confirmed PHF6 mutations, have been reported since its first description in 1962. The phenotype is better characterized in males with moderate to severe developmental delay, microcephaly and hypogonadism. The phenotype of affected females ranges from normal through to developmental delay with obesity and hypothyroidism. Our aim is to report three cases of BFLS, describe the associated endocrine dysfunction and further delineate the female phenotype.

Method: Endocrine and genetic results were reviewed of three patients (2 female and 1 male) with a clinical diagnosis of BFLS.

Results: Confirmation of the diagnosis was established in one patient and is pending in the other two. All three have developmental delay. Patient 1 is an obese female (BMI 41 kg/m²) with genetically proven BFLS and pubertal delay, autoimmune hypothyroidism and hypercholesterolaemia. Patient 2 is an obese female (BMI 39kg/m²) with autoimmune hypothyroidism, hyperandrogenism and hypercholesterolaemia. Patient 3 is an obese male (BMI 30 kg/m²) with typical dysmorphic features and pubertal delay.

Conclusion: BFLS is an important condition to consider when reviewing patients with obesity and developmental delay. We suspect it is more prevalent than reported in the literature and may be missed particularly in females where the phenotype is poorly characterized. Endocrine abnormalities were seen in all of our patients. Because of the X-linked pattern of inheritance, diagnosis and genetic counselling are important.

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ADVERSE EFFECTS OF EXCESSIVE TELEVISION VIEWING IN CHILDREN

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Aim:

1.To study the relationship between TV viewing and dietary and physical activity habits and

2.To correlate daily TV time with BMI and blood pressure.

Methods: 540 children (53% boys) aged 2-14 years (mean age 8.4 years) were included in this prospective study. Demographic data, anthropometric indexes, alimentary and physical activity patterns were recorded and blood pressure was measured. TV time was determined as hours per day dedicated to watching television.

Results: 46% of the sample spent >2h/day watching television, noticeably boys more than girls (51.4% vs. 40%, p=0.009). Daily TV time increased with age, with preschool-aged children reaching a mean time of 2.4h/day, elementary school-aged children 2.8h/day and adolescents 3.3h/day, respectively (p< 0.001). The existence of a TV set in the child's bedroom increased the likelihood of excessive viewing by 2.63 times (p< 0.001). Furthermore, children who spent more hours per day watching TV consumed larger quantities of high-calorie snacks (p< 0.001), soft beverages (p< 0.001), ready-made juices (p< 0.001) and fast food meals (p=0.003). Prolonged daily TV time was strongly correlated with increased BMI (p< 0.001) and more importantly with the presence of both prehypertension and hypertension (p=0.006). In contrast, low intensity exercise, such as walking short distances everyday, was associated with decreased TV watching (p< 0.001).

Conclusion: Extended TV viewing predisposes children to adopting unhealthy lifestyles. Implementing the AAP's guidelines which state that all children >2 years of age should limit screen time to < 2h/day might reduce its negative impacts on their health.

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ESTIMATION OF BODY COMPOSITION IN CHILDREN AGED 4-7: BODY MASS INDEX, SKINFOLDS AND WAIST-TO-HEIGHT RATIO COMPARED TO THREE COMPONENT MODEL

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Background & aims: Field methods to estimate body composition in young children have limited reliability. The aim of our study was to examine the inter-relationship of three body composition

variables derived from simple anthropometry: 1) Body Mass Index (BMI), 2) skinfolds (SF) and 3) Waist-to-Height ratio (WHtR) in young children.

Methods: Body composition of twenty-five healthy, non-obese children, aged 4 to 7 years, was measured by the use of BMI, SF, WHtR and the 3C model. Fat mass (FM; kilograms) was derived from SF equations (Goran and Slaughter) and the 3C model, which consists of measurements of weight, body volume by air displacement plethysmography (BOD POD) and total body water by Deuterium water dilution (D2O). BMI and WHtR were derived from anthropometry.

Results: Correlation coefficients of (a) BMI, (b) FM calculated from SF equations by Goran, (c) FM calculated from SF equations by Slaughter and (d) WHtR with FM estimated by the 3C model were 0.877, 0.950, 0.945 and 0.644 respectively. Bland-Altman plots showed a bias of -0.621 kg for Goran SF equations (CI -0.8766 to -0.3659). Slaughter SF equations showed a bias of -0.876 kg (CI -1.1449 to -0.6064).

Conclusions: Using 3C model derived FM as reference, the results indicate that WHtR has limited utility in estimating body composition, whereas BMI and SF seem to be more useful in estimating body composition in young children.

Aims: To compare BMD with BMAD Z scores in a cohort of 21 children born small for gestational age (SGA) on growth hormone treatment

Methods: A retrospective study was conducted on DEXA scans and growth parameters performed on this cohort over a 4 year period

Results: Mean birth weight 1.36Kg. Mean age at time of DEXA scans 8.8yrs. 14/21(66%) had a height >3SDs below the mean. 29 DEXA scans were performed. BMAD demonstrated significantly different results ($p=0.000$). Mean BMD score was -1.1 with 27/29(93%) below the mean. Mean BMAD score was +0.1 on the same DEXA scans with only 9/29(31%) below the mean. 18/29(62%) DEXA's with previously abnormal results on BMD reports moved to within normal range.

Conclusion: Adjustment of BMD to account for short stature using BMAD significantly altered results in our homogenous group of children born sga. The majority of children moved to within the normal range. DEXA scans are usually performed on children with chronic disease at increased risk of low BMD and osteoporotic fractures. These children are often small for their age hence a low bone density may simply reflect small body size. This has implications for diagnosis and treatment of osteoporosis.

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BONE MINERAL DENSITY ADJUSTMENT IN CHILDREN WITH SHORT STATURE

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Background: Children may have low bone mineral density (BMD) on Dual energy x-ray absorptiometry (DEXA) scanning due to smaller bones and/or less mineral than expected for bone size (volume). BMD, a 2D measurement may underestimate BMD in small subjects. Bone mineral apparent density (BMAD) will adjust for calculated bone volume rather than bone area

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EVALUATION OF LIPID PROFILE IN CORD BLOOD OF TERM NEWBORNS IN OUR CENTER

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Background and aims: Clinical studies have demonstrated a close association between lipoprotein abnormalities and susceptibility to cardiovascular diseases. Recent studies have shown that cardiovascular diseases start in childhood. Evaluation of newborns lipid profile might be benefit. So we measured lipid levels in cord blood of newborns.