dysmorphic features, skeletal anomalies, goitre or pigmentation. The rest of the examination was unrevealing.

Investigations showed normal CBC, ESR, and liver and renal and thyroid functions. Sweat chloride test, and tissue trans-glutaminase concentrations were normal. His IGF-I level = 70 (IGF-I SDS = -1) and his bone age = 3 years. The peak GH response to clonidine stimulation test = 10 ng/dl. Brain MRI showed normal pituitary gland.

Because of the decelerated growth and marginally low IGF-I a trial of GH therapy was started (0.035 mg/kg/day s.c. HS). A rapid catch-up of growth occurred during the first 3 years of treatment that was maintained at a slower pace during the following 3 years. Testicular enlargement started at 11 years and at 12 years his HtsDS = 0.8 and bone age = 12.3 years. His predicted adult height = 181 cm.

Conclusion Prolonged GH treatment of this boy (normal GH–IGF-I axis) with GH unexpectedly resulted in a HTSDS which surpassed his MPHtSDS by 1.4 SD.

PO-0073 WITHDRAWN

PO-0074 PSEUDO-BARTTER’S SYNDROME AS A FIRST MANIFESTATION OF CYSTIC FIBROSIS IN INFANCY

Background and aims Metabolic alkalosis in association with low serum electrolyte concentration (hyponatremia, hypochloremia, and hypokalemia) is known complication of cystic fibrosis (CF) in infancy. The condition is a metabolic mimicry of Bartter’s syndrome, therefore is sometimes referred to as pseudo-Bartter’s syndrome in CF. The aims of study were to estimate the prevalence of this metabolic disorder as a first manifestation of CF and the influence of some clinical and genetic factors on its developing.

Methods The records of all 85 newly diagnosed infants with CF in the period from 1998 to 2013 were reviewed. In addition to data of acid-base and electrolyte status at first admission, clinical and CFTR genotype data of patients with pseudo-Bartter’s syndrome were analysed.

Results 16 infants had manifestations of hyponatremic/hypochloremic dehydration with metabolic alkalosis, while the prevalence of pseudo-Bartter’s syndrome among newly diagnosed infants with CF in our region was 18.8%. Mean age of patients was 3.5 (range 1–8) months. Most of them were breastfed. Mean values of blood pH, serum bicarbonate, sodium, chloride and potassium (mmol/L) were: 7.57 ± 0.06, 44.89 ± 7.23, 117.87 ± 5.38, 67.06 ± 8.48, 2.69 ± 0.47, respectively. Concerning CFTR genotypes of these patients, a great variability was found: F508del/F508del (7), F508del/G542X (3), F508del/621+G>T (1), F508del/G542X >G (1), F508del/T711+3A>G (1), G12D/V456F (1) and F508del/Unknown (2). Three of them were pancreatic sufficient.

Conclusions The possibility of CF should be seriously considered in any infant with metabolic alkalosis and hypoelectrolytemia, whether or not there are associated pulmonary and/or gastrointestinal symptoms. The initial diagnosis of Bartter’s syndrome can be excluded by hypochloruria.
preschool children is significantly increased in the last decade (student t-test, p).

Conclusions Data from 2013 indicate that about 30% of young children encounter the obesity problem. Therefore, children at this age already should represent the priority population for intervention strategies such as control of diet and/or physical activity.

**PO-0077** **VITAMIN D DEFICIENCY IN CHILDREN WITH OSTEOGENESIS IMPERFECTA**

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Background and aims Osteogenesis imperfecta (OI) is a disorder that leads to fragile bones and significant morbidity. The aim was to find out the prevalence of Vitamin D deficiency in children with OI.

Methods In present study, 15 children with clinically severe OI on zolendronate therapy were studied. The biochemical parameters tested were Vit D level and urine DPD level along with the routine parameters like Ca, Po, ALP and urinary calcium creatinine ratio. We used a cut-off value of 30 ng/ml for vitamin D deficiency. Also cost effectiveness of zolendronate therapy was assessed.

Results Most of the OI patients were vit D deficient (80%). The mean value of vitamin D in the study was 21.89 ± 9.76 (mean ±SD), and median value was 25.49 units. This treatment in present study did not significantly increase the financial burden on the family using alternate brand of zolendronate.

Conclusions High prevalence of Vitamin D deficiency in OI may be due to their less mobility and thus less sun exposure, the low vit D level can decrease their response to zolendronate treatment. Vitamin D supplementation may be needed at higher doses along with oral calcium in patients with OI put on bisphosphonates therapy. Generic preparations of zolendronate do not increase the burden of therapy in patients with OI. Further studies are needed to find out long term side effects of zolendronate therapy in children.

**PO-0078** **THE RELATIONSHIP BETWEEN MATERNAL AND NEONATAL 25(OH) VITAMIN D STATUS**

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Background In this study we aimed to investigate the relationship between maternal and neonatal 25(OH)D levels.

Methods The subjects were 58 mothers and their newborns who were born between February 2012 and April 2012. Blood specimens were obtained within 72 h of birth and from mothers. Serum 25(OH)D concentrations were measured. Vitamin D deficiency was defined as serum concentrations ≤20 ng/mL.

Results The mean gestational age and birth weight of preterm infants were 33.06 ± 2.2 weeks and 2125.4 ± 546 g and for term infants were 38.84 ± 1 weeks and 3470.3 ± 451 g, respectively. Sociodemographic characteristics of mothers were not significantly different between groups.

Twelve percent of infants born before 32 completed weeks, 16% infants born between 32–36 weeks and 28% of term infants had vitamin D deficiency. Vitamin D deficiency was found in 27% mothers of preterm infants and 42% mothers of term infants.

Conclusion Vitamin D receptors plays an important role in calcium absorption and bone metabolism. In the literature there are reports that vitamin D deficiency during pregnancy had adverse gestational outcomes including risk of pre-eclampsia, gestational diabetes. The mean vitamin D levels were normal in infants whereas their mothers had low levels of vitamin D. When we consider that all mothers in the study received vitamin D supplements, we should give appropriate vitamin D prophylaxis during pregnancy. Also we should give adequate vitamin D supplementation to the infants without any delay.

**PO-0079** **URINARY N-TELOPEPTIDE LEVELS ARE NOT ASSOCIATED WITH VITAMIN D STATUS IN HEALTHY CHILDREN**

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Background and aims Urinary levels of N-telopeptide (NTx) have been reported to be a sensitive and specific marker of bone resorption. This cross-sectional study determined the urinary levels of NTx among healthy children living in Calgary and explored their relationship with age, sex and vitamin D status.

Methods We included healthy children 2 to 13 years of age who presented to the Alberta Children’s Hospital for elective surgery during a 12-month period. Data including the child’s weight, height, age, gender, ethnicity, dietary intake, vitamin intake, and physical activity were collected. Urinary NTx levels were measured with a commercially (Wampole Laboratories, Princeton) available competitive-inhibition enzyme-linked immunosorbent assay.

Results Urinary NTx levels were available for 968 out of 1862 participants, of whom 605 (62.5%) were boys. The mean urinary NTx/creatinine ratio was 605.4 nmol/mmol (SD 264.8, range 200–2985.1). We found that mean urinary NTx/creatinine excretion was higher in the younger children (2–5 years) compared to subsequent ages. There was no significant difference in urinary NTx levels between children with suboptimal vitamin D status (serum 25-hydroxyvitamin D <80 nmol/L) compared to those with optimal vitamin D status.

Conclusions Higher urinary NTx levels were measured in our healthy pediatric participants compared to what has been reported in healthy adults. In healthy children, urinary NTx levels may not be a useful marker of increased bone turnover in face of suboptimal vitamin D status. Future research is needed to determine the effect of suboptimal vitamin D status on bone health in children.

**PO-0080** **LAXITAS GENERALISATA**

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Twelve percent of infants born before 32 completed weeks, 16% infants born between 32–36 weeks and 28% of term infants had vitamin D deficiency. Vitamin D deficiency was found in 27% mothers of preterm infants and 42% mothers of term infants.

Conclusion Vitamin D receptors plays an important role in calcium absorption and bone metabolism. In the literature there are reports that vitamin D deficiency during pregnancy had adverse gestational outcomes including risk of pre-eclampsia, gestational diabetes. The mean vitamin D levels were normal in infants whereas their mothers had low levels of vitamin D. When we consider that all mothers in the study received vitamin D supplements, we should give appropriate vitamin D prophylaxis during pregnancy. Also we should give adequate vitamin D supplementation to the infants without any delay.