LEFT-VENTRICULAR MASS INDEX IN HYPERTENSIVE CHILDREN AND ADOLESCENTS

Submitted by Stella Stabouli
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OBJECTIVE: Our aim was to investigate differences in left-ventricular mass corrected for height2.7 (LVMI) in children and adolescents according to 24-hour ambulatory blood pressure (BP) levels.

METHODS: A total of 67 consecutive children and adolescents aged 5 to 20 years were analyzed. Patients underwent 24-hour ambulatory BP monitoring and echocardiography. LVMI was calculated by using the Devereux equation. All subjects underwent 24-hour ambulatory blood pressure monitoring on a usual school day. Ambulatory hypertension was defined as mean daytime systolic BP and/or diastolic BP at ≥95th percentile for gender and height (n = 22). Prehypertension was defined as mean daytime systolic BP and/or diastolic BP at ≥90th percentile and <95th percentile for gender and height (n = 13). Normotension was defined as mean daytime systolic BP and/or diastolic BP at <90th percentile for gender and height (n = 32).

RESULTS: LVMI was 28.3 ± 9.4 g/m2.7 (mean ± SD) in the normotensive subjects (n = 32), whereas it was 35.1 ± 8.7 g/m2.7 in the hypertensive subjects (n = 22), a difference that was significantly higher (P < .001, Mann-Whitney test). LVMI was 32.4 ± 5.4 g/m2.7 in prehypertensive subjects (n = 13), values that tended to be lower than the values of hypertensive subjects (P = .275) and significantly higher than the values of normotensive subjects (P < .05, Mann-Whitney test).

CONCLUSIONS: Children and adolescents characterized as hypertensive or prehypertensive using the ambulatory blood pressure criteria exhibited significantly higher LVMI than normotensive subjects. Prehypertensive children may be at a similar risk for cardiovascular target-organ damage as that established for hypertensive children.

STRATEGY FOR HIGH-DOSE IMMUNOGLOBULIN THERAPY–RESISTANT KAWASAKI DISEASE: CURRENT STATUS IN JAPAN

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INTRODUCTION: High-dose intravenous immunoglobulin (IVIg) therapy has decreased the risk for development of coronary arterial lesions (CALS) in Kawasaki disease (KD), whereas patients who show resistance to IVIg have a higher risk for CALs.

OBJECTIVE: The purpose of this study was to determine the risk for CALs in patients with IVIg-resistant KD and to investigate whether an additional therapy might affect its risk, based on the nationwide survey (2003–2004) in Japan.

METHODS: Information from 11 510 children with KD treated with IVIg with the first 9 days of illness was available. The incidence of CALs was compared among 4 groups: group 1 (G1), children who responded to initial IVIg; group 2 (G2), IVIg-resistant patients who received additional IVIg; group 3 (G3), IVIg-resistant patients who received additional prednisolone (PSL); and group 4 (G4), IVIg-resistant patients who received additional IVIg plus PSL. CALs were assessed on the 30th day of illness.

RESULTS: Among 11510 cases, 2229 patients (19.4%) were resistant to initial IVIg treatment and received additional therapy. The incidence of CALs was significantly lower in children who responded to IVIg (G1, n = 9281) than in those with IVIg resistance (1.87% and 11.03%, respectively). In each of the additional therapy groups, the incidences of CALs were as follows: G2 (n = 1108), 6.68%; G3 (n = 93), 9.68%; and G4 (n = 135), 22.22%. Thus, the risk for development of CALs was significantly higher for patients in G4 than those in G1 and G2.

CONCLUSIONS: Additional therapy including PSL may increase the risk for CALs; however, several selection biases, such as more severe cases in G3 and G4, might have affected the results.

Community Pediatrics

THE AMERICAN ACADEMY OF PEDIATRICS I-CATCH PROGRAM: IMPROVING CHILDREN’S ACCESS TO COMMUNITY-BASED CARE IN RESOURCE-LIMITED SETTINGS

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INTRODUCTION: The great disparities in children’s access to health care depend on many factors. Expanding the availability of community-based services through programs designed to decrease these disparities is imperative.

METHODS: In 2006, the American Academy of Pediatrics Section on International Child Health implemented a new program to address these disparities, the International Community Access to Child Health (I-CATCH) program, which offers mentorship in grant preparation and project execution and provides 3-year funding to support project development and implementation. Projects are community-based initiatives that increase children’s access to health care or services not otherwise available. Project initiatives will decrease health disparities and will develop sustainable community-based child health programs that may be replicated in other communities.

RESULTS: During the first grant cycle, innovative proposals were received from colleagues in 16 countries. A great variety of opportunities were described to improve children’s access to health. Four projects were funded, each of which focused on community education and development: (1) improve children’s nutrition and decrease gastrointestinal and respiratory disease (El Salvador); (2) train community health care workers (Pakistan); (3) identify and serve high-risk pregnancies and neonates (Philippines); and (4) promote essential newborn care (Uganda).

CONCLUSIONS: The first grant cycle illuminated the impressive creativity of colleagues, who outlined many opportunities to improve children’s access to care through community-based programs with the expectation of decreasing health disparities. The tremendous potential of the I-CATCH program was validated. Although assessment of the long-term impact of the I-CATCH program is needed, the initial year showed great promise.

THE EUROPEAN ASSOCIATION FOR CHILDREN IN HOSPITAL (EACH) CHARTER

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The European Association for Children in Hospital (EACH) Charter, adopted in 1988 in Leiden, Netherlands, is a list of the rights of all children before, during, and after a hospital stay. The rights mentioned in the charter apply to all sick children regardless of their illness, age, or disability, their origin or social or cultural background, or any possible reason for treatment, whether as inpatients or outpatients.

All rights mentioned in the charter and all measures derived from it must, in the first place, be in the best interests of children and enhance their well-being.

The rights/needs of children in hospital include accommodation for parents, support for parents and children, informed participation in the decision-making process, and care in pediatric units by staff who are adequately trained.

The EACH Charter is in line with corresponding and binding rights stipulated at the United Nations Convention on the Rights of the Child and refers to children as being aged 0 to 18 years.

Some of the goals of the EACH Charter are still unachieved, such as:

- the right of children to have their parents with them in the hospital;
- painless medical treatment;
- to receive information they can understand;
- the possibility for children to have their own say in the care plan;
- opportunities for play and education in the ward;
- to have contact with peers; and
- a healing environment.

TRADITIONAL PRACTICES AFFECTING CHILD HEALTH: A SUB-SAHARAN AFRICAN EXPERIENCE

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INTRODUCTION: Culture includes the values of a people and affects nurturing of children as well as illness attribution. In spite of scientific discoveries, traditional practices that relate to health-seeking behaviors have persisted.

OBJECTIVE: The purpose of this work was to highlight the harmfulness and consequent negative effects of some of these practices on child health.

METHODS: A 1-year longitudinal study of children who attended the children’s emergency and outpatient departments of a health institution in an urban area in Nigeria was carried out. Oral interviewing of the caregivers and physical inspection of the children was carried out for all patients. Treatment history, preferences for health care, and obvious traditional attempts at cure were evaluated.

RESULTS: There were 4484 hospital visits during which 2040 children were evaluated. The most common form of medical intervention at home before the visit was the use of herbal remedies (964 [47.25%]), scarifications that remained after blood-letting procedures...
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