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Susceptibility of Aggregatibacter actinomycetemcomitans to Myrtus communis extracts and other Antimicrobial Agents

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Background and Aim:Increasing prevalence of dental caries makes it one of the most important problems in public health. Plants products are currently gaining attention for treatment of various ailments. Aggregatibacter actinomycetemcomitans is a major pathogen associated with chronic periodontitis, an inflammatory disease of the supporting tissues of the teeth. Oral Aggregatibacter actinomycetemcomitans are pathogens commonly associated with dental plaque and the formation of caries. The inhibitory effects of Myrtus communis extract on the caries inducing properties of Aggregatibacter actinomycetemcomitans were examined in vitro.

Methods: communis extract was dissolved in sterile distilled water with gentle heating where necessary. All the extracts showed activity against Aggregatibacter actinomycetemcomitans standard oral pathogenic bacteria. The MICs were determined using a standard susceptibility broth dilution technique Bacteria and growth conditions strain of Aggregatibacter actinomycetemcomitans bacteria were selected for this study. All bacteria were maintained on Tryptic Soy Broth (TSB; Merck, Ger.) and blood brucella agar supplemented with menadione, hemin and yeast extract grown in at 37°C for 96 h. Bacterial suspensions were prepared by centrifuging 20 mL of TSB cultures at 15 min, Myrtus communis extract solutions or component solutions prepared of Commercial Myrtus communis were prepared by using 70% Methanol