

ABSTRACT

Background: Anaerobe bacteria on Gingival Sulcus is the main etiology agent in initiation and development of periodontal disease such as gingivitis and periodontitis. Beside scaling and root planning, it could be used the additional treatment i.e giving irrigating solution such as chlorhexidine and hydrogen peroxide in gingival sulcus. The solutions had antimicrobial effect with different catch bond.

Purpose: This study aimed to find out the effect of chlorhexidine irrigating solution which was combined with hydrogen peroxide toward the growth and multiplication of gingival sulcus anaerobic bacteria.

Method: This research is conducted as an experimental laboratory in vitro. The sample of this study was the isolated bacteria which was from human gingival sulcus. The method used is disc diffusion on blood agar plate media followed by measuring the bacterial inhibition zone with sliding caliper. Irrigating solution tested was 0.2% chlorhexidine and 0.2% chlorhexidine combined with 3% hydrogen peroxide.

Result: The effect of both solutions towards gingival sulcus anaerobic bacteria.

Conclusion: 0.2% chlorhexidine was more effective in inhibit the growth of gingival sulcus anaerobic bacteria

Keywords: The bacterial inhibition zone, gingival sulcus anaerobical bacteria, 0.2% chlorhexidine, 3% hydrogen peroxide