Coriandrum Sativum Prevents Neuro-Inflammation by Mitigating Periodontitis: A Narrative Review

Mohammad Mirzaei*, Hojjat Shadman Zahroodi, Seyedeh Motahareh Mirdoost, Sara Abbassi

Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

Published: 17 April, 2018

Abstract

Neuro-inflammation, biochemical and cellular responses of the nervous system to injury, infection or neurodegenerative diseases, is a major risk factor for Alzheimer’s, Parkinson’s and Multiple Sclerosis. Periodontitis is a serious bacterial gum infection that damages the soft tissue and teeth supporting bones, causing teeth loss. It also renders systemic inflammation by secretion of pro-inflammatory cytokines and microglia activation and subsequently, causes neuro-inflammation. Mechanical removal, systemic anti-infective therapy and local anti-infective therapy are used to treat periodontitis. Based on recent studies, local application of herbal gels has a considerable positive effect on bacterial plaque removing and treating periodontitis. Coriandrum Sativum is a traditionally used medicinal plant. Its extract has tannin that has anti-inflammatory, antibacterial and antioxidant properties and is used in cosmetics. Many studies indicate no remarkable side-effects for this herb, compared to synthetic medicaments. Due to decreasing in anti-oxidative and antibacterial activity of saliva during periodontitis, it is important to applicate such herbs to prevent progression of inflammation. Neuro-inflammatory diseases initiate many years before they can be clinically diagnosed. By treating systemic inflammations like periodontitis, Neuro-inflammation is preventable or can be delayed. Current methods used for treating periodontitis are not completely helpful and studies show better results when herbal medicines are used concomitantly. Coriandrum Sativum is one of these herbs to be used in oral-hygiene products such as toothpaste, mouthwash, dental floss and even chewing gums and drinking water.

Keywords: Neuro-Inflammation, Periodontitis, Coriandrum Sativum, Oral Health

*Corresponding Author: Mohammad Mirzaei
E-mail: MirzaeiM952@mums.ac.ir