

Oil Pulling and its Role in Oral and Systemic Diseases- A Review Article

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Abstract: Preventive medicine is gaining a lot of popularity today. Apart from the various available scientific advancements in the medical field, there are age old traditional practices in Ayurvedic medicine which have to be encouraged. Oil pulling, which only requires one to swish oil in the mouth is known to cure many oral and systemic ailments. This article aims at highlighting this practice in preventing not only diseases of the mouth but also systemic diseases associated with oral pathogens.

Key Words: ayurveda, oil pulling, prevention.

INTRODUCTION

Prevention is always better than cure. Establishing adequate preventive habits in our patients must be our goal. In spite of the advanced developments in the field of medicine, complementary and alternative medicine has been gaining popularity over the last few years as the practices are natural, safe and cost effective. Among the various number of medicinal practices which deserve recognition is the practice of oil pulling. The literature reviewed in this article was collected from an online search in wiley online library and other educational websites.

HISTORY

Oil pulling or oil swishing is a procedure which involves swishing oil in the mouth for oral and systemic benefits.^[1] This concept of oil pulling is not new and it has been discussed in the Ayurvedic text *Charaka Samhita* where it is referred to as *Kavala graham* or *Kavala gandoosha*.^[2] It has been used for many years for strengthening teeth, gums and jaws and to prevent tooth decay, oral malodour, bleeding gums, dryness of throat and cracked lips.^[3] This concept was further familiarized by Dr.F.Karach in the 1990s in Russia.^[3] It is claimed to cure about 30 systemic diseases ranging from headache, migraine to diabetes and asthma.^[3]

OILS USED IN OIL PULLING

Oil pulling unlike other medical treatments is simple, harmless and inexpensive. It only requires a spoonful of vegetable oil. Oil pulling therapy can be done using edible oils like sesame oil and sunflower oil.^[1]

The sesame plant (*Sesamum indicum*) has been considered a gift of nature due to its many desirable health benefits. Sesame oil has a high concentration of polyunsaturated fatty acids and is a good source of vitamin E.^[4] The antioxidants present in it are mainly sesamol, sesamin and sesamolin.^[4] Sunflower oil is also known to be effective. It is high in the essential vitamin E and low in saturated fat.^[5] Coconut oil may also be used. It has Lauric acid which is proven to be antimicrobial.^[6,7]

PROCEDURE

For oil pulling therapy, a tablespoon (teaspoon for children) of sesame or sunflower oil is taken in the mouth, sipped, sucked and pulled between the teeth for 10-15 minutes. The viscous oil turns thin and milky white. It is claimed that this swishing action activates enzymes and draws toxins out of the blood.^[3] The oil should not be swallowed as it contains bacteria and toxins. It must be preferably disposed in a paper towel. Oil pulling must be followed by tooth brushing and rinsing of the mouth. It is better to perform oil pulling in the morning on an empty stomach.

MECHANISM OF ACTION

The exact mechanism of oil pulling is not known but it was claimed that swishing oil in the mouth activates enzymes and draws toxins out of the blood.^[3] But sesame seed oil, because of its antioxidant effect may detoxify toxins, potentiate the action of vitamin E, prevents lipid peroxidation and have an antibiotic effect.^[8] Studies on the mechanism of action of oil pulling therapy was done (Asokan et al) and it was found that emulsification process of oil started 5 minutes after oil pulling.^[9] The emulsification occurs due to agitation of oil in the mouth and leads to the formation of a soapy layer which can alter the adhesion of the bacteria on the tooth surface, remove superficial worn out squamous cells and improve oral hygiene.^[9] As it prevents bacteria adhesion it also prevents plaque co-aggregation.^[13]

ROLE IN SYSTEMIC HEALTH

There is no literature or scientific proof to accept the role of oil pulling therapy for systemic health benefits except for anecdotal testimonies. However, a survey was conducted by an Indian daily newspaper (Andhra Jyoti) in 1996 on the effects of oil pulling on various diseases. Out of 1041 readers who responded, 927(89%) reported healing effects and 114(11%) did not report any disappearance of symptoms or illnesses.^[10] The chronic diseases that were reportedly cured included heart diseases, diabetes, diseases of digestive system, skin problems, allergy and respiratory problems, physical pains and diseases of the female reproductive system.^[10] A homeopathic physician from India reported 3 cancer cases cured by the oil pulling therapy.^[10]

ROLE IN ORAL CAVITY

A few studies have been carried out in the literature regarding oil pulling for oral health. Amith et al (2007) have shown that oil pulling therapy with sunflower oil significantly reduced plaque scores after 45 days.^[11] Sharath et al (2009) showed that oil pulling therapy was very effective against plaque induced gingivitis both in clinical and microbial assessment.^[12] Another study by Asokan et al (2008) showed a definitive reduction in the *Streptococcus mutans* count in plaque and saliva after oil pulling therapy^[13] thus reducing incidence of dental caries. It is also known to deal with the problem of halitosis^[14] which is proved in the study by Sharath et al (2011).

ORAL CAVITY- A SOURCE OF MICRO ORGANISMS

Oral infections and poor oral health can provoke the introduction of oral microorganisms into the bloodstream or lymphatic system.^[15] Toxins may be liberated from pathogenic agents at their primary oral site through the bloodstream and cause metastatic injury.^[15] There are a number of diseases in the body, especially cardiovascular diseases, which may get aggravated by the oral microflora. Even though scientific evidence is not available for the benefits of oil pulling for systemic health, the oral health benefits can be made use of to decrease the microbial load that can affect an individual systemically. By trying to keep the pathogenic oral microflora in check its effects on systemic diseases can be prevented.

CONCLUSION

Because of the few studies done on the effect of oil pulling on oral health, there is adequate scientific evidence that this therapy helps in the reduction of the microbial count in the oral cavity and in the restoration of

periodontal health. This can thus be used as a method to prevent the associated systemic problems that could occur as a result of systemic spread of oral infections. This therapy can thus be made use of for acquiring good oral health and preventing not only oral but even systemic diseases that can be associated with oral infections.

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