

INTISARI

HUBUNGAN ANTARA PERUBAHAN NILAI CA 125 PRA DAN PASCA TERAPI DAN *PROGRESSION FREE SURVIVAL* PASIEN KANKER OVARIUM EPITELIAL DI RSUP DR. SARDJITO TAHUN 2017-2021

Latar Belakang: *Progression Free Survival* (PFS) telah direkomendasikan sebagai faktor prognosis primer pada kejadian kanker ovarium epitelial dengan menilai progresi sifat sel kanker yang mengacu pada situasi terdapat tanda-tanda tumor dari hasil pemeriksaan laboratorium, radiologis, atau klinis. Cancer Antigen-125 (CA-125) merupakan biomarker yang digunakan dalam mendiagnosa pasien kanker ovarium ataupun sebagai prediktor rekurensi kanker ovarium.

Tujuan: Penelitian ini bertujuan untuk mengetahui hubungan antara perubahan nilai CA-125 pra dan pasca terapi dengan PFS pasien kanker ovarium epitelial.

Metode: Studi kohort retrospektif dilakukan pada 94 pasien kanker ovarium epitelial pasca pembedahan dan kemoterapi di RSUP Dr. Sardjito tahun 2017-2021 untuk menilai perubahan nilai CA-125 pra dan pasca terapi serta progres penyakit dalam 3 tahun setelah terapi.

Hasil: Rerata waktu PFS dari 94 pasien adalah 16,7 bulan, dimana 92,55% diantaranya mengalami rekurensi dalam 3 tahun. Rerata waktu PFS signifikan berbeda ($p=0,004$) antara pasien dengan perubahan nilai CA-125 $<50\%$ ($n=6$, rerata waktu PFS=6 bulan), $50-75\%$ ($n=8$, rerata waktu PFS=15 bulan), dan $>75\%$ ($n=73$, rerata waktu PFS=17,7 bulan). Secara bivariat, dibandingkan pasien dengan perubahan nilai CA-125 $>75\%$, pasien dengan perubahan nilai CA-125 $<50\%$ memiliki risiko yang signifikan lebih tinggi mengalami progres penyakit dalam 3 tahun (HR=3,106, CI 95%=1,285-7,509, $p=0,012$), tetapi tidak signifikan pada pasien dengan perubahan nilai CA-125 $50-75\%$ (HR=1,258, CI 95%=0,605-2,618, $p=0,539$). Tidak berbeda signifikan PFS pasien berdasarkan usia (HR=1,029, CI 95%=0,643-1,648, $p=0,905$), paritas (HR=0,885, CI 95%=0,532-1,447, $p=0,637$), stadium (HR=0,821, CI 95%=0,537-1,255, $p=0,363$), dan residu tumor (HR=0,863, CI 95%=0,566-1,318, $p=0,496$). Meskipun secara statistik tidak signifikan, namun risiko PFS dalam 3 tahun lebih tinggi pada pasien LGSC (HR=4,382, CI 95%=0,968-19,829, $p=0,055$), HGSC (HR=1,770, CI 95%=0,998-3,138, $p=0,051$), clear cell (HR=1,735, CI 95%=0,500-6,018, $p=0,385$), dan endometrioid (HR=1,343, CI 95%=0,587-3,074, $p=0,485$) dibandingkan pasien mucinous. Secara simultan, risiko PFS signifikan lebih tinggi pada pasien dengan perubahan nilai CA-125 $<50\%$ (HR=3,096, CI 95% = 1,254-7,644, $p=0,014$) dan pasien dengan LGSC (HR=4,946, CI 95% = 1,082 – 22,613, $p=0,039$).

Kesimpulan: Perubahan nilai CA-125 pra dan pasca terapi di bawah 50% pada pasien kanker ovarium epitelial meningkatkan risiko PFS dalam 3 tahun. Selain itu pasien dengan histopatologi LGSC, HGSC, Clear cell & Endometrioid memiliki risiko penurunan PFS yang lebih tinggi dibandingkan dengan pasien dengan suptipe mucinous.

Kata kunci: Kanker ovarium epitelial, CA-125, PFS.

ABSTRACT

CORRELATION BETWEEN CHANGES IN PRE- AND POST-THERAPY CA-125 LEVEL AND PROGRESSION-FREE SURVIVAL IN EPITHELIAL OVARIAN CANCER PATIENTS AT RSUP DR. SARDJITO 2017 – 2021

Background: Progression-Free Survival (PFS) has been recommended as a primary prognostic factor in epithelial ovarian cancer by assessing the development of cancer characteristics based on laboratory, radiological, or clinical examination results. Cancer Antigen-125 (CA-125) is a biomarker used both for diagnosing ovarian cancer and predicting its recurrence.

Objective: This study aims to determine the relationship between pre- and post-therapy CA-125 level changes and PFS in epithelial ovarian cancer patients.

Method: A retrospective cohort study was conducted on 94 patients with epithelial ovarian cancer who underwent surgery and chemotherapy at RSUP Dr. Sardjito from 2017 to 2021. The study assessed changes in CA-125 levels before and after therapy and monitored disease progression within three years after treatment.

Results: The average PFS time for the 94 patients was 16,7 months, with 92,55% experiencing recurrence within three years. The average PFS time differed significantly ($p=0,004$) among patients with CA-125 level reductions of $<50\%$ ($n=6$, average PFS time=6 months), $50-75\%$ ($n=8$, average PFS time=15 months), and $>75\%$ ($n=73$, average PFS time=17,7 months).

Compared to patients with CA-125 reductions of $>75\%$, patients with reductions of $<50\%$ had a significantly higher risk of disease progression (HR=3,106, CI 95%=1,285-7,509, $p=0,012$). However, this risk was not significant for patients with CA-125 reductions of $50-75\%$ (HR=1,258, CI 95%=0,605-2,618, $p=0,539$). No significant differences in PFS based on age (HR=1,029, CI 95%=0,643-1,648, $p=0,905$), parity (HR=0,885, CI 95%=0,532-1,447, $p=0,637$), stage (HR=0,821, CI 95%=0,537-1,255, $p=0,363$), and tumor residue (HR=0,863, CI 95%=0,566-1,318, $p=0,496$). Although not statistically significant, the risk of PFS within three years was higher in patients with LGSC (HR=4,382, CI 95%=0,968-19,829, $p=0,055$), HGSC (HR=1,770, CI 95%=0,998-3,138, $p=0,051$), clear cell (HR=1,735, CI 95%=0,500-6,018, $p=0,385$), and endometrioid (HR=1,343, CI 95%=0,587-3,074, $p=0,485$) compared to patients with mucinous. Simultaneously, the risk of PFS was significantly higher in patients with CA-125 reductions of $<50\%$ (HR=3,096, CI 95%=1,254-7,644, $p=0,014$) and those with LGSC (HR=4,946, CI 95%=1,082–22,613, $p=0,039$).

Conclusion: A reduction in CA-125 levels of less than 50% after therapy is associated with an increased risk of disease progression within three years in epithelial ovarian cancer patients. Additionally, patients with LGSC, HGSC, clear cell, and endometrioid have a higher risk of reduced PFS compared to patients with mucinous.

Key words: epithelial ovarian cancer, CA-125, PFS