ABSTRACT

Background. Asthma is a chronic inflammatory condition of the airways characterized by hyperresponsiveness and episodic reversible symptoms of airflow obstruction. Inhaled steroids are established as the main management to reduce asthma symptoms. However, inhaled steroid can cause adverse side effects in oral cavity such as periodontal disease. With intraoral radiographic examination, it can be shown as alveolar bone resorption. Purpose. The aim of this study was to obtain alveolar bone resorption in asthmatic patients with inhaled steroid therapy through bitewing technique radiographic observation.

Methods. Thirty samples aged 18-30 years old, without systemic disease, not under orthodontic or any dental treatment, and have been using inhaled steroid for about one year (minimum) were recruited through purpose sampling to undergo the research. Periapical radiograph (bitewing technique) was done each on their posterior (first premolar, second premolar, first molar) maxilla and mandibula. The alveolar bone resorption was measured from distal and mesial of their tooth. The measurement then got the mean of the alveolar bone resorption.

Results. Alveolar bone resorption occurred in almost tooth samples. Conclusion. There are resorption of alveolar bone in tooth sample. The magnitude of alveolar bone resorption is 1.8 mm.

Keywords: Alveolar bone resorption, Asthma, Inhaled steroid