Hubungan antara profil besi dan hemoglobin pra-transfusi dengan pubertas terlambat pada pasien thalassemia mayor remaja di RSUPN dr. Cipto Mangunkusumo Jakarta (RSCM) = Association between iron profile and pre transfusion hemoglobin with delayed puberty in adolescent thalassemia major patients in dr. Cipto Mangunkusumo National Public Hospital Jakarta (RSCM)

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Abstrak

ABSTRAK
Pubertas terlambat merupakan salah satu komplikasi utama pada pasien thalassemia mayor. Penyebab utama pubertas terlambat pada pasien thalassemia mayor adalah penumpukan besi pada kelenjar hipofisis. Selain itu, anemia kronis pada pasien thalassemia mayor juga dapat menyebabkan pubertas terlambat. Tujuan: Penelitian ini bertujuan untuk mengetahui hubungan antara profil besi dan kadar hemoglobin pra-transfusi dengan status pubertas pasien thalassemia mayor remaja di Pusat Thalassemia RSCM. Metode: Penelitian ini merupakan studi cross-sectional yang melibatkan 47 pasien thalassemia mayor dengan rentang usia 13-18 tahun untuk pasien perempuan dan 14-18 tahun untuk pasien lelaki di Pusat Thalassemia RSCM. Profil besi subjek ditentukan dari kadar feritin serum dan saturasi transferin subjek. Status pubertas subjek ditentukan berdasarkan Tanner Staging. Hasil & Diksusi: Berdasarkan kadar feritin serum, terdapat 47 (100%) subjek yang mengalami kelebihan besi, dengan 35 (75%) diantaranya mengalami kelebihan besi berat. Nilai median feritin serum subjek adalah 3645 (1415-12636) ng/mL. Berdasarkan saturasi transferin, sebesar 36 (77%) subjek mengalami kelebihan besi, dengan nilai median saturasi transferin sebesar 85 (28-100)%. Terdapat 42 (89%) subjek yang mengalami anemia, dengan nilai median kadar hemoglobin pra-transfusi sebesar 8,0 (4,8-9,5) g/dL. Pubertas terlambat ditemukan pada delapan (17%) subjek. Secara statistik, tidak terdapat hubungan yang bermakna antara feritin serum dengan status pubertas (p = 0,183), saturasi transferin dengan status pubertas (p = 0,650), dan kadar hemoglobin pra-transfusi dengan status pubertas (p = 0,932). Berdasarkan hasil tersebut, profil besi dan kadar hemoglobin pra-transfusi tidak berhubungan dengan status pubertas pasien thalassemia mayor remaja di Pusat Thalassemia RSCM.
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ABSTRAK
Introduction Delayed puberty is a major complication in thalassemia major patients. Delayed puberty occurs due to accumulation of iron in the pituitary gland. In addition, chronic anemia in thalassemia major patients can cause delayed puberty.Objectives This study aims to find the association between iron profile and pre transfusion hemoglobin level with pubertal status in adolescent thalassemia major patients in Thalassemia Centre RSCM.Methods This was a cross sectional study that involved 47 thalassemia major patients aged 13 to 18 years for female patients and 14 to 18 years for male patients in Thalassemia Centre RSCM. Iron profile was determined from serum ferritin level and transferrin saturation. Pubertal status was determined by Tanner Staging.Results Discussion Based on serum ferritin level, 47 100 subjects had iron overload, in which 35 75 subjects had severe iron overload. The median of serum ferritin level was 3645 1415 12636 ng mL. Based on transferrin saturation, 36 77 subjects had iron overload. The median of transferrin saturation

was 85 28 100 . Forty two 89 subjects were found anemic. The median of pre transfusion hemoglobin level was 8,0 4,8 9,5 g dL. Delayed puberty occurred in eight 17 subjects. Statistically, no significant associations were found between serum ferritin level and pubertal status p 0.183 , transferrin saturation and pubertal status p 0.650 and pre transfusion hemoglobin level and pubertal status p 0,932 . Based on the results, iron profile and pre transfusion hemoglobin level are not associated with pubertal status in adolescent thalassemia major patients in Thalassemia Centre RSCM.