



INTISARI

Kanker payudara adalah kanker dengan tingkat kematian tertinggi di Indonesia. Deteksi dini dapat meningkatkan prognosis kanker. Biomarker matriks metalloproteinase-8 (MMP-8) dalam bentuk aktif memiliki potensi sebagai alternatif deteksi dini. Status MMP-8 aktif dapat dideteksi melalui cairan mulut yang lebih mudah dan noninvasif. Penelitian ini bertujuan untuk mengetahui hubungan antara status MMP-8 aktif di cairan mulut dengan kejadian kanker payudara.

Penelitian observasional *case-control* melibatkan 44 responden kanker payudara dari RSUP Dr. Sardjito dan 38 responden kontrol dari civitas akademika FKG UGM dan warga Dusun Ngabean, Ngaglik, Sleman. Penentuan kanker didasarkan pada diagnosis dokter penanggung jawab di RSUP Dr. Sardjito. Deteksi MMP-8 aktif di cairan mulut dilakukan menggunakan PerioSafe®. Analisis dilakukan secara bivariat menggunakan uji *chi-square*.

Hasil analisis bivariat menunjukkan tidak terdapat hubungan antara status MMP-8 aktif di cairan mulut dengan kejadian kanker payudara ($p \geq 0,05$; OR: 2,923; 95% CI: 0,973-8,778). Berdasarkan penelitian yang sudah dilakukan, didapatkan kesimpulan bahwa tidak terdapat hubungan antara status MMP-8 aktif di cairan mulut dengan kejadian kanker payudara.

Kata kunci: MMP-8 aktif, cairan mulut, biomarker, kanker payudara



ABSTRACT

Breast cancer is a cancer with the highest mortality rate in Indonesia. Early detection can improve its prognosis. Matrix metalloproteinase-8 (MMP-8) in the active form has the potential to be an alternative biomarker for early detection of breast cancer. The presence of active MMP-8 can be detected from oral fluid, which is easier and noninvasive. This research aimed to know the association between active MMP-8 in the oral fluid and breast cancer incidence.

A case-control observational research was conducted with 44 breast cancer respondents from Dr. Sardjito General Hospital and 38 control respondents from the Faculty of Dentistry UGM and residents of Dusun Ngabean, Ngaglik, Sleman. Cancer determination is based on diagnosis by the attending doctor. Active MMP-8 in oral fluid was detected using PerioSafe®. Data were analyzed using the bivariate chi-square test.

Statistical analysis showed that no association was found between the existence of active MMP-8 in oral fluid with breast cancer incidence ($p \geq 0.05$, OR: 2.923, 95% CI: 0.973-8.778). In conclusion, there was no association between active MMP-8 in oral fluid with breast cancer incidence.

Keywords: active MMP-8, oral fluid, biomarker, breast cancer