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CLINICAL PORTRAIT OF DIABETIC FOOT SYNDROME PATIENTS

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Background. Diabetes mellitus is a disease of metabolism clinically expressed by chronic hyperglycemia and blood lipid and protein disorders that have been extensively reported as linked to several complications that significantly impair the quality of life. Diabetic foot syndrome (DFS), as defined by the World Health Organization, is an ulceration of the foot (distally from the ankle and including the ankle) associated with neuropathy and different grades of ischemia and infection. Among diabetic vascular complications, foot ulcers represents the first cause of hospitalization in diabetics. Diabetic foot problems account for more hospital admissions than any other long term complications of diabetes and are responsible for nearly 50% of all-diabetes-related hospital bed days. The diabetic foot is particularly at risk for complications because of its inability to tolerate stress. Neuropathy, peripheral vascular disease, and reduced resistance to infections are recognized risk factors leading to the development of diabetic foot ulcers (DFUs), which have all the characteristics of a chronic wound.

Aim. to access clinical and laboratory manifestations typical for patients with Diabetic Foot Syndrome (DFS) in a population of non-specialised surgical hospital.

Materials and methods. A retrospective analysis of medical records of 41 patients hospitalized in 5th City Clinical Hospital, Minsk, with a complication of Diabetic Foot Syndrome was performed. Male to Female ratio was 22:19. The patients aged between 38-87 years with a mean age of 66.2 ± 11.5 years. Inclusion criteria were ischemic heart disease, arterial hypertension, chronic kidney disease, obesity, atrial fibrillation, chronic heart failure, chronic pancreatitis, chronic obstructive pulmonary disease and liver enzyme like ferritin.

Results. According to the data retrieved, typically patients with DFS had vascular comorbidities (% of cases). Ischemic Heart Disease (IHD): 41 patients (100%) have IHD, with associated cardiosclerosis and atherosclerosis. (SD: 0%). Arterial Hypertension: 41 patients (100%) have arterial hypertension, with varying risk levels (3-4). (SD: 0%). Chronic Kidney Disease (CKD): 15 patients (36.6%) have CKD, with varying stages (C2-C4). (SD: 18.1%). Obesity/Overweight: 24 patients (58.5%) have obesity or overweight, with BMI ranging from 26.7 to 32.3. (SD: 15.6%). Atrial Fibrillation: 7 patients (17.1%) have atrial fibrillation. (SD: 10.3%). Chronic Heart Failure (CHF): 15 patients (36.6%) have CHF, with varying functional classes (FC1-FC3). (SD: 18.1%). Among non-CV-comorbidities others included: Serum ferritin: 21 patients (51.22%) have increased serum ferritin level. (SD: 7.81%). Chronic Pancreatitis: 5 patients (12.2%) have chronic pancreatitis. (SD: 9.1%). Chronic Obstructive Pulmonary Disease (COPD): 2 patients (4.9%) have COPD. (SD: 5.5%).

Conclusion. All patients (100%) had ischemic heart disease and arterial hypertension, indicating a strong association between DFS and cardiovascular disease. More than a third of patients (36.6%) had chronic kidney disease, and over half (58.5%) were obese or overweight. Chronic heart failure was also present in 36.6% of patients. More than half of patients (51.22%) had elevated serum ferritin levels, which may indicate underlying inflammation or oxidative stress. A smaller proportion of patients (12.2% and 4.9%, respectively) had chronic pancreatitis and chronic obstructive pulmonary disease. Patients with DFS require comprehensive management, including tight glycemic control, management of cardiovascular risk factors, and treatment of non-cardiovascular comorbidities.