Cervical end preparation design of collarless metal ceramic crown to the decrease of bacterium colony number

Abstrak:

Background: Cervical end preparation design is an important procedure in fixed partial denture. If the cervical end preparation design is inadequate, dental plaque will easily be formed that may indicate the beginning of periodontal disease. Purpose: This study was aimed to analyze the effect of cervical end preparation design on collarless metal ceramic crown towards the decrease of bacterium colony number. Methods: This study was quasi-experimental study applying the pre and post test with control group design involving 48 subjects with shoulder, bevel shoulder, and deep chamfer cervical end preparation. The bacterium colonies were examined on the 1st, 7th, and 21st days after the insertion of collarless metal ceramic crown. Results: The result of the study showed that bacterium colony increased significantly in deep chamfer and bevel shoulder preparation design between the treatment group and the control group (p<0.05). In shoulder preparation there was not significant different between the treatment group and the control group (p>0.05). Conclusion: Shoulder design is the best design for collarless metal ceramic crown restoration compared to the bevel shoulder and deep chamfer.

Keyword: