

**FAKULTAS KEDOKTERAN
UNIVERSITAS PEMBANGUNAN NASIONAL “VETERAN” JAKARTA**

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**KADAR FERITIN SETELAH PEMBERIAN TERAPI KELASI BESI
DEFERASIROX DIBANDINGKAN DENGAN DEFERIPRONE PADA
PASIEN THALASEMIA BETA MAYOR DI RSU HERMINA JATINEGARA**

RINCIAN HALAMAN (xi + 76 halaman, 9 tabel, 10 gambar, 6 lampiran)

ABSTRAK

Tujuan

Thalasemia beta mayor merupakan kelainan genetik yang terjadi akibat gangguan sintesis hemoglobin. Thalasemia menyebabkan peningkatan zat besi karena transfusi darah terus menerus sehingga memerlukan terapi kelasi besi seperti deferasirox, deferoxamine, atau deferiprone. Penelitian ini bertujuan untuk mengidentifikasi karakteristik pasien thalasemia beta mayor, rata-rata penurunan kadar feritin terapi deferasirox dan deferiprone, dan membandingkan kemampuan kedua terapi tersebut dalam menurunkan kadar feritin di RSU Hermina Jatinegara.

Metode

Desain penelitian yang digunakan ialah potong lintang, penelitian ini melibatkan 74 sampel, dengan masing-masing kelompok terapi terdiri dari 37 sampel. Data diambil dari rekam medis. Karakteristik dinilai dari frekuensi dan persentase usia, jenis kelamin, dan frekuensi transfusi. Data kadar feritin pertama diambil ketika kadar melebihi atau sama dengan 1000 ng/mL lalu diambil kembali setelah tiga bulan.

Hasil

Karakteristik pasien terdiri dari perempuan (52,7%), remaja (45,95%), dan kelompok frekuensi 21-30 kali tranfusi sebanyak 44,6% sejak Januari 2023 hingga Oktober 2024. Hasil penelitian menunjukkan bahwa deferasirox secara signifikan menurunkan kadar feritin lebih tinggi dibandingkan dengan deferiprone, dengan rata-rata penurunan -2108,61±1913,70 ng/mL (*Mean ± Std*) dan -983,64±948,06 ng/mL (*Mean ± Std*). Terdapat perbedaan dalam penurunan kadar feritin antara terapi deferasirox dan deferiprone.

Kesimpulan

Pasien thalasemia di RSU Hermina Jatinegara lebih banyak ditemukan pada perempuan, usia remaja, dan frekuensi 21-30 kali transfusi sejak Januari 2023 hingga Oktober 2024. Terdapat perbedaan dari kedua terapi dalam menurunkan kadar feritin. Penerima terapi deferasirox memiliki penurunan feritin yang lebih tinggi dibandingkan deferiprone.

Daftar Pustaka : 78 (2014-2024)

Kata Kunci : deferasirox, deferiprone, feritin, thalasemia beta mayor, terapi kelasi besi.

**FACULTY OF MEDICINE
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FERRITIN LEVELS AFTER IRON CHELATION THERAPY WITH DEFERASIROX COMPARED TO DEFERIPRONE IN BETA THALASSEMIA MAJOR PATIENTS AT HERMINA JATINEGARA HOSPITAL

PAGE DETAIL (xi + 76 pages, 9 tables, 10 pictures, 6 appendices)

ABSTRACT

Objective

Beta thalassemia major is a genetic disorder causes a quantitative defect of hemoglobin synthesis. Thalassemia leads to iron overload due to regular blood transfusions, necessitating chelation therapy with agents such as deferasirox, deferoxamine, or deferiprone. This research aims to understand the characteristics of patients with beta thalassemia major, determine the mean reductions of serum ferritin levels with deferasirox and deferiprone therapies, and compare the ability of these two therapies in reducing ferritin levels at Hermina Jatinegara Hospital

Methodology

Using a cross-sectional design, this research involved 74 patients, with each therapy group consisting of 37 patients. Data were collected from medical records. Characteristics are assessed from the frequency and presentation of age, sex, and frequency of transfusions. The first ferritin level is assessed when the level exceeds or equals 1000 ng/mL and is reassessed after three months.

Result

The patient population predominantly comprised females (52.7%), adolescents (45.95%), and those who had received 21-30 transfusions (44,6%) from January 2023 to October 2024. The results indicated that Deferasirox significantly reduced ferritin levels more than Deferiprone, with mean reductions of -2108.61 ± 1913.70 ng/mL (Mean \pm Std) and -983.64 ± 948.06 ng/mL (Mean \pm Std), respectively. There was a difference found in the reduction of ferritin levels between the Deferasirox and Deferiprone therapies

Conclusion

Thalassemia patients at RSU Hermina Jatinegara were found to be more female, adolescent age, and frequency of 21-30 transfusions from January 2023 to October 2024. There is a difference between the two therapies in reducing ferritin levels. Deferasirox therapy recipients had a higher ferritin reduction than deferiprone.

Reference : 78 (2014-2024)

Keywords : beta thalassemia major, deferasirox, deferiprone, iron chelation therapy, ferritin.