



CORONARY STATUS, PHYSICAL CAPACITY, LEFT VENTRICULAR FUNCTION AND PROGNOSIS IN MEDICALLY STABILIZED PATIENTS WITH UNSTABLE ANGINA

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Hospital prognosis in patients with unstable angina pectoris (UAP) is generally good (1,9). Concerning the period of posthospital treatment in medically stabilized patients data are, however, contradictory, as it is not clear what is the significance of the ventricular function (LVF) and physical capacity for assessing coronary status and prognosis. The aim of the study is to determine the relationship of LVF, physical capacity, coronary status and one-year outcome in order to apply the results for selection of patients in whom coronary angiography is strongly mandatory.

A total of 131 medically stabilized patients with UAP were studied who had a coronary arteriography performed at a later stage (2). Three to ten days thereafter they had a submaximal stress testing for assessment of physical capacity (6), echocardiographic evaluation of systolic (ejection fraction - EF) and diastolic (fast filling fraction - FFF) LVF (3). Depending on coronary angiography changes the patients were divided into such with normal coronary arteries or one-vessel disease (> 50%) and patients with multivessel disease (> 50% stem stenosis, or > 50% stenosis of 2 or 3 epicardial vessels). One-year outcome was defined as: unfavourable (death, non-fatal acute myocardial infarction-MI, UAP recurrence, III or IV functional class of stable angina; or favourable (I or II functional class) (according to the Canadian scale) (7).

Normal coronary arteries (9,2%) or one vessel disease (25,9%) are found in 46 (35,1%) patients and multivessel disease - in 85 (64,9%) patients (three-vessels - 29,8%, two-vessels - 26,7%, stem - 8,4%). LVF and coronary status: the predictive value of normal EF ($\geq 57\%$) for normal coronary arteries or one-vessel disease is 43,6% and for multivessel disease of reduced EF ($< 57\%$) is 83,3%. The sensitivity and specificity of EF for detection of multivessel disease is 43,2% and 84,1%, respectively. The predictive value of the normal FFF ($\geq 53\%$) for normal coronary arteries or one-vessel disease is 65,9% and of reduced FFF ($< 53\%$) for multivessel disease is 81,5%. The sensitivity and specificity of FFF for multivessel disease detec-

tion is 81,5% and 65,9%. Stress testing and coronary status: The predictive value of the negative and positive stress tests of more than 100 W for the absence of multivessel disease is 72% and of the positive test of less than 75 W for the presence of multivessel disease is 88,3%. The specificity and sensitivity of stress testing (according to the selected criterion of the stress level for myocardial ischemia expression) for recognition of multivessel disease is 80,0% and 82,9%. Coronary status and one-year outcome: the predictive value of normal coronary arteries or one-vessel disease for a favourable outcome is 89,2% and for an unfavourable outcome of multivessel disease is 80,6%. The sensitivity and specificity of coronary arteriography results for recognition of unfavourable outcome is 87,9% and 82,9%, respectively.

In accordance with data in the literature our results reveal that about 2/3 of UAP patients have multivessel disease (4-6,8). The incidence of stem disease, of three and two-vessel disease is in the range of that found by others. Though an unquestionable relation exists between LVF and coronary status its quantitative expression cannot always distinguish patients with multivessel disease. In this respect disturbed diastolic function (FFF) is of much greater value. The relation between physical capacity of medically stabilized patients with UAP and their coronary status is strong. The criterion selected by us for coronary reserve assessment (delimitation level of 75 W) determines the high total predictive accuracy of stress testing (81,9%) as well as of sensitivity (82,9%) and specificity (80,0%) for multivessel disease. Our results confirm the decisive role of coronary status concerning one-year outcome of the disease of medically stabilized patients with UAP.

In conclusion, coronary angiography is not necessary at the stage of risk determination in medically stabilized patients with UAP. It is mandatory, however, in patients with established (by means of noninvasive indices of LVF and physical capacity) high risk of unfavourable prognosis (predicted multivessel disease).

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