



11th AAPD 2014 CHINA

The 11th International Conference of Asian Academy of Preventive Dentistry

第十一届亚洲口腔预防医学大会

Promoting Oral Health with Systemic Health 促进口腔健康与全身健康

17th-19th, September, 2014 Beijing, China

Organizer: Peking University School of Stomatology

Affiliate Organizers:

- Society of Preventive Dentistry, Chinese Stomatological Association
- China Oral Health Foundation
- WHO Collaborating Centre for the Research and Training in Preventive Dentistry, WHOCC-China
- China Association for Science and Technology
- China International Conference Center for Science and Technology

主办单位：北京大学口腔医学院

协办单位：

- 中华口腔医学会预防口腔医学专业委员会
- 中国牙病防治基金会
- 世界卫生组织预防牙医学科研究与培训合作中心（中国）
- 中国科学技术协会
- 中国国际科技会议中心

Abstracts

Homepage: <http://www.aapd2014.org>

PO2-008

Relationship bone mineral density and resorption of alveolar

Irene Edith Rieuwpassa¹, Nurlindah Hamrun¹, Muliaty Yunu², St. Rafiah³

1. Oral Biology, Faculty of Dentistry, Hasanuddin University, Makassar, Indonesia
2. Dental Radiology, Faculty of Dentistry, Hasanuddin University, Makassar, Indonesia
3. Anatomy, Faculty of Medicine, Hasanuddin University, Makassar, Indonesia

E-mail: drgirene@yahoo.com

Objectives: Osteoporosis is a degenerative disease characterized by reduced metabolic bone mass and bone micro-architect so that the risk of failure. Low bone mineral density is a clinical condition in patients with osteoporosis. The high rate of decline in bone mineral density can lead to tooth loss. The purpose of this study was to determine the relationship of reduction in bone mineral density of the alveolar bone resorption so expect no early prevention of tooth loss in people with osteoporosis and osteopenic.

Methods: The sampling method using a random sampling technique. The sample consisted of 36 subjects included men and women with age group 20-71 years. The tools used to retrieve the data is dual energy x-ray absorptiometry (DXA) to assess bone mineral density reduction. Alveolar bone resorption in maxillary incisors with the technique of panoramic radiographs. Data obtained by measuring bone mineral density at the spine, articulatio radiocarpalis, femoral neck. In bone mineral density T-score (WHO, 2003) as follows: Osteoporosis is a bone mineral density <-2.5. Osteopenia is bone mineral density between -1 SD and - 2.5. When normal bone mineral density > -1. Alveolar bone resorption measured if there is loss of bone in the maxillary incisors, alveolar crest more than 2 mm apical to the CEJ toward the limit.

Results: Obtained bone mineral density: normal = 8, osteopenic = 15, osteoporosis = 13. Alveolar bone resorption: no resorption = 8, resorption 2-4 mm = 16 and resorption of > 4 mm = 12. Test performed correlation analysis with SPSS version 21, the results of the study there is a relationship between age and bone density value of $r = 0.378$, between age and alveolar bone resorption value of $r = 0.442$, between bone mineral density and alveolar bone resorption $r = 0.368$.

Conclusion: There is a relationship between bone mineral density and resorption of alveolar and associated with increased age.

Keywords: Bone Mineral Density; Alveolar Resorption