

ABSTRAK

Latar Belakang: Talasemia β merupakan Penyakit kelainan genetik darah yang menyebabkan gangguan pembentukam molekul hemoglobin, sehingga pasien memerlukan transfusi darah berulang yang dapat menyebabkan penumpukan zat besi (*iron overload*). Akumulasi zat besi diukur melalui kadar feritin serum dan diketahui dapat memengaruhi pertumbuhan anak.

Tujuan: Mengetahui korelasi antara kadar feritin serum dengan pertumbuhan pasien talasemia β yang mendapat transfusi darah rutin di RSUD Al Ihsan Bandung tahun 2022-2024

Metode: Penelitian ini menggunakan desain kuantitatif analitik dengan pendekatan cross-sectional. Data sekunder diambil dari rekam medis 57 pasien talasemia β yang memenuhi kriteria inklusi. Analisis korelasi dilakukan menggunakan uji *Spearman* karena distribusi data tidak normal

Hasil: Hasil penelitian menunjukkan adanya korelasi negatif sedang dan signifikan antara kadar feritin dan tinggi badan menurut usia ($r = -0,472$; $p < 0,05$), yang berarti semakin tinggi kadar feritin, semakin besar risiko gangguan pertumbuhan linear. Sementara itu, hubungan antara kadar feritin dengan indeks massa tubuh menurut usia (IMT/U) menunjukkan korelasi sangat lemah dan tidak signifikan ($r = -0,086$; $p > 0,05$).

Kesimpulan: Terdapat korelasi signifikan antara kadar feritin dan pertumbuhan linier (tinggi badan menurut usia), namun tidak terdapat hubungan signifikan dengan status gizi (IMT/U). Pemantauan kadar feritin dan kepatuhan terhadap terapi kelasi besi penting untuk mencegah gangguan pertumbuhan pada pasien talasemia β .

Kata Kunci : Talasemia β , feritin serum, pertumbuhan, tinggi badan, IMT/U

ABSTRACT

Background: Beta thalassemia is a hereditary blood disorder that impairs hemoglobin synthesis, requiring regular blood transfusions that lead to iron overload. Serum ferritin level serves as an indicator of iron accumulation, which can adversely affect growth in children.

Objective : To determine the correlation between serum ferritin levels and growth among patients with beta thalassemia at Al Ihsan General Hospital Bandung during 2022–2024.

Methods : This study employed an analytical quantitative design with a cross-sectional approach. Secondary data from 57 patients who met the inclusion criteria were collected from medical records. The Spearman correlation test was used due to non-normal data distribution.

Results : The findings revealed a moderate negative and significant correlation between serum ferritin levels and height-for-age ($r = -0.472$; $p < 0.05$), indicating that higher ferritin levels were associated with a greater risk of impaired linear growth. Meanwhile, the correlation between serum ferritin and body mass index-for-age (BMI/A) was weak and statistically insignificant ($r = -0.086$; $p > 0.05$).

Conclusion : There is a significant correlation between serum ferritin levels and linear growth (height-for-age), but no significant relationship with nutritional status (BMI/A). Regular monitoring of ferritin levels and adherence to iron chelation therapy are crucial to prevent growth impairment in beta thalassemia patients.

Keywords : Beta thalassemia, serum ferritin, growth, height-for-age, BMI-for-age