

**Perbedaan Kadar Hemoglobin Sebelum dan Sesudah Kemoterapi
(Cisplatin-Paclitaxel) pada Pasien Kanker Nasofaring di RSUD Prof. Dr.
Margono Soekarjo**

ABSTRAK

Latar Belakang: Terapi kanker nasofaring berdasarkan *National Comprehensive Cancer Network* merekomendasikan *induction chemotherapy + concurrent chemoradiotherapy* sebagai salah satu perawatan standar untuk penyakit kanker nasofaring stadium II-IVA. Penggunaan *induction chemotherapy* diberikan sebelum radioterapi, menjadi strategi pengobatan yang efektif karena memiliki tingkat kepatuhan yang lebih baik dan memfasilitasi pemberantasan dini mikrometastasis. Namun, kemoterapi memiliki efek samping supresi sumsum tulang dan mengurangi produksi hormon eritropoietin di ginjal. Penurunan kadar hemoglobin dapat memperburuk defisiensi oksigen pada tumor sehingga meningkatkan sel-sel hipoksia dan berkontribusi terhadap perkembangan resistensi radioterapi.

Tujuan: Mengetahui kadar hemoglobin sebelum dan sesudah kemoterapi (cisplatin-paclitaxel) pada pasien kanker nasofaring di RSUD Prof. Dr. Margono Soekarjo.

Metode: Penelitian ini merupakan jenis penelitian analitik observasional dengan pendekatan *cross sectional*. Subjek penelitian ini adalah 36 pasien kanker nasofaring di RSUD. Prof. Dr. Margono Soekarjo yang memenuhi kriteria. Pengumpulan data variabel terkait kanker nasofaring menggunakan diagnosis dokter spesialis THT-KL, sedangkan data untuk variabel terikat kadar hemoglobin diperoleh dari rekam medis.

Hasil: Hasil analisis bivariat menggunakan *Paired T Test* didapatkan perbedaan rerata kadar hemoglobin sebelum dan sesudah kemoterapi ($p=0,000$), rerata kadar hemoglobin sebelum kemoterapi yakni 13,397 g/ dL dan sesudah kemoterapi yakni 11,35 g/dL pada pasien kanker nasofaring di RSUD Prof. Dr. Margono Soekarjo.

Kesimpulan: Terdapat perbedaan signifikan antara kadar hemoglobin sebelum dan sesudah kemoterapi (cisplatin-paclitaxel) selama 6 siklus pada pasien kanker nasofaring di RSUD Prof. Dr. Margono Soekarjo.

Kata Kunci: Hemoglobin, Kemoterapi, Kanker Nasofaring

Hemoglobin Levels Before and After Chemotherapy (Cisplatin-Paclitaxel) of Nasopharyngeal Cancer Patients at RSUD Prof. Dr. Margono Soekarjo

ABSTRACT

Background: Nasopharyngeal cancer therapy based on the National Comprehensive Cancer Network recommends induction chemotherapy +concurrent chemoradiotherapy as one of the standard treatments for stage II-IVA nasopharyngeal cancer. The use of induction chemotherapy given before radiotherapy, is an effective treatment strategy because it has a better level of adherence and facilitates early eradication of micrometastasis. But chemotherapy has a direct side effect of disruption of red blood cell formation in the bone marrow and reduces the production of the hormone erythropoietin in the kidney. Decreased hemoglobin levels exacerbate oxygen deficiency in tumors thereby increasing hypoxic cells and contributing to the development of radiotherapy resistance.

Goal: This research was conducted to find out the hemoglobin levels before and after chemotherapy (cisplatin-paclitaxel) in nasopharyngeal cancer patients at RSUD Prof. Dr. Margono Soekarjo.

Method: This was analytical observational studies with a cross sectional method. The subjects of this research were 36 nasopharyngeal cancer patients at RSUD Prof. Dr. Margono Soekarjo that meets the research criteria. Nasopharyngeal cancer independent variable data was collected from otorhinolaryngologists diagnosis, while hemoglobin levels as dependent variable was collected from hospital medical records.

Result: The results of the bivariate analysis showed differences in the average hemoglobin levels before and after chemotherapy, the average hemoglobin levels before chemotherapy which were 13.397 g / dL and after chemotherapy which were 11.35 g / dL in nasopharyngeal cancer patients at Prof. Hospital Dr. Margono Soekarjo ($p = 0,000$).

Conclusions: There is a significant difference between hemoglobin levels before and after chemotherapy (cisplatin-paclitaxel) for 6 cycles in nasopharyngeal cancer patients in Prof. Hospital Dr. Margono Soekarjo.

Key Words: Hemoglobin, Chemotherapy, Nasopharyngeal Cancer