

## ABSTRAK

### **Perubahan Profil Glikemik Pasien Limfoma Non-Hodgkin (LNH) Non Diabetes Melitus (DM) pada Pemberian Kemoterapi CHOP yang Pertama**

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**Latar belakang:** Kemoterapi limfoma non-hodgkin (LNH) yaitu siklofosfamid, doksorubisin, vinkristin, dan prednison (CHOP) memiliki efek samping hiperglikemia yang mempengaruhi keberhasilan kemoterapi. Perbaikan profil glikemik menurunkan morbiditas dan mortalitas.

**Tujuan:** Menentukan perubahan profil glikemik pasien LNH non DM sebelum dan hari ke-6 kemoterapi CHOP yang pertama.

**Material dan Metode:** Penelitian analitik observasional longitudinal prospektif di Unit Rawat Inap Penyakit Dalam RSUD Dr. Soetomo Surabaya, melibatkan seluruh pasien LNH kemoterapi CHOP yang pertama selama bulan November 2019–Februari 2020. Sejumlah 21 pasien memenuhi syarat kemoterapi dan tidak DM. Pemeriksaan profil glikemik menggunakan metode *heksokinase* dan alat glukometer (*Easy Touch®*). Analisis data menggunakan uji Wilcoxon, dianggap bermakna jika  $p < 0,05$ .

**Hasil:** Total subjek penelitian 21 orang, dominasi perempuan (66,7%), rerata usia  $49,24 \pm 13,96$  tahun, dominasi stadium klinis 3 (52,38%), rerata HbA1C  $5,75 \pm 0,49$  %, rerata GDP  $90,86 \pm 13,13$  mg/dL, dan rerata GD2PP  $114,33 \pm 20,16$  mg/dL. Kadar glukosa darah harian selama kemoterapi tertinggi pada *pre dinner* hari pertama. Dominasi peningkatan kadar glukosa darah *pre lunch* diikuti penurunan saat waktu pemeriksaan berikutnya. Terdapat perbedaan bermakna pada GDP dan GD2PP hari sebelum kemoterapi dan hari ke-6 kemoterapi (*p-value* 0,032 dan 0,002). Insidensi DM baru pada hari ke 6 sesudah kemoterapi CHOP yang pertama sebanyak 2 orang (9,53%).

**Kesimpulan:** Terdapat peningkatan GDP dan GD2PP pasien LNH non DM sebelum dan hari ke-6 kemoterapi CHOP yang pertama.

**Kata kunci:** LNH, DM, CHOP

## ABSTRACT

### Change in Glycemic Profile of Non-Hodgkin Lymphoma (NHL) Non Diabetes Mellitus (DM) Patient in the First CHOP Chemotherapy

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**Background:** Non-Hodgkin lymphoma (NHL) chemotherapy namely cyclophosphamide, doxorubicin, vincristine, and prednisone (CHOP) have hyperglycemia side effects that affect the success of chemotherapy. Improved glycemic profile decreases morbidity and mortality.

**Objective:** Determine the glycemic profile changes in non-DM NHL patients before and the 6<sup>th</sup> day after the first CHOP chemotherapy.

**Method:** Prospective longitudinal observational analytic study in the Internal Medicine Inpatient Unit Dr. Soetomo Hospital Surabaya involved all the first CHOP chemotherapy NHL patients during November 2019-February 2020. A total of 21 patients met chemotherapy requirements and were not DM. The glycemic control check uses the hexokinase method and a glucometer (Easy Touch®). Data analysis using the Wilcoxon test was considered significant if  $p < 0.05$ .

**Results:** Total research subjects were 21 people, female domination (66.7%), mean age  $49.24 \pm 13.96$  years, clinical stage 3 dominance (52.38%), mean HbA1C  $5.75 \pm 0.49\%$ , average FBG  $90.86 \pm 13.13$  mg / dL, and the mean PPBG  $114.33 \pm 20.16$  mg / dL. Daily blood glucose levels during chemotherapy were highest on the first day's pre-dinner. The predominance of an increase in pre-lunch blood glucose levels is followed by a decrease during the next examination. There were significant differences in FBG and PPBG before chemotherapy and the 6<sup>th</sup> day after chemotherapy ( $p$ -values 0.032 and 0.002). The incidence of new-onset DM on the 6<sup>th</sup> day after the first CHOP chemotherapy was 2 people (9.53%).

**Conclusion:** There was an increase in FBG and PPBG of NHL non-DM patients before and the 6<sup>th</sup> day after the first CHOP chemotherapy.

**Keyword:** NHL, DM, CHOP