Conclusion: Our findings suggest that children of HIV-infected women, regardless of the child's HIV infection status, might benefit from initial vaccination at 6 months of age in regions where children are at risk for measles. Confirmation of the child's HIV-infection status prior to vaccination would not be needed. Measles vaccines appear to be safe in HIV-infected children but there is an absence of studies reporting adverse events.

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Body composition measurements and fat redistribution in HIV-infected children and adolescents from São Paulo city, Brazil


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Background: Body composition changes are frequently present in HIV—infected individuals. We studied the relation between body composition measurements and lipodystrophy in children and adolescents infected with human immunodeficiency virus.

Methods: Prospective transversal study including 40 pre-pubertal children and adolescents of both gender, aged 7 to 12 years, attended at the Pediatric Infectious Disease Clinic - Universidade Federal de São Paulo, São Paulo city, Brazil, from August to December, 2008. Age, gender, clinical and immune status (CDC, 1994), weight and height were recorded. Body Mass Index (BMI) z-score and height-for-age z-score was calculated according to WHO, 2007. Circumferences and skinfolds measurements were assessed. Body fat mass (%) was determined by DXA. Presence of clinical signs of lipodystrophy was assessed by a trained clinician. Statistical tests such as t-distribution and chi-squared test were performed. Statistical significance was considered as P<0.05, data were analysed using STATA 8.0 software.

Results: The mean age was 9,8±1,2 years, 50% were girls and 82,5% children from B e C categories. The mean values of BMI z-score and height-for-age z-score were -0,10±1,58 and -0,80±1,26 respectively. Lipodystrophy was present in 14 (27,5%) patients; four had lipoatrophy (10%), three lipohypertriglyceridaemia (7,5%) and four a mixed pattern (10%). Considering the body composition measurements, the waist circumference (61±7,47 cm; P=0,044) and trunk-arm ratio (0,95±0,28; P=0,001) were related to lipodystrophy presence. No significant association was found between lipodystrophy and arm and calf circumferences (18,76±2,58 cm; 25,93±2,93 cm), body fat mass (17,61±8,26%), tricipital and bicipital skinfolds (8,37±2,91 mm; 5,67±2,13 mm).

Conclusion: Waist circumference and trunk-arm ratio were sensitive measurements to show body composition changes in patients with lipodystrophy.

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