

## The Influence of periodontal status, IL-1 $\beta$ level, and PMN phagocytotic function as risk factors on type 2 diabetes mellitus patients

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20429155&lokasi=lokal>

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### Abstrak

Periodontal status is a periodontum condition evaluated by using plaque index, calculus index, gingival index and pocket index. The main mediator of periodontum inflammation is IL-1 $\beta$  examined by ELISA method. There is an evaluation of PMN s in periodontum inflammation, but the leucotoxin as well as the protease in turn lowers the PMN phagocytotic function. Phagocytotic function was measured by flowcytometry. The aim of the study was to evaluate the high risk factors of being type 2 DM. A diagnostic study was conducted by using cross-sectional design on 45 controlled DM (CDM) subjects, 45 uncontrolled DM (UCDM) subjects in the Metabolic Endocrinology Clinic Cipto Mangunkusumo Hospital Jakarta, as compared to 45 non-DM control subjects. The result of multivariate analysis showed that patients of older age ( $>54$  years old), low periodontum status (periodontal index  $>1.80$ ), high IL-1 $\beta$  level ( $>23.70$  pg/mL), and low PMN phagocytotic function ( $<53.47\%$ ), were significantly at high risk of having DM compared to non-DM ( $p<0.05$ ). Lower periodontum status showed an increase in IL-1 $\beta$  level, decrease PMN phagocytotic function, and consequently, an increase in the risk of being type 2 DM.