OUTER MEMBRANE PROTEIN OF PORPHYROMONAS GINGIVALIS AS BASIC OF DIAGNOSTIC TOOL IN AGGRESSIVE PERIODONTITIS

(PROTEIN MEMBRAN BAGIAN LUAR PORPHYROMONAS GINGIVALIS SEBAGAI ALAT DIAGNOSTIK PERIODONTITIS AGRESIF)

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Abstract

Porphyromonas gingivalis is a gram-negative anaerobic bacteria and has been shown previously to be one of the major pathogens in aggressive periodontitis. Outer membrane protein is the major virulence factor of *P. gingivalis* and plays role in the host immune response impair agains *P. gingivalis*, which in turns, causing tissue destruction and bone resorption. This study was aimed to investigate the isolation and characteristic outer membrane protein of *P. gingivalis*. Protein of OMP *P. gingivalis* ATCC 33277 was isolated using sodium dodecyl sulphate polyacrylamide gel electrophoresis (SDS-PAGE) and than continued by hemaglutination test. The result showed that protein profil in SDS-PAGE of OMP protein was 40 kDa molecular weight dan hemaglutination test was positive in titer of hemaglutination 1/8. In conclusion, outer membrane protein molecular mass of 40kDa produced by *P. gingivalis* is a key virulence factor involved in the co-aggregation activity of *P. gingivalis*

Key words: polyclonal antibody, *Porphyromonas. gingivalis*, outer membrane protein