulation and modulation effect. It up-regulates the genes that are good for you and down-regulates the genes that are harmful to the body. It's smart and intelligent enough to know exactly what to do deep down. That's why it's often told to take triphala on a consistent basis. Everyday consumption of these herpes calibrates to the needs of the body.

Triphala is beneficial for digestion and elimination. It acts as a laxative and digestive tonic, stabilizes blood sugar and provides a source of antioxidants and vitamin C.

THE POTENTIAL OF TRIPHALA IN ORAL CARE: (CLINICAL TRIALS AS PER JOURNAL OF ALTERNATIVE AND COMPLEMENTARY MEDICINE 2017)

Triphala has been used traditionally in Ayurvedic medicine as an antimicrobial agent. Numerous controlled clinical trials have shown that Triphala significantly reduces the abundance of oral bacteria, dental plaque, and gingivitis in human subjects.

Human clinical trials using Triphala water decoction as a mouthwash report that it exerts comparable efficacy compared with chlorhexidine gluconate germicidal mouthwash in the prevention of dental caries. For example, a study in human subjects revealed that Triphala mouthwash promoted a significant reduction in oral streptococcus colonies. Oral streptococcus levels were measured after using a Triphala mouthwash for 48 h and for 7 days. The researchers concluded that Triphala was as effective compared to the chlorhexidine mouthwash. Another double-blind human clinical trial also reported significant reductions in oral streptococcus levels at 5 and 60 min after rinsing with 15 mL aqueous Triphala extract mouthwash.

In addition, a double-blind, randomized human clinical trial reported that Triphala mouthwash is effective against dental plaque and gingivitis in teenagers. The study reported Triphala as equally effective in antiplaque and antigingivitis activity compared with chlorhexidine. Moreover, a clinical study in children on the effects of Triphala mouthwash on dental plaque, gingival inflammation, and microbial growth also compared its

efficacy with a commercially available chlorhexidine mouthwash. Triphala mouthwash treatment has also shown promise to reverse precancerous oral lesions associated with tobacco use in young adults.

VII. CONCLUSION

This manuscript should help clinicians and people suffering from cancer to combat serious chemo-radiotherapy related side effects through simple but effective home-based ayurveda remedies. The remedies described are commonly available and safe. These simple ayurveda based solutions may act as an important adjuvant to chemo-radiotherapy and enhance the quality of life of cancer patients. Future studies should scientifically test these recommendations for various side effects induced by conventional management of cancer.

Triphala is a powerful poly herbal formula with myriad efficacious therapeutic uses for maintaining homeostasis as well as the prevention and treatment of disease. Many scientific studies have reported evidence-based validation of various traditional uses of Triphala. It provides therapeutic value for multiple pathologies. Additional government funding allocations and support are needed for further and ongoing studies to validate its therapeutic uses in human clinical trials and to define the biological mechanisms relevant to this plant-based medicine. More widespread education of the general public and medical providers on clinical Ayurvedic medicine and complementary therapies such as *Triphala* is warranted to increase awareness of these treatments for both clinical and healthy populations.

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