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Oil Pulling - A Blessing in Disguise

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ABSTRACT

Oil pulling is an ancient Ayurvedic remedy for oral health and detoxification. It involves the use of pure oils as agents to cleanse out harmful bacteria, as well as reduce fungal overgrowth. Oil pulling may also increase saponification in the mouth, creating a soapy environment that cleanses the mouth as vegetable fat is an emulsifier by nature. Most interesting is perhaps the ability of oil to help in cellular restructuring, and are related to the proper functioning of the lymph nodes and other internal organs. 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. Though oil pulling is effective, none of the studies considered it as a replacement for the tooth brushing, but can definitely be a supplemental oral hygiene aid. This paper aims at throwing light on the various health benefits of this bygone practice.

Key words: Oil pulling, *Kavala*, *Gandoosha*, Vegetable oil, Oral health benefits.

INTRODUCTION

Oil pulling or oil swishing is a traditional folk remedy where oil is "swished" (*Kavala Graha*) or "held" (*Snigda Gandoosha*) in the mouth for oral and systemic health benefits.^[1] It is not a new concept and it has been mentioned in the Ayurvedic text Charaka Samhita where it is called *Kavala Gandoosha* / *Kavala Graha*.^[2] The concept of oil pulling was familiarized by Dr. F. Karach in the 1990s in Russia. It is claimed to cure about 30 systemic diseases ranging from headache, migraine to diabetes and asthma. Its

promoters claim it works by "pulling out" toxins, which are known as *Ama* in Ayurvedic medicine, and thereby reducing inflammation.^[3] Oil pulling has been used extensively as a traditional Indian folk remedy for many years to prevent decay, bleeding gums, oral malodor, dryness of throat, cracked lips and for strengthening teeth, gums, and jaws. Various oils (Table 1) have been used for oil gargling. Oil pulling therapy can be done using edible oils like sunflower or sesame oil.^[4] Sesame plant (*Sesamum indicum*) of the pedaliaceae family has been considered a gift of nature to mankind for its nutritional qualities and desirable health effects. Scientific evidence shows that the oil-pulling therapy could reduce the plaque index, modify gingival scores and the total oral bacteria count in gingivitis patients.^[5]

Table 1: Various oils used for Oil Pulling ^[12]

Coconut oil	Antimicrobial activity against various Gram-positive and Gram-negative organisms, including <i>Escherichia vulneris</i> , <i>Enterobacter</i> species, <i>Helicobacter pylori</i> , <i>Staphylococcus aureus</i> , <i>Candida</i> spp., including <i>Candida albicans</i> and other strains. The medium chain
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	monoglycerides had the capacity to alter bacterial cell walls, penetrate and disrupt cell membranes, inhibit enzymes involved in energy production and nutrient transfer, leading to the death of the bacteria.
Sesame oil	Reducing bacterial growth and adhesion. Toxins and bacteria from the body might be expelled through the tongue and trapped in the oil and removed from the body. It also significantly reduced <i>S. mutans</i> counts in plaque and saliva of adolescents within 1 week.
Sunflower oil	Antimicrobial activity against <i>S. aureus</i> , <i>Escherichia coli</i> , <i>Pseudomonas aeruginosa</i> , <i>Enterococcus faecalis</i> , <i>Mycobacterium spp.</i> , <i>Streptococcus pyogenes</i> and <i>C. albicans</i> .
Soya bean oil Corn oil Rice bran oil Palm oil	Small amounts of saturated fatty acid, i.e. lauric acid, in these oils may play a role in their antimicrobial properties.

As per Ayurvedic literature, sesame oil is one among many medicinal fluids recommended for daily preventive use and/or seasonal use to reduce dryness (*Vata Dosh*a) of the mouth and reduce inflammation and burning sensation in the mouth. In case of specific issues, Ayurvedic practitioners might also suggest other treatments such as coconut oil and sunflower oil or other herbalized oils after proper diagnosis of the specific ailment or *Dosha*.^[6]

Mechanism of Action

The purported mechanism of action of oil pulling therapy is not clear.^[7] Another suggestion is that oil provides a surface layer that prevents plaque or bacteria adhering to teeth. 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. However, 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],[9]}

Studies on the mechanism of action of oil pulling therapy were done, and it was found that emulsification process of oil started 5 minutes after oil pulling. The emulsification occurs due to agitation of oil in the mouth leading 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. As it prevents bacteria adhesion, it also prevents plaque coaggregation.^[10]

It is also suggested that by increasing the secretion of saliva, oil pulling uses the salivary glands in the mouth as a detoxifying organ: the saliva can trap the toxin within the oil particles. It is also suggested that the prolonged and forceful mechanical action could play a part in dislodging bacteria and undigested particles from the deep crevices within the mouth. Oil pulling with sesame seed oil moisturizes gums, which can provide a measure of relief to those suffering from dry mouth. Dry mouth is known to increase bacteria growth.^[11]

Health Benefits

Oil pulling is not only good at preventing oral infections, but can actively fight them as well. The oil pulls the infection (bacteria, toxins, and pus) out of the tissues, allowing the body to heal itself. Inflammation is quieted, gums stop bleeding, loose teeth tighten, and pain and sensitivity vanish. Oil pulling benefits also include helping to support and strengthen the body’s immune system, which in turns helps the entire body be healthier and function better. (Table 2)

Table 2: Health benefits of Oil Pulling

Oral Health Benefits
<ul style="list-style-type: none"> ▪ Potential holistic remedy for plaque induced

gingivitis
<ul style="list-style-type: none"> Prevention of dental caries
<ul style="list-style-type: none"> Prevention of halitosis
<ul style="list-style-type: none"> Dryness of the throat and cracked lips
<ul style="list-style-type: none"> Possible holistic treatment for TMJ and general soreness in the jaw area.
General Health Benefits
<ul style="list-style-type: none"> Thrombosis
<ul style="list-style-type: none"> Eczema
<ul style="list-style-type: none"> Intestinal infection
<ul style="list-style-type: none"> Diabetes
<ul style="list-style-type: none"> Bronchitis
<ul style="list-style-type: none"> Asthma
<ul style="list-style-type: none"> Headaches
<ul style="list-style-type: none"> Chronic skin problems
<ul style="list-style-type: none"> Stop the growth of malignant tumors.

Oral health benefits

Oil pulling has been proven to be an effective method in reducing plaque formation and plaque induced gingivitis. Faizal C. *et.al.*, confirmed that coconut oil is an easily usable, safe and cost effective agent with minimal side effects which can be used as an adjuvant in oral hygiene maintenance.^[13]

Gingival health: A few studies have been carried out in the literature regarding oil pulling for oral health. Amith *et. al.* have shown that oil pulling therapy with sunflower oil significantly reduced plaque scores after 45 days.^[14] Asokan *et. al.* showed that oil pulling therapy was very effective against plaque induced gingivitis both in clinical and microbial assessment.^[15]

C.Hannig *et.al.* in an in vitro study found that oil pulling with olive oil, safflower oil, or linseed oil had no effect on microbial colonization of the enamel. The authors concluded that it could not be recommended for biofilm reduction.^[2]

In vitro lab studies have shown antibacterial activity of edible oils such as coconut oil, sesame oil and sunflower oil.^[16] Also, multiple studies have indicated the effectiveness of essential oils such as tea tree oil against gingivitis and dental plaque formation when used in combination with regular oral hygiene.^[17]

Dental caries: Another study by Asokan *et. al.* showed a definitive reduction in the Streptococcus mutans count in plaque and saliva after oil pulling therapy thus reducing the incidence of dental caries.^[10]

Halitosis: Asokan *et. al.* evaluated the effect of oil pulling with sesame oil on halitosis and microorganisms which could be causing it in adolescents and also the efficacy of oil pulling and use of chlorhexidine mouthwash on halitosis. There was a definite reduction in the ORG 1, ORG 2 scores and BANA test score in both groups I and II. They concluded that oil pulling therapy has been equally effective like chlorhexidine on halitosis and organisms associated with halitosis.^[18] A 2012 - AIT, Ireland – study indicates that coconut oil which has been partially digested (or enzyme modified) by saliva is more effective as an antifungal and antibacterial, than natural coconut oil. Amongst the pathogens tested were Candida albicans and Streptococcus mutans which are most often related to oral health issues.^[19]

Procedure

The oil pulling/swishing is done best before breakfast. To accelerate the healing process, it can be repeated 3 times a day, but always before meals on an empty stomach. This process makes oil thoroughly mixed with saliva.

Step 1: First thing in the morning on an empty stomach and before drinking any liquids (including water), one should pour exactly one tablespoon of coconut oil or sesame oil into the mouth.

Step 2: Swish the oil around in your mouth without swallowing it. Move it around in your mouth and through your teeth, as it is done with a mouth wash (do not tilt your headback to gargle though). You will find that the oil will start getting watery as saliva mixes with it. Keep swishing. Relax your jaw muscles and use your tongue to help move the liquid around the inside of your mouth.

Step 3: As the end of the oil pulling session approaches, one may notice that the oil/saliva mixture becomes thicker. This is quite normal, since it is pulling out toxins from your body. When 20min is up, spit out the oil into the toilet. Don't be alarmed if it looks yellowish-this is also normal. If the oil is still yellow, it has not been pulled long enough.

Step 4: Rinse out your mouth a couple of times with warm salt water and spit into the toilet. The oral cavity must be thoroughly rinsed and mouth must be washed thoroughly.

Advantages^[20]

- Oil pulling is a cost-effective remedy.
- It is very easy; you simply swish oil in your mouth. Compared to other forms of detoxification it is relatively effortless.
- It doesn't require dieting, fasting or consuming unpleasant, and often bowel loosening mixes of herbs and pills.
- It is completely harmless.
- It is claimed to have advantages over commercial mouth washes since it causes no staining, has no lingering after taste, causes no allergic reactions and is readily available in the household.

Drawbacks

Against the background of current scientific and empirical knowledge, edible oils might be used as oral hygiene supplements but a decisive benefit for the oral health status is questionable.^[21] The drawbacks highlighted by medical professionals and experts are;

- a. Oil pulling cannot replace care from a qualified dentist.

- b. It consumes more time than conventional alcohol-free, antiseptic mouthwashes.
- c. There is a report of lipid pneumonia caused by accidental inhalation of the oil during oil pulling.^[22]

Coconut oil, in rare cases, can act as an antigenic agent that causes contact dermatitis.^[23] In addition, according to the ADA; cases of diarrhea or upset stomach have been reported. If the oil is spat into a sink, it can clog the pipes if it solidifies.

Ayurvedic experts warn of negative side effects if improper technique is used, such as dry mouth, excessive thirst, muscular stiffness, exhaustion and loss of sensation or taste in the mouth.

Precautions

Oil pulling therapy should be followed by brushing the teeth and is preferably done on an empty stomach in the morning. Do not swallow, however, inadvertently if swallowed, there is nothing to worry. Do not spit where people walk or on vegetation. If one is allergic to a particular brand, change the brand of oil or to different oil. Make sure the oil is good and refined. Keep chin up so that pulling covers the back of the oral cavity and the molar teeth. For children of 5 years and above, only one teaspoonfull (5 mL) of oil will do.^[24]

CONCLUSION

The result of this healing research has attracted amazement and resulted in further research. This additional research concerning Oil therapy has now been thoroughly documented, especially with regard to physiological similarities between individuals. It is surprising that through this biological healing method a wide variety of symptoms have unquestionably disappeared without any side effects. This simple method makes it possible completely heal such a wide variety of diseases which would normally be treated by invasive treatment options or by powerful or potent drugs, usually with significant side-effects. The simplicity of this healing system in which Oil is swirled backwards and forwards in the mouth, is due to the

stimulating effect which it has on the body's eliminatory system. Through this method it is possible to heal individual cells, cell conglomerates such as lymph nodes and more complex tissues such as internal organs simultaneously. This occurs because the beneficial microflora throughout the body is provided with a healthy continuum. Without this natural bodily intrusive element evinced by the microflora the usual pattern of human health tends to lean towards illness rather than wellness.

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