**Conclusions:** The miR-1 non coding molecules may improve our understanding of disease development, progression and gene expression of the uterine leiomyosarcoma. Further prospective translational studies in order to evaluate miR-1 as a prognostic factor are needed.

Key words: MIR-1, leiomyosarcoma, Western Blot.

## 257. MATURITY ONSET DIABETES OF THE YOUNG: CURRENT TRENDS AND CONCEPTS

## **Covantev Serghei**

Scientific adviser: Perciuleac Ludmila, PhD, Associate Professor, Department of Molecular Biology and Human Genetics, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

**Introduction:** Diabetes is a worldwide problem with polygenic etiology and high rate of mortality and morbidity. By 2030 the number of individuals with diabetes worldwide may rise to 472 million. Eighty per cent of them will be in low and middle income countries. In some of these countries diabetic drugs and insulin are inaccessible or rather expensive which eventually affect the whole healthcare system. Nevertheless 10% of patients with type 1 and 5% of patients with type 2 diabetes have a monogenic form of this disease.

**Materials and methods**: We studies a case series of patients with maturity onset diabetes of the young (MODY) with the review of the literature of the last 10 years using PubMed and Scopus.

**Discussion results:** Nationwide studies show that the prevalence of MODY ranges from about 1% to 35% of all diabetes mellitus cases. Current data describes 11 types of MODY. The most frequent are MODY 1, 2 and 3. To date, several transcriptional factors and an enzyme are Associated with MODY. There are several characteristic traits that may help to diagnose the disease without molecular methods. Such include diabetes diagnosed before 45 years, negative  $\beta$ -cell antibodies, less than 30 years of age, no insulin resistance, family history of diabetes, detectable C-peptide more than 0,2 nmol/l outside the honeymoon period, GST more than 0.2 nmol/l.

**Conclusion**: In Republic of Moldova there are approximately 80 thousand diabetic patients, which mean that they represent somewhere 50% of the endocrine diseases. Some of these patients may have MODY diabetes which requires different treatment options and has a better clinical prognosis then type 1 and 2 diabetes mellitus.

**Key Words**: monogenic forms of diabetes, HNF-4a, GCK, HNF-1a.