



INTISARI

Kanker nasofaring merupakan jenis kanker dengan kejadian tertinggi ketiga di Indonesia. Tingkat kelangsungan hidup pasien kanker nasofaring rendah apabila terdeteksi di stadium lanjut, sedangkan deteksi dini kanker nasofaring sulit karena tanda dan gejalanya tidak spesifik. *Active Matrix Metalloproteinase-8* (aMMP-8) merupakan mediator inflamasi yang berpotensi sebagai *biomarker* deteksi dini noninvasif bagi kanker nasofaring. Penelitian ini bertujuan untuk mengetahui hubungan antara hasil uji aMMP-8 di cairan mulut dengan kejadian kanker nasofaring.

Penelitian dilakukan dengan desain *cross-sectional* serta melibatkan 82 subjek yang terbagi menjadi 41 subjek kanker nasofaring dan 41 subjek kontrol sehat. Sampel berupa cairan mulut diperoleh dari masing-masing subjek. Alat uji *chairside* berupa PerioSafe® digunakan untuk mendapatkan hasil uji aMMP-8. Analisis bivariat dilakukan menggunakan uji *chi-square* untuk mengetahui hubungan hasil uji aMMP-8 dengan kejadian kanker nasofaring.

Hasil analisis menunjukkan terdapat hubungan yang signifikan secara statistik antara hasil uji aMMP-8 dan kanker nasofaring ($p = 0,023$; OR = 3,37; CI 95% = 1,150-9,852), khususnya pada kelompok laki-laki ($p = 0,008$; OR = 8,87; CI 95% = 1,763-45,366). Hasil penelitian ini mendukung potensi aMMP-8 sebagai *biomarker* deteksi dini kanker nasofaring.

Kata kunci: aMMP-8, kanker nasofaring, cairan mulut, *biomarker*



ABSTRACT

Nasopharyngeal cancer has the third highest incidence in Indonesia. Patients diagnosed with nasopharyngeal cancer at an advanced stage have a lower survival rate, meanwhile early detection of nasopharyngeal cancer is difficult due to its nonspecific signs and symptoms. Active Matrix Metalloproteinase-8 (a-MMP-8) is an inflammatory mediator that has the potential as a noninvasive early detection biomarker for nasopharyngeal cancer. This research aimed to explore the relationship between aMMP-8 test results in oral fluid and the incidence of nasopharyngeal cancer.

This cross-sectional study involved 82 subjects, divided into 41 subjects in the nasopharyngeal cancer group and 41 subjects in the healthy control group. Oral fluid samples were collected from each subject. A chairside diagnostic tool called PerioSafe® was used to obtain aMMP-8 test results. Bivariate analysis was conducted using chi-square test to analyze the relationship between aMMP-8 test results and nasopharyngeal cancer incidence.

The analysis results showed that there is a statistically significant relationship between aMMP-8 test results and nasopharyngeal cancer ($p = 0,023$; $OR = 3,37$; $CI\ 95\% = 1,150-9,852$), especially in the male subgroup ($p = 0,008$; $OR = 8,87$; $CI\ 95\% = 1,763-45,366$). The results of this study support the potential of aMMP-8 as an early detection biomarker for nasopharyngeal cancer.

Keywords: aMMP-8, nasopharyngeal cancer, oral fluid, biomarker