



POSTER PRESENTATION

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Primary hyperlipidemia in children: clinical, biochemistry characteristics and outcome

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Background

Primary hyperlipidemia is genetic dyslipoproteinemia. Without any intervention, cardiovascular diseases and acute pancreatitis may be occurred. The detection and appropriate management of pediatric hyperlipidemia can have a significant impact upon the disease course and can prevent complications.

Objects

to describe the clinical and biochemical characteristics of hyperlipidemia in Vietnamese children and to evaluate outcome of treatment.

Patients and methods

From 2007 to 2013, 30 children with primary hyperlipidemia were recruited and were treated with diet and/or lipid-lowering drug therapy at the National Hospital of Pediatrics, Hanoi, Vietnam. Clinical symptoms and biochemical finding, outcome of treatment were studied. Results: Among 30 cases from 28 families, 8 patients were mixed hyperlipidemia (MHL), 13 patients were hypertriglyceridemia (HT) and 9 patients were hypercholesterolemia (HC). Mean age of diagnosis was 5.5 years (1 month – 16 years). The rate of male/female was 13/17. Clinical manifestations included hepatomegaly (4 cases), xanthemas in the knees and elbows (5 cases), “creamy” blood (21 cases). Twenty cases were clinical asymptomatic. 8/28 patients had family history with hyperlipidemia and cardiovascular diseases. Serum cholesterol levels of HC group was 9.2 ± 4 mmol/l. Serum triglyceride level of HT group was 23.6 ± 9.9 mmol/l. MHL group had hypercholesterolemia (12.1 ± 4.5 mmol/l) and hypertriglyceridemia (20.3 ± 10.5 mmol/l). After interventions, HT group had the best outcome with serum triglyceride level was 10.1 ± 4.6 mmol/l, next to MHL group with

serum cholesterol level was 5.8 ± 1.8 mmol/l, and serum triglyceride level was 9.5 ± 5.2 mmol/l; finally, serum cholesterol level of HC group was 12.4 ± 5.5 mmol/l. Five infants with HT had the best outcome of treatment: serum triglyceride level decreased from 19 - 57.6 mmol/l to 5 - 10 mmol/l. Two patients with HC had the worsen results (unchanged blood lipid level).

Conclusions

Primary hyperlipidemia had poor clinical manifestations and good results of treatment. Screening for primary hyperlipidemia help to prevent premature cardiovascular diseases.

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