ABSTRACT

A recent study demonstrated an increase in receptor activator of nuclear factor κβ ligand (RANKL) and significant decrease in osteoprotegerin (OPG) level in the gingival crevicular fluid (GCF) of patient with periodontal disease (periodontitis). The purpose of this study clearly describes role of receptor activator of nuclear factor κβ ligand (RANKL) and osteoprotegerin (OPG) in bone loss mechanism in periodontitis. Interaction receptor activator of nuclear factor κβ ligand (RANKL) to receptor activator of nuclear factor κβ (RANK) produce mature osteoclast were markedly alveolar bone loss in periodontitis and this process counteracted by osteoprotegerin (OPG) through that activity as decoy receptor with blockade receptor activator of nuclear factor κβ ligand (RANKL) to bind to receptor activator of nuclear factor κβ (RANK).

Key words: RANKL, OPG, Bone loss, Periodontitis