Analisis molekuler ekspresi anomali protein mukosa mulut pada recurrent aphthous stomatitis (RAS)

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The purpose of this study was to disclose one of the etiopathogenesis of recurrent aphthous stomatitis (RAS) at molecular level by analyzing the expression of protein anomaly in oral mucosa. This was a cross-sectional explorative and analytic observational study. Samples, who met inclusion and exclusion criteria, were taken from total population. Samples of protein swab were obtained from oral mucosa, serum were taken from 15 patients with major RAS, 20 patients with minor RAS and 15 were control. The characterization of protein anomaly expressed on the surface of oral mucosa epithelium was carried out using SDS-PAGE 12% and Westemblot methods. The result of oral mucosa protein anomaly expression analysis in patients with major RAS using SDS-PAGE 12% revealed five protein bands with molecular weights of 87, 65, 30, 25, and 20 kDa. In minor RAS cases with protein anomaly expression there were four proteins with molecular weights of 87, 65, 25, and 20 kDa, and the protein in remission RAS had four proteins bands with molecular weight of 87, 65, 25 and 20 kDa. The band disappearances by using Westemblot test, of 30 kDa of major cases, 87 and 20 kDa of minor cases and 20 and 25 kDa of remission cases, indicated that those patients were not reacted with polyclonal antibodies of rabbit serum; therefore they had no role in the induction of RAS. ln conclusion, the antigenic protein expressed in oral mucosa of major, minor, and remission RAS was predominantly 65 kDa molecular weight.