

**Evaluation of interproximal alveolar
bone level among menopause by using
direct digital bitewing intra oral imaging
system**

**A thesis
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Abstract

Background

Digital radiography uses conventional radiographic techniques, but the film is replaced with sensor that transmits the image to a computer. These systems allow some manipulation of image to be carried out, which can enhance the image quality. Although the equipment is expensive, this technique has grown in popularity over recent years.

The relationship between changes in postmenopausal women and periodontal condition had been studied in many countries.

It has been suggested that estrogen deficiency play a role in the alveolar bone loss through menopause.

Aim of the study:

The aim of this study was to elucidate the effect of menopause on interproximal alveolar bone level radiographically and correlate this effect with age and duration of the menopause.

Patients, materials and methods:

The study was completed by the participation of 40 individuals (postmenopausal group: 20 subjects; premenopausal group: 20 subjects). The age of the subjects (premenopausal group) was (35-40) yrs. (Postmenopausal group) was (45-60) yrs. divided into three groups:-

First age group: from (45-49), second age group: from (50-54), third age group: from (55-60).

They were collected from popular clinic in Babylon and referred to diagnosis department of College of Dentistry/ University of Babylon, sample collection was from (2009-2010) yrs.

The patients were choosed according to list of selected criteria before they were employed in the study.

Digital bitewing radiographic examination was done, then measurements of the alveolar bone level from (distal surface of first premolar to the mesial

surface of second molar) in upper and lower jaws, right and left sides were done by using 2 clicks on screen measuring technique which is provided by Dimax software.

Results :

There was highly significant difference in interproximal alveolar bone level measurements for postmenopausal women at different age groups including in this study, and no significant difference in interproximal alveolar bone level measurements for postmenopausal women at both jaws (upper and lower) was revealed. Also no significant difference in interproximal alveolar bone level measurements for postmenopausal women at both sides (right and left), but there was a significant effect for duration of menopause in interproximal alveolar bone level according to the confidence level and highly significant difference in interproximal alveolar bone level between premenopausal and postmenopausal c groups in all age groups.

Conclusion:

There is a highly significant difference in interproximal alveolar bone level between premenopausal and postmenopausal groups in age and duration parameters including in this study.