

C845084 : MAJOR PEDIATRICS

KEY WORD: BETA-THALASSEMIA / MEAN PULMONARY ARTERIAL PRESSURE / ASPIRIN / POSTSPLENECTOMY

CHAIYONG NITHICHAIO : THE EFFECT OF ASPIRIN ON PULMONARY ARTERY PRESSURE IN POSTSPLENECTOMY BETA-THALASSEMIA CHILDREN.

THESIS ADVISOR : ASSO. PROF. PANYA SAKSUN MD. THESIS COADVISOR : ASSO. PROF. PIROCHN CHOTIVITTAYATARAKORN. MD. 37 pp. ISBN 974-636-839-7.

Objective : To present the effect and clinical application of 3-5 mg/kg/day aspirin on pulmonary artery pressure in postsplenectomy beta-thalassemia children.

Design : Before - after experimental study without control group.

Setting : Pediatrics out-patient unit , Chulalongkorn Hospital.

Patients population : Postsplenectomy bete-thalassemia children who come to visit at hemato-clinic regularly , received blood transfusion before 3 wk prior to study , hematocrit between 18 - 24 % , no history of heart failure , bleeding tendency , aspirin allergy or peptic ulcer. We selected them by the sequence of doctor visitation. Doppler echocardiogram was done to measure the mean pulmonary artery pressure (MAP) and select only whom MAP \geq 20 mmHg (12 was selected)

Interventions : We explained about the study design , the importance about regular usage of aspirin , aspirin side effects. After that we give them aspirin 3 - 5 mg/kg/day once a day and appointed them to visit to measure MAP 1 month , 3 months and 5 months after.

Main outcome measures : We measured the MAP by Doppler echocardiogram in supine position. We measure acceleration time and ejection time of pulmonary blood flow 5 times then calculated the average of MAP.

Results : We found that MAP has statistically significant decrease after aspirin therapy in 1 month ($p = 7.3 \times 10^{-6}$) and so in 3 and 5 months. Mean of the MAP before study was 42.09 mmHg. , after aspirin therapy for 1 month was 39.76 mmHg. , 3 months was 36.28 mmHg. , 5 months was 32.49 mmHg

Conclusions : Aspirin can decrease the MAP in postsplenectomy beta - thalassemia children that the studys before have showed that them have thombocytosis and pulmonary arterial thombosis after splenectomy. We concluded that platlets is a mian factor to produce pulmonary hypertension in postsplenectomy beta - thalassemia children.

ภาควิชา.....

ลายมือชื่อนิสิต.....

สาขาวิชา.....

ลายมือชื่ออาจารย์ที่ปรึกษา.....

ปีการศึกษา.....

ลายมือชื่ออาจารย์ที่ปรึกษาร่วม.....