

INTISARI

Anak penderita talasemia beta mayor mengalami anemia. Penyebab anemia adalah eritropoesis masif. Eritropoesis masif menyerang korteks tulang, sehingga mengakibatkan kelainan tulang, untuk mengatasi kondisi anemia dilakukan transfusi darah. Tujuan penelitian ini adalah untuk mengevaluasi hubungan antara lama transfusi dengan posisi anteroposterior maksila dan mandibula pada anak talasemia beta mayor usia 12-14 tahun (kajian suku Jawa).

Jenis penelitian adalah observasional dengan rancangan *cross sectional*. Subjek penelitian adalah anak penderita talasemia beta mayor berusia 12-14 tahun. Jumlah subjek penelitian adalah 40 anak. Data lama transfusi diperoleh dari data yayasan talasemia Indonesia di Jakarta. Pada subjek dilakukan foto rontgen sefalometri, selanjutnya dilakukan pengukuran sudut SNA, SNB, ANB.

Hasil penelitian menunjukkan rerata besar sudut SNA 86.83 ± 3.75 , sudut SNB 77.11 ± 2.49 dan sudut ANB 9.71 ± 5.73 . Persamaan garis regresi lama transfusi terhadap sudut SNA yaitu $y = 88,43 - 0,29x$, lama transfusi terhadap sudut SNB yaitu $y = 75,85 + 0,23x$, lama transfusi terhadap sudut ANB yaitu $y = 12,57 - 0,521x$. Hasil uji korelasi Spearman menunjukkan terdapat hubungan bermakna antara lama transfusi dengan besar sudut SNA ($r : -0,356$, $p : 0,024$), SNB ($r : 0,382$, $p : 0,015$), ANB ($r : -0,411$, $p : 0,008$).

Kesimpulan (1) Semakin lama transfusi, maka posisi anteroposterior maksila terhadap basis kranium semakin mendekati normal (sudut SNA berkurang) (2) Semakin lama transfusi, maka posisi anteroposterior mandibula terhadap basis kranium semakin mendekati normal (sudut SNB bertambah) (3) Semakin lama transfusi, maka posisi anteroposterior maksila terhadap mandibula semakin mendekati normal (sudut ANB berkurang).

Kata kunci : Talasemia beta mayor, Lama transfusi, Posisi anteroposterior maksila dan mandibula.

ABSTRACT

Children with beta thalassemia major have anemia. The cause of anemia is massive erythropoiesis. Massive erythropoiesis attacks the cortex of the bone, resulting in bone abnormalities. Blood transfusions are used to treat anemia. The aim of this study was to evaluate the relationship between the duration of transfusion and the anteroposterior position of the maxilla and mandible in beta thalassemia major children aged 12-14 years (Javanese study).

This type of research is observational with a cross sectional design. The research subjects were children with beta thalassemia major aged 12-14 years. The number of research subjects was 40 children. Transfusion time data was obtained from data from the Indonesian Thalassemia Foundation in Jakarta. A cephalometric X-ray was taken on the subject, then the SNA, SNB, and ANB angle measurements were taken.

The results showed that the mean SNA angle was 86.83 ± 3.75 , the SNB angle was 77.11 ± 2.49 and the ANB angle was 9.71 ± 5.73 . The equation of the regression line for transfusion duration with respect to the SNA angle is $y = 88.43 - 0.29x$, the duration of the transfusion to the SNB angle is $y = 75.85 + 0.23x$, the duration of the transfusion to the ANB angle is $y = 12.57 - 0.521x$. The results of the Spearman correlation test showed that there was a significant relationship between the length of the transfusion and the SNA angle ($r: -0.356$, $p: 0.024$), SNB ($r: 0.382$, $p: 0.015$), ANB ($r: -0.411$, $p: 0.008$).

Conclusions (1) The longer the transfusion, the closer the anteroposterior position of the maxilla to the cranial base is (reduced SNA angle) (2) The longer the transfusion, the closer the anteroposterior position of the mandible to the cranium base is (increased SNB angle) (3) The longer it takes transfusion, the maxillary anteroposterior position with respect to the mandible is closer to normal (reduced ANB angle).

Key words : Beta thalassemia major, duration of transfusion, maxillary and mandibular anteroposterior position.