

Green Tea mouthwash for reducing dental plaque

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Abstract

Paraguay is a country popular for the use of herbal products for health care. Extensive studies have been made on natural mouthwashes with fewer side effects as an alternative to chemical ones. In the case of reducing dental plaque, a green tea mouthwash has been studied alone or combined with other natural agents.

Keywords: green tea, mouthwash, *camellia sinensis*

An increasing number of people all around the world are turning towards use of natural extracts such as herbal products for both prophylaxis and treatment of different diseases. This is especially common in Paraguay, which is a country that uses a lot of herbal products containing plants as active ingredients.

The gold standard material in chemical plaque control is chlorhexidine. Nevertheless, this substance cannot be used for long periods due to its side effects [1]. Considering this, there has been a growing interest in using herbal agents as green tea. Green tea has been shown to have anti-inflammatory properties along with antibacterial and other properties [2]. Green tea has been studied alone or combined with other natural herbs.

Aloe vera-green tea and chlorhexidine mouthwashes reduced plaque index, gingival index, and bleeding on probing index significantly and there was no significant difference between these two mouthwashes in one study [1].

On the other side, pomegranate and green tea-based mouthwashes can be considered an alternative to chlorhexidine mouthwashes in sustaining oral hygiene, because of the added advantages provided by such herbal preparations [2].

Chlorhexidine and green tea mouthwashes were found to be effective in reducing plaque index and it has been shown to be equally effective in gingivitis reduction [3]. The results from the meta-analysis indicated that there was no significant difference between chlorhexidine and green tea, either at endpoint or over time. In addition, there was little evidence of side effects with green tea mouthwash [4]. Same as other study that concluded that

the use of green tea and chlorhexidine mouthwashes has a similar effect on bacterial colonies in the pharynx [5]. However, other study suggested found that green tea as a mouthwash is more effective compared to chlorhexidine mouthwash and is an appropriate adjunctive measure in the treatment of chronic periodontitis [6].

Green tea mouthwash may be a viable alternative to chlorhexidine, especially for long-term use. But, further clinically controlled studies with a longer observation period and bigger samples are required.

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Rec: Mar 14, 2020; Acc: Jun 04, 2020; Pub: Jun 08, 2020

Global Dentistry. 2020;3(1):133

DOI: 10.36879/GOD.20.000133

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