

Energy Dispersive X -Ray Analysis of Periodontally Diseased and Nondiseased Human Teeth using Scanning Electron Microscopy

Abstarct

This study was undertaken to evaluate the differences between healthy and periodontally diseased root cementum including distribution of various elements within cementum ,presence of endotoxins and surface characteristics of diseased cementum using light microscope, scanning electron microscope and electron dispersive x ray microanalysis. The results of this study showed that the inorganic content of the diseased cementum surface were altered and the cementum surfaces were generally rough, irregular covered by bacterial dental plaque displaying multiple deep resorption areas filled with bacterial endotoxins. According to this present work, efforts to restore the biocompatibility of the periodontitis-affected root surface by removal of the superficial and weakly attached plaque may be the goal of the periodontal therapy, instead of the total removal of the periodontally involved cementum