

INTISARI

HUBUNGAN ANTARA KADAR C-REACTIVE PROTEIN DAN INTERLEUKIN-6 TERHADAP *DISEASE-FREE SURVIVAL* DAN *PROGRESSION-FREE SURVIVAL* KANKER PAYUDARA

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Latar Belakang

Beberapa studi telah menunjukkan peran inflamasi pada proses inisiasi, perkembangan, dan tingkah laku kanker payudara. C-reactive protein (CRP) dan Interleukin-6 (IL-6) merupakan mediator dan indikator respon inflamasi pada kanker payudara namun peran sitokin tersebut sebagai faktor prognostik kanker payudara masih belum konsisten.

Metode

Sebanyak 122 pasien yang baru terdiagnosis kanker payudara sejak Juli 2018 hingga Juni 2020 diikuti dalam penelitian ini. Sebanyak 69 sampel dapat masuk dalam kelompok analisis DFS sedangkan 43 sampel masuk dalam kelompok analisis PFS. Kadar hsCRP dan IL-6 sebelum terapi diperiksa dengan menggunakan metode ELISA. Nilai ambang keduanya ditentukan dengan analisis *receiver operating characteristic* (ROC). Hubungan antara hsCRP dan IL-6 dengan *disease-free survival* (DFS) dan *progression-free survival* (PFS) dinilai dengan metode Kaplan-Meier.

Hasil

Pada penelitian ini subjek dengan kadar CRP ≥ 0.965 mg/L memiliki prognosis DFS yang lebih buruk ($p = 0.022$) namun tidak menunjukkan hubungan yang signifikan terhadap PFS. Sementara itu, kadar IL-6 tidak memiliki nilai prognostik baik terhadap DFS maupun PFS.

Simpulan

Tingginya kadar CRP berhubungan DFS yang lebih buruk pada kanker payudara sedangkan kadar IL-6 tidak menunjukkan hubungan yang signifikan baik terhadap DFS maupun PFS.

Kata kunci: kanker payudara, hsCRP, IL-6, inflamasi, kesintasan

ABSTRACT

THE CORRELATION OF C-REACTIVE PROTEIN AND INTERLEUKIN-6 LEVELS TO DISEASE-FREE SURVIVAL AND PROGRESSION-FREE SURVIVAL OF BREAST CANCER

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Background

Some studies have shown the role of inflammation in initiation, development, and behaviour of breast cancer. C-reactive protein (CRP) and Interleukin-6 (IL-6) are the mediator and the indicator of inflammatory response in breast cancer. However, the role of those cytokines as the prognostic factor in breast cancer is still inconsistent.

Methods

A total of 122 newly diagnosed breast cancer patients from July 2018 to June 2020 were enrolled in this study. Sixty nine samples were analyzed for DFS while 43 samples were included in PFS analysis. The levels of hsCRP and IL-6 before chemotherapy was examined using ELISA method. The threshold of the cytokines were determined with receiver operating characteristic (ROC) analysis. The correlation of hsCRP and IL-6 to disease-free survival (DFS) and progression-free survival (PFS) was analyzed with Kaplan-Meier method.

Results

In this study, subjects with CRP level ≥ 0.965 mg/L had worse DFS ($p = 0.022$). However, the results did not show significant correlation with PFS. On the other hand, the IL-6 level did not have prognostic value either for DFS or PFS.

Conclusion

Higher level of CRP was associated with worse DFS in breast cancer while the IL-6 level did not show the significant result for both DFS and PFS.

Keyword: breast cancer, hsCRP, IL-6, inflammation, survival