

Outcomes	Length of Hosp. Stay	H. Admission		iv Fluid-Therap.	
		YES	NO	YES	NO
Group A WITH mdG	5,6 h (2-26)	1 (14,3%)	6	1 (14,2%)	6
GroUp B WITHOUT mdG	21,6 h (2,5-60)	16 (85,7%)	5	18 (76,2%)	3
Glycemic ↑ post-mdG: 47 mg/dl (18-66) Glycémie after-mdG (30'- 60') 139,6 mg/dl (104 -146)		Relative Risk: 0,166 = 1/6 (CI 95: 0,05-0,49)		Relative Risk: 0,19 = 1/ 5,3 (CI 95: 0,123-0,28)	

[Glucagon_md_outcomes]

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BONE STATUS IN CHILDREN AND ADOLESCENTS WITH TYPE 1 DIABETES MELLITUS: CURRENT CONCEPT

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Background: There is recent considerable evidence supporting vitamin D deficiency role in pathogenesis of type 1 diabetes mellitus (T1DM) resulting in alteration in bone metabolism and structure and higher risk of related complications later in life.

Aim: The present study aimed to evaluate alteration of bone status and possible association between 25-hydroxy D3 [25 (OH) D3], parathormone [PTH], insulin growth factor -1 [IGF-1] serum profiles, glycemic control and disease duration with bone mineral density (BMD) in a children and adolescence with uncomplicated T1DM.

Methods:

Thirty six children and adolescents (mean +/- SD age, 10.38 +/- 3.17 years) with T1DM were matched with 15 (8.47 +/-4.17 years) healthy controls. Serum levels of 25 (OH) D3, PTH, IGF-1 were measured by ELISA while, glycosylated hemoglobin (HbA1c), calcium (Ca), inorganic phosphorus (PO₄) by

spectrophotometer. Bone quality was determined by dual energy X-ray absorptiometry (DEXA).

Results: Children and adolescents with T1DM showed increased serum levels of PO₄ and PTH and decreased calcium, IGF-1, 25 (OH) D3. About 52.8% of our patients had insufficient 25 (OH) D3 levels. Abnormal bone status was found in arm, ribs, T-spine, L-spine, leg, total body while head showed normal bone currency. Longer diabetic duration and poor metabolic control had a negative; meanwhile PTH, IGF-1 had a positive impact on bone mass.

Conclusions: Given that individuals with T1DM possess multiple risk factors for skeletal fragility, ensuring vitamin D sufficiency throughout childhood and adolescence in this population seems especially warranted.

Keywords: Bone mineral density; Type 1 diabetes mellitus

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CHANGES IN THE BCAA METABOLISM IN NORMAL AND DIABETIC PREGNANCIES. IMPLICATION FOR MATERNAL-FETAL INTERMEDIARY METABOLISM

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Although previous studies have underlined the importance of branched-chain aminoacids (BCAA) in normal pregnancy, little is known with regard to the metabolism of BCAA in diabetic pregnancy.

Objective: To delineate the role of the BCAA metabolism in normal and diabetic pregnancies and their significance in fetus/neonate metabolism.

Methods: Concentrations of leucine and valine were measured in 43 pregnant women (17 diabetic and 26 non-diabetic) before delivery and in their neonates at birth. The reference group consisted of 6 non-pregnant women. BCAA evaluation was performed in dry blood spot by using Tandem MS/MS technology.