

## INTISARI

Sisplatin dan karboplatin merupakan agen kemoterapi lini pertama *Non-Small Cell Lung Cancer* (NSCLC) yang dapat menimbulkan efek samping nefrotoksisitas. Informasi mengenai gambaran kejadian nefrotoksisitas pascakemoterapi dan faktor risikonya masih terbatas. Penelitian ini bertujuan untuk mengidentifikasi gambaran kejadian nefrotoksisitas pascakemoterapi dan faktor risikonya

Penelitian ini merupakan studi observasional retrospektif dengan rancangan potong-lintang. Sampel dikumpulkan menggunakan teknik *total sampling* pada pasien yang menjalani kemoterapi di RS Bethesda Yogyakarta periode waktu Januari 2014-November 2018. Variabel yang dapat mempengaruhi kejadian nefrotoksisitas dianalisis secara deskriptif dalam bentuk rerata  $\pm$  SD dan proporsi.

Tiga pasien mengalami nefrotoksisitas dan 31 pasien tidak mengalami nefrotoksisitas. Hasil penelitian ini menunjukkan bahwa prevalensi nefrotoksisitas pascakemoterapi sebesar 8,82% dan variabel yang diduga sebagai faktor risikonya adalah kadar kreatinin serum di atas normal (40,0%); kadar limfosit di bawah normal (37,5%); siklus kemoterapi pertama (30,0%); usia > 65 tahun (25%); dosis karboplatin 300 mg (25,0%); klirens kreatinin 10-49 mL/menit (20,0%); riwayat merokok (15,8%); rejimen kemoterapi karboplatin-gemcitabin (14,3%); kadar ureum di atas normal (13,6%) dan tekanan darah di atas normal (11,8%). Peneliti menyimpulkan bahwa prevalensi nefrotoksisitas pascakemoterapi pada penelitian ini cukup tinggi dan sebanyak sepuluh variabel diduga sebagai faktor risikonya.

**Kata kunci :** Faktor risiko, nefrotoksisitas, kemoterapi, *Non-Small Cell Lung Cancer*.

## **ABSTRACT**

Cisplatin and carboplatin are the first-line chemotherapy agents in Non-Small Cell Lung Cancer (NSCLC) which can cause nephrotoxicity. However, informations about prevalence and risk factors of nephrotoxicity are still limited. The objective of this study was to identify the prevalence and risk factors of post-chemotherapy nephrotoxicity in patients with NSCLC.

This was a retrospective observational study with a cross-sectional design. Samples were collected using total sampling technique in patients undergoing chemotherapy at Bethesda Hospital during January 2014-November 2018. Variables that could influence the incidence of nephrotoxicity were analyzed descriptively in the mean  $\pm$  SD and proportion.

Three patients had nephrotoxicity and 31 patients did not have nephrotoxicity. The prevalence of post-chemotherapy nephrotoxicity was 8.82% and variables suspected as risk factors in this study were high serum creatinine (40.0%); low lymphocyte level (37.5%); first cycle of chemotherapy (30.0%); age > 65 years (25%); dose of carboplatin 300 mg (25.0%); creatinine clearance 10-49 mL/min (20.0%); smoking (15.8%); carboplatin-gemcitabine chemotherapy regimen (14.3%); high urea level (13.6%) and high blood pressure (11.8%). We concluded that the prevalence of post-chemotherapy nephrotoxicity in this study was quite high and there were ten variables thought to be risk factors.

**Key words :** Risk factors, nephrotoxicity, chemotherapy, Non-Small Cell Lung Cancer.