

INTISARI

NILAI PROGNOSTIK EKSPRESI VIMENTIN PADA KANKER PAYUDARA TRIPLE NEGATIF DI RSUP DR. SARDJITO

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Latar Belakang

Vimentin merupakan salah satu penanda kanker payudara triple negatif (KPTN) subtype mesenchymal yang berhubungan dengan resistensi terhadap kemoterapi sistemik. Belum diketahui dampak ekspresi vimentin terhadap kesintasan pasien KPTN di Indonesia serta hubungannya terhadap respon regimen kemoterapi yang berbeda.

Metode Penelitian

Penelitian dilakukan secara retrospektif, melibatkan 80 pasien KPTN yang terdiagnosa tahun 2014-2018 di RSUP Dr. Sardjito. Vimentin diperiksa dengan metode *immunohistochemistry* menggunakan jaringan tumor dari *paraffin block*. Analisis kesintasan menggunakan kurva Kaplan Meier. Uji univariat faktor prognostik menggunakan *log – rank test*, diikuti dengan uji multivariat *Cox proportional hazard*. Hasil dinyatakan bermakna secara statistik bila nilai $p < 0,05$.

Hasil Penelitian

Saat terdiagnosis, 85% subjek berusia ≥ 40 tahun dengan rerata usia $50,4 \pm 11$ tahun. Sebanyak 60% subjek memiliki indeks massa tubuh (IMT) $< 25 \text{ kg/m}^2$, 71,2% subjek memiliki tumor T3-4, 67,5% subjek N (+), 13,75% subjek M (+), 37,5% subjek mengalami anemia, 51,2% subjek mendapat kemoterapi berbasis platinum, 48,8% subjek mendapatkan kemoterapi non – platinum, 43,75% subjek mengekspresikan vimentin. Berdasarkan stadium penyakit, 17,5% subjek tergolong dalam *early*, 68,8% subjek tergolong dalam *locally advanced* dan 13,75% subjek dalam *metastatic*. Sebanyak 47,5% subjek masih hidup pada *follow-up* 48 bulan, dengan median kesintasan 35 bulan. Variabel yang signifikan pada uji univariat adalah T, M, hemoglobin, dan vimentin pada seluruh subjek penelitian, sedangkan pada subjek yang mendapat kemoterapi non – platinum adalah T, M dan vimentin. Variabel yang signifikan pada uji multivariat adalah T, M, dan hemoglobin pada seluruh subjek penelitian, sedangkan pada subjek yang mendapat kemoterapi non – platinum adalah T, M dan vimentin.

Kesimpulan

Ekspresi vimentin secara independen berhubungan dengan OS 48 bulan yang lebih baik pada subjek KPTN yang mendapatkan kemoterapi berbasis non – platinum.

Kata Kunci: vimentin, resistensi platinum, KPTN, faktor prognostik

ABSTRACT

PROGNOSTIC VALUE OF VIMENTIN IN TRIPLE NEGATIVE BREAST CANCER PATIENTS TREATED IN DR. SARDJITO GENERAL HOSPITAL

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Background

Vimentin, a marker of mesenchymal subtype in triple negative breast cancer (TNBC), is associated with resistance towards systemic chemotherapy. Currently there is no data on the prognostic value of vimentin in Indonesian TNBC patients and its relation towards different types of systemic chemotherapy.

Methods

A retrospective observational of study was conducted involving 80 TNBC patients diagnosed between 2014-2018 in Dr. Sardjito General Hospital. Vimentin was examined using immunohistochemistry of paraffin embedded tumor tissue. Survival analysis was performed using Kaplan Meier curve. Univariate analysis of potential prognostic factor was conducted using log - rank test, followed by multivariate analysis using Cox proportional hazard. Significant value was set at $p < 0,05$.

Results

At diagnosis, 85% subjects were ≥ 40 years old, with mean of 50.4 ± 11 years. Sixty percent subjects had body mass index (BMI) $< 25 \text{ kg/m}^2$, 71.2% subjects had T3-4 tumor, 67.5% subjects had N (+), 13.75% subjects had M (+), 37.5% subjects had anemia, 51.2% subjects received platinum – based chemotherapy, 48.8% subjects received non – platinum – based chemotherapy, 43.75% subjects expressed vimentin. According to disease stage, 17.5% subjects were early, 68.8% subjects were locally advanced and 13.75% subjects were metastatic. As many as 47.5% subject were alive at 48 months follow up, with median survival of 35 months. Variables significant in univariate analysis were T, M, hemoglobin, and vimentin in all subjects, while T, M and vimentin were significant in subjects receiving non – platinum – based chemotherapy. Variables significant in multivariate analysis were T, M and hemoglobin in all subjects, while T, M and vimentin. were significant in subjects receiving non – platinum – based chemotherapy

Conclusion

Expression of vimentin is independently associated with improved 48 – month OS in TNBC patients treated with non – platinum – based chemotherapy.

Keywords: vimentin, platinum resistance, TNBC, prognostic factor