PERBEDAAN RESPON TERAPI PASIEN KARSINOMA NASOFARING STADIUM LANJUT NON METASTASIS ANTARA *INDEKS ADVANCED LUNG CANCER INFLAMMATION* (ALI) TINGGI DAN RENDAH DI RSUP DR. SARDJITO

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INTISARI

Latar belakang: Karsinoma nasofaring (KNF) merupakan keganasan tersering nasofaring di Asia Tenggara dan sebagian besar pasien di Indonesia datang pada stadium lanjut dengan luaran yang masih kurang memuaskan. Inflamasi sistemik berperan penting dalam progresivitas kanker dan indeks *Advanced Lung Cancer Inflammation* (ALI), yang menggabungkan IMT, albumin serum, dan *neutrophil-to-lymphocyte ratio* (NLR), telah dilaporkan sebagai biomarker prognostik pada berbagai kanker, namun data terkait hubungan ALI dengan respon terapi KNF stadium lanjut non metastasis belum ada.
Metode penelitian: Penelitian ini merupakan studi observasional analitik dengan rancangan *case control* menggunakan data rekam medis pasien KNF stadium lanjut non metastasis yang mendapat *neoadjuvant chemotherapy* tiga kali dan *concurrent chemoradiotherapy* 33 kali di RSUP Dr. Sardjito periode 2020 – 2023. Sampel diperoleh dengan *consecutive sampling* dan dibagi menjadi kelompok respon terapi komplit dan inkomplit berdasarkan penilaian 3 bulan pasca terapi menggunakan kriteria RECIST 1.1 serta biopsi nasofaring, kemudian dibandingkan dengan kategori indeks ALI (tinggi ≥24,2; rendah <24,2) menggunakan uji *chi-square.*
Hasil penelitian: Sebanyak 70 pasien memenuhi kriteria, terdiri dari 52 laki-laki (74,3%) dengan mayoritas stadium IVA (80%). Sebanyak 28 pasien (40,0%) memiliki ALI rendah dan 42 pasien (60,0%) ALI tinggi; pasien dengan ALI rendah lebih banyak mengalami respon terapi inkomplit (67,9% vs 32,1%), dan analisis menunjukkan perbedaan bermakna antara ALI dan respon terapi (p=0,028; OR 3,431; CI 95% 1,251–9,404). Perbedaan NLR dengan respon terapi juga didapatkan signifikan (p = 0,037; OR 3,625; CI 95% 1,201–10,944), sedangkan IMT dan albumin serum tidak menunjukkan perbedaan bermakna dengan respon terapi.
Kesimpulan: Terdapat perbedaan signifikan respon terapi pasien KNF stadium lanjut non metastasis antara indeks ALI tinggi dan rendah di RSUP Dr. Sardjito.
Kata kunci: Karsinoma nasofaring; *Advanced Lung Cancer Inflammation* index; biomarker; respon terapi;

DIFFERENCES IN THERAPEUTIC RESPONSE BETWEEN HIGH AND LOW ADVANCED LUNG CANCER INFLAMMATION INDEX IN ADVANCED NON-METASTATIC NASOPHARYNGEAL CARCINOMA PATIENTS AT RSUP DR. SARDJITO

ABSTRACT

Background: Nasopharyngeal carcinoma (NPC) is the predominant nasopharyngeal malignancy in Southeast Asia, where most Indonesian patients present at advanced stages with suboptimal outcomes. Systemic inflammation contributes significantly to cancer progression, and the Advanced Lung Cancer Inflammation Index (ALI)—integrating body mass index (BMI), serum albumin, and neutrophil-to-lymphocyte ratio (NLR)—serves as a prognostic biomarker across various malignancies; however, its association with therapeutic response in advanced non-metastatic NPC remains unexplored.
Methods: This analytic observational case control study reviewed medical records of patients with advanced non-metastatic NPC receiving three cycles of neoadjuvant chemotherapy followed by 33 fractions of concurrent chemoradiotherapy at RSUP Dr. Sardjito (2020–2023). Consecutive sampling yielded 70 patients stratified by complete (CR) versus incomplete response (non-CR) at 3 months post-treatment per RECIST 1.1 criteria and nasopharyngeal biopsy. Associations with ALI (high ≥24.2; low <24.2) were evaluated using chi-square tests.
Results: Of 70 patients (74.3% male; 80.0% stage IVA), 28 (40.0%) had low ALI and 42 (60.0%) high ALI. Low ALI correlated with higher incomplete response rates (67.9% vs. 32.1%; p=0.028; OR 3.431; 95% CI 1.251–9.404). Elevated NLR also demonstrated significant association (p=0.037; OR 3.625; 95% CI 1.201–10.944), whereas BMI and serum albumin showed no significant differences.
Conclusion: Therapeutic response differs significantly between high- and low-ALI groups in advanced non-metastatic NPC at RSUP Dr. Sardjito.
Keywords: nasopharyngeal carcinoma; Advanced Lung Cancer Inflammation Index; biomarker; therapeutic response