

INTISARI

Latar belakang: Penyakit lupus eritematosus sistemik (LES) merupakan penyakit autoimun sistemik yang menyebabkan peradangan serta kerusakan beberapa organ tubuh. Keterlambatan pertumbuhan tinggi badan adalah ciri khas LES remaja, yang disebabkan oleh aktivitas penyakit jangka panjang, kondisi komorbiditas dan pengaruh pengobatan kortikosteroid.

Tujuan penelitian: Mengetahui faktor prediktor *height velocity* pada anak perempuan dengan LES yang menerima metilprednisolon dosis tinggi.

Metode penelitian: Studi kohort retrospektif dengan mengumpulkan data rekam medis pada Januari 2014 hingga Januari 2023. Pasien anak perempuan LES usia 8-18 tahun dan mendapatkan glukokortikoid sistemik (metilprednisolon) sediaan oral atau intravena diikutsertakan dalam penelitian. Data keparahan LES, status gizi, pertumbuhan tinggi badan dan usia saat terdiagnosis dikumpulkan. Data dianalisis dengan analisis univariat, bivariat dan multivariat.

Hasil penelitian: Ada 89 pasien anak dengan LES yang memenuhi kriteria inklusi dan eksklusi. Subjek LES derajat berat didapatkan sebanyak 32,6%, mayoritas subjek didiagnosis LES pada masa *post-menarche* (60,7%). Sebagian besar subyek memiliki status gizi baik pada awal diagnosis (33,7). Status tinggi badan terhadap usia pada awal penggunaan terapi glukokortikoid didapatkan bahwa mayoritas pendek (62,9%). *Height velocity* subjek sebagian besar pasien adalah normal (77,5%). Hasil analisis multivariat didapatkan usia terdiagnosis berpengaruh signifikan terhadap *height velocity* $p < 0,001$, dengan OR=8,71 dan gizi awal $p = 0,036$, nilai OR=1,88.

Kesimpulan: Total terdapat hubungan yang signifikan antara usia saat terdiagnosis dan status gizi dengan *height velocity* pada anak perempuan dengan LES yang menerima metilprednisolon dosis tinggi sehingga usia saat terdiagnosis dan status gizi merupakan faktor prediktor *height velocity*.

Kata kunci: Lupus eritematosus sistemik, faktor prediktor, *height velocity*

ABSTRACT

Background: Systemic lupus erythematosus (SLE) is a systemic autoimmune disease that causes inflammation and damage to several organs of the body. Delayed growth in height is a hallmark of juvenile SLE, which is caused by long-term disease activity, comorbid conditions and the effects of corticosteroid treatment.

Aims: To determine the predictors of height velocity in girls with SLE who received high doses of methylprednisolone.

Methods: Retrospective cohort study by collecting medical record data from January 2014 to January 2023. Female SLE patients aged 8-18 years and receiving systemic glucocorticoids (methylprednisolone) oral or intravenous preparations were included in the study. Data on SLE severity, nutritional status, height growth and age at diagnosis were collected. Data were analyzed by univariate, bivariate and multivariate analysis.

Results: There were 89 pediatric patients with SLE who fulfilled the inclusion and exclusion criteria. Subjects with severe SLE were found to be 32.6%, the majority of subjects were diagnosed with SLE during the post-menarche period (60.7%). Most of the subjects had good nutritional status at the initial diagnosis (33.7%). Majority of height status for age were short (62.9%). Most of height velocity of the patients was normal (77.5%). The results of multivariate analysis showed that age at diagnosis and initial nutrition had a significant effect on height velocity, respectively $p < 0.001$, $OR = 8.71$; $p = 0.036$, $OR = 1.88$.

Conclusion: There is a significant relationship between age at diagnosis and nutritional status with height velocity in girls with SLE who receive high doses of methylprednisolone so that age at diagnosis and nutritional status are predictors of height velocity.

Keywords: Systemic lupus erythematosus, predictor factor, height velocity