

**ABSTRACT****GAMBARAN RADIOGRAFIK KORTIKAL MANDIBULA SEBAGAI  
INDIKATOR OSTEOPOROSIS PADA WANITA POSTMENOPAUSE*****Radiographs of Mandibular Cortical as an Indicator of Osteoporosis in  
Postmenopausal Women***

**Background:** Osteoporosis is a condition where there is a decrease in bone mass due to aging thus resulting in decreased bone strength and increased risk of fracture. Population at risk of osteoporosis is in postmenopausal women. Bone density can be assessed from the dental radiographs, such as panoramic radiographs. Bone status at various sites can be assessed using DXA, SPA, DPA, or QCT but many of these costs relatively more expensive than using panoramic radiographs. Panoramic radiographs can be used as an initial step to detect the onset of osteoporosis. **Purpose:** The aim of this study was to determine the changes of mandibular cortical appearance in patients with postmenopausal osteoporosis on dental panoramic radiographs. **Methods:** In this study, Panoramic radiographs of 30 patients were evaluated for mandibular cortical index (MCI). Subjects are selected by criteria such as women aged over 50 years old, postmenopausal with osteoporosis who had been diagnosed by a doctor using the BMD, have a good oral hygiene, not suffering from diabetes mellitus. MCI was determined by the appearance of mandibles on panoramic radiographs. **Result:** the study showed that the category C2 (mildly to moderately eroded cortex) was more found than the category C1 (normal cortex) and C3 (severely eroded cortex) in postmenopausal women and category C3 (severely eroded cortex) was more found than the category C1 (normal cortex) in postmenopausal women but there were no statistically significant difference between the age of the respondents and the classifications of MCI. **Conclusion:** the thickness of the cortical mandible based on Mandible Cortical Index in postmenopausal women mostly showed changes. It was 36.7% of the category C3 (severely eroded cortex), 43.3% of the category C2 (mildly to moderately eroded cortex), and 20% of the category C1 (normal cortex).

**Key words:** Mandibular cortical, Osteoporosis, Postmenopausal women.