Osteoarthritis has a great medical, social and economic influence on the society, and the most topical problem is considered to be knee and hip joint diseases, as gonarthrosis (GA) and coxarthrosis (CA) are the most disabling localizations of the pathological process. Diabetes mellitus (DM) is one of the independent risk factors for the development of osteoarthritis. The aim of this research were the comparative evaluation of clinical, radiological and sonographic signs of GA and CA in the patients with different types of DN and in the patients without it, the study of the links of the bone-destructive characteristics with the disturbances of carbohydrate metabolism including physical, chemical integral indices, the determination of the effect of DM on the rates of the progression of the changes in the knee and hip joints. Material and methods. There were 153 patients with osteoarthritis who were divided into two groups. The 1st (main) group consisted of 47 people (16 men and 31 women aged 25 to 72 years) with DM, and the 2nd (control) group included 106 patients without DM (83 men and 23 women aged 32 to 73 years). Results. DM in the patients with OA determines the number of affected joints in the form of polyarthritis, not only starting, but also morning stiffness, the increase of the frequency of some roentgenosonographic signs of the articular syndrome, the severity of the involvement of the spine, knee and hip joints in the process that depend on the rates of insulinemia and glycated hemoglobin in the blood. The development of GA and CA is often observed in the patients with DM of type 2, which is more "aggressive" factor as for the hip joint disease, while DM of type 1 in the patients with GA causes mainly the cases of tendosynovitis and enthesopathy. In such cases the intensity of synovitis is associated with diabetic macro - and microangiopathy. The presence of DM in the patients with GA affects the formation of osteocystosis, subchondral sclerosis, osteoporosis, intraarticular calcifications and cartilage flaps, ligamentosis. Conclusion. DM affects the course of the GA and CA, and the detection of the disturbances of carbohydrate metabolism in such joint pathology can have a practical significance as a risk factor of some structural changes of articular and periarticular tissues.

Key words: osteoarthritis, knee and hip joint, diabetes mellitus.