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Pattern Of Polymorphism SLC22A1 Gene In Children With Diabetes Mellitus Type 2

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Abstract : Type 2 diabetes mellitus (T2DM) is a syndrome characterized by a state of increased blood sugar levels due to chronic disorders of insulin secretion by pancreatic beta cells and insulin action or a combination of both. The organic cation transporter 1, encoded by the SLC22A1 gene, responsible for the uptake of the antihyperglycemic drug, metformin, in the hepatocyte. We assessed whether a genetic variation in the SLC22A1 gene was associated with the glucose - lowering effect of metformin. Method case study research design. Samples are children with type 2 diabetes mellitus who meet the inclusion criteria. The results proportions SLC22A1 gene polymorphisms in children with diabetes mellitus type 2 amounted to 52.04 % at position 400T/C, there is one heterozygous and one at position 595T/C Conclusion The presence of SLC22A1 gene polymorphisms in children with diabetes mellitus type 2.

Keywords : diabetes Mellitus type 2, metformin, organic cation transporter 1, pharmacogenomics
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