

ABSTRACT

Introduction: Low levels of serum 25-hydroxyvitamin D are closely linked to health problems that can be influenced by risk factors. The purpose of this study was to look at the relationship between 25-hydroxyvitamin D levels in risk factors for age, sex, body mass index (BMI) and comorbidities, and to see differences in serum 25-hydroxyvitamin D levels in patients with oral mucosal disease and healthy individuals. Methods: This study was a retrospective observational study with a case-control research design, conducted and analyze by recording serum 25-hydroxyvitamin D levels in patients with oral mucosal diseases and healthy individuals according to the inclusion and exclusion criteria at Dr. Hasan Sadikin Hospital Bandung from 1 January 2019 to 31 December 2021. Results: Female patients (62.27%) were significantly more prevalent ($p < 0.000$) than males (37.21%). The age group of 26–50 years (79.06%) were significantly larger ($p < 0.000$) than other groups. Serum 25-hydroxyvitamin D deficiency in patient wiyh oral mucosal disease were significantly higher ($p < 0.000$) than in the other groups. The top three cases of oral mucosal diseases found were oral cancer (17.82%), recurrent aphthous stomatitis (16.83%), and candidiasis (13.86%) respectively. Serum 25-hydroxyvitamin D levels in healthy individuals were significantly higher ($p < 0.000$) than in patients with oral mucosal diseases. There was a significant association ($p < 0.000$) between gender and serum 25-hydroxyvitamin D levels with an odds ratio of 5.78, age, BMI, and comorbidities were not associated. Conclusion: This study showed that most patients with oral mucosal disease had deficient serum 25-hydroxyvitamin D levels, the most common gender was female and there was a difference in lower serum 25-hydroxyvitamin D levels in patients with oral mucosal disease compared to healthy individuals. There is a significant relationship between gender and serum 25-hydroxyvitamin D levels.

Keyword: 25-hydroxyvitamin D, oral mucosa diseases, risk factors