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IS PERIPHERAL ARTERY DISEASE (PAD) A SIGNIFICANT CLINICAL PROBLEM AMONG PATIENTS HOSPITALIZED FOR CARDIOLOGICAL REASONS?

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Introduction. Patients with peripheral artery disease (PAD) have decreased lower extremity arterial perfusion which can cause thigh or calf pain with walking due to temporary ischemia of the leg muscles during exertion, although over 50% of patients with PAD have no symptoms.

Aim: our goal was to investigate in which subpopulation of cardiological patients the Ankle-Brachial Index (ABI) should be measured.

Materials and methods. The study group consisted of consecutive patients hospitalized in the Cardiology Department of the Medical University of Białystok from march 2021 to march 2022. A questionnaire on both awareness and prevalence of cardiovascular risk factors was conducted. In addition, all patients had the ABI index measured in both lower limbs.

Results and discussions. A total of 396 subjects were studied. 219 (55.3%) were men, mean age 69.8 ± 10.4 . 14% were active smokers. The mean ABI value was $1.12(\pm0.12)$ for the left and $1.13(\pm0.14)$ for the right lower limb.

In 5,3 % patients ABI \leq 0.9 was found. These patients had significantly lower LV ejection fraction (42% vs 49%, p=0.02) and significantly higher creatinine levels. A history of myocardial infarction (p=0.002), carotid atherosclerosis (p<0.0001), heart failure (p=0.02), chronic kidney disease (p<0.0001), hypercholesterolemia (p=0.03) and episodes of acute limb ischaemia (p<0.001) were significantly more frequent in this group of patients. Also these patients were more likely to have been diagnosed with an aortic aneurysm (p<0.001). A significant difference in daily physical activity was observed between patients with and without PAD (3.9% vs 96%, p=0.001). In contrast, ABI \leq 0.9 was unrelated to patient education, occupation and type of diet.

Conclusion. Patients with peripheral artery disease (PAD) have a significantly higher incidence of other cardiovascular diseases. Routine ABI testing should therefore be considered in patients hospitalised for cardiovascular reasons in order to detect asymptomatic PAD.