

Summary

Type 1 diabetes mellitus is an autoimmune disease resulting from the destruction of insulin-producing beta cells in the pancreas leading to insulin deficiency. It is multifactorial disease, in its genesis are participating interactions of genetic background and environmental factors. Type 1 diabetes is a life-long autoimmune disease that usually occurs in childhood but can be diagnosed at any age.

Diabetes mellitus type 1 is primarily characterized by hyperglycemia. The others classical symptoms include: polyuria, polydipsia and weight loss. Long-term complications can result from type 1 diabetes, including nephropathy, retinopathy, neuropathy and vascular disease.

Treatment goals for diabetic patients are related to control of blood glucose, blood pressure and lipids to minimize the risk of long-term consequences. Type 1 diabetes is treated with insulin replacement therapy - usually by insulin injection or insulin pump. An integral part of therapy is the patient's involvement in the therapeutical process, education, frequent glucose monitoring, adjustments in diet and exercise.

The review discuss the up-to date view of treatment and continuous subcutaneous insulin infusion (insulin pump) therapy. The review compare effects of continuous subcutaneous insulin infusion with multiple insulin injection.

Results of this study confirm the fact that continuous subcutaneous insulin infusion leads to improved diabetes compensation and an improvement of the quality of life of diabetics.