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## MODY 2 diabetes in Siberia: Three years of follow up

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Purpose: To identify the clinical features of MODY 2 diabetes which we need to follow in this group of patients.

**Materials & Methods:** We observed 11 patients (8 families). We diagnosed MODY 2 diabetes during the molecular genetic testing (direct automatic sequencing) of glucokinase gene. Follow-up was of 3 years. All patients had once a year a full clinical examination, blood samples for biochemical research, determination of C-peptide and TSH, antibodies to b- cells, microalbuminuria, abdominal ultrasound, heart and thyroid ultrasound, examination of ophthalmologist.

**Results:** Patients with MODY 2 diabetes were 5 males (45%) and 6 (55%) female, age of onset ranged from 6 months to 32 years. 8 (73%) of 11 patients with MODY 2 had not clinical manifestations of disorders of carbohydrate metabolism at the time of debut. All patients with MODY 2 had fasting hyperglycemia and 2 hours after a meal - a small increase in blood glucose levels. Overweight and obesity were not detected in any patient. 1 (9%) patient had diabetic peripheral neuropathy, 1 - retinopathy and 1 - nephropathy. Among the comorbid conditions 4 (36%) patients had thyroid pathology, 4 (36%) - the presence of allergic reactions, and 1 (9%) - a disease of the gastrointestinal tract. 1 (9%) patient at the time of pregnancy used insulin, 6 (55%) - oral hypoglycemic agents and 4 (36%) - a balanced diet. 10 (91%) patients with MODY 2 diabetes had targets levels of HbA1c, C-peptide level was below the reference values, anti-b-cells were not detected. Microalbuminuria was in 1 patient.

**Conclusions:** 1. The earliest age of clinical manifestations of disorders of carbohydrate metabolism in MODY 2 diabetes was six months which should be considered in the differential diagnosis with type 1 diabetes because it is also manifest in a younger age group. 2. MODY 2 diabetes had oligosymptomatic onset, soft flow, good compensation of carbohydrate metabolism, no complications, no need for exogenous insulin in most cases.

## **Biography**

Alla Ovsyannikova is a PhD and currently working with the Federal State Budget Institution Scientific - Research Institute of Therapy and Preventive Medicine from Siberian Branch of the Russian Academy of Medical Sciences, Russia, Novosibirsk.

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