0.3—2.57; p=0.016), CD40 3.5 (CI 95% 3.13—3.91; p<0.001), BMP7 2.03 (CI 95% 1.22—2.83; p<0.001) was increased in subjects with hypercortisolism as compared to inactive pituitary adenoma. An increase in the expression of microRNA 133a-3p 1,74 (CI 95% 0.14—3.34; p=0,037), that stimulate osteoclastogenesis, and microRNA 204-5p 0,54 (CI 95% 0.06—1.02; p=0.031), that block the differentiation of osteoblasts was found. **Conclusion.** Suppression of osteoblastogenesis in patients with endogenous hypercortisolism is explained by an increase in the expression of the SOST, which codes the main inhibitor of the Wnt signaling pathway — sclerostin. Reduction of osteoblast differentiation is also realized through increased expression of 133a-3p microRNA and 204-5p microRNA.

KEYWORDS: microRNA, osteoblastogenesis, hypercortisolism.

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MCCUNE-ALBRIGHT SYNDROME (MAS): CLINICAL CASE

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Introduction. McCune-Albright syndrome (MAS) — a systemic disease associated with a mutation in the gene GNAS1, responsible for the activation of a G protein subunit (Gsa), is characterized by symptoms: fibrocystic dysplasia, skin pigmentation, precocious puberty. **Clinical case.** A 29 — y. o. male patient during past 12 years noted a gradual change in his appearance. Began to seek a medical attention only 3.5 years ago due to reduced vision. Hormonal tests revealed marked elevation of GH to 106 (<20 mIU/ln), and IGF-1 to 567 (121—336 ng/ml), decrease in testosterone levels to 1.91 (3-12 ng/ml), other gormons within the reference range. MRI of the brain showed a 4×7 mm adenoma of the anterior part of the pituitary. CT brain scan with contrast described poliostic dysplasia of the skull bones. Octreotide depot injections therapy was initiated 20 mg/28 d. Than levels of GH and IGF-1 were still high in spite of medical treatment — 119 (<20 mIU/ln) and 1033 (121—336 ng/ml), respectively. At the age of 27 years the patient was 205 cm tall (BMI 29.5 kg/m^2) at admission to Endocrinology Research Centre. His facial features were acromegaloid with sloped towered skull. "Café au lait" pigmentation of the skin was noted at the chest, back, and abdomen. Lab tests confirmed the presence of the active acromegaly (GH — 117 (< 20 mIU/ln), IGF-1 — 1412 (121—336 ng/ml)). Brain MRI with contrast showed a marked increase in the size of previously described adenoma 17×23×14 mm, and progression of the fibrous dysplasia (predominantly hypointense on T1) of the skull base, parietal, temporal bones, scales of the frontal and occipital bones, hypopneuma-tization of frontal sinus and ethmoidal labyrinth, narrowing of the internal and the external auditory canals on the left. All these symptoms allowed us to suspect the MAS. The progressive clinical course of the disease, insensitivity to octreoride treatment was the basis for the choice of further surgical treatment despite the pronounced fibrous dysplasia of the skull base. Then the patient underwent endoscopic endonasal removal of tumor using navigation BrainLab at Burdenko Neurosurgical Research Institute. Postoperatively levels of GH and IGF-1 decreased to - 27 (<20 mIU/ln) and 856 (121—336 ng/ml), visual function had improved markedly. He was then followed on depo octreotide injections 30 mg/28d and cabergoline 2 mg/w with later dose adjustments. The high-performance parallel sequencing was implemented with the gene panel (*MEN1, CDKN1B, PRKAR1A, GNAS, AIP, SDHA, SDHB, SDHC, SDHD, PRKCA, CDKN2C, CDKN2A, POU1F1, PTTG2*). **Conclusions.** The treatment of acromegaly in the setting of the MAS is characterized by multiple challenges that require the participation of a team of experienced endocrinologists and neurosurgeons. This patient with the MAS was identified heterozygous p.S163P replacement in *SDHB* gene.

KEYWORDS: McCune-Albright syndrome, acromegaly, parallel sequencing, pituitary adenomas.

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OBESITY PARADOX: CARDIOVASCULAR COMPLICATIONS IN PATIENTS WITH TYPE 2 DIABETES MELLITUS AND OBESITY

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Introduction. Obesity and type 2 diabetes mellitus (T2DM) are commonly associated with cardiovascular complications. At the same time, obesity paradoxes are not new to the field of cardiovascular disease and have been observed in heart failure, acute coronary syndromes, and chronic kidney disease. **Clinical cases.** Two patients (both non-smoking men) comparable for age (48—50 years), BMI (32.1—34.4 kg/m^2) glycated hemoglobin (HbA_{1c}) (6.0—6.3%), hypoglycemic therapy (Sulfonylureas with Metformin) and diabetes duration (3—5 years) were treated in Endocrinology Research Centre during 2016 year. There was no significant differences in routine laboratory tests (total cholesterol, low-density cholesterol, high-density cholesterol, triglycerides, fasting glucose, microalbuminuria). First patient (50 years old, BMI 32.1 kg/m^2) had several cardiovascular complications at the time of hospitalization: including Myocardial infarction, coronary angiography revealed multi-vascular atherosclerotic lesion of coronary vessels (left anterior descending coronary artery, right coronary artery and circumflex artery were stenosed up to 90%) and athero-