

Rapidly progressive aortic valve regurgitation - a case report Szybko postępująca niedomykalności zastawki aortalnej – opis przypadku

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Streszczenie: W pracy przedstawiono przypadek 73-letniego pacjenta z wadą wielozastawkową - szybko postępującą niedomykalnością aortalną współistniejącą z niedomykalnością zastawki trójdzielnej i mitralnej oraz 2–naczyniową chorobą niedokrwinną serca.

Słowa kluczowe: niedomykalność zastawki aortalnej

Abstract: In this paper we present a case report of a 73-year-old patient with a multifocal predisposition (rapidly progressing aortic regurgitation associated with tricuspid and mitral valve regurgitation) and 2-vessel ischemic heart disease.

Key words: aortic regurgitation

Introduction

Aortic regurgitation (AR) is a condition resulting in the diastolic flow of blood from the aorta to the left ventricle. It may be caused by a valves congenital abnormality or damage as a result of rheumatic fever or arthritis. Clinical assessment and determination of severity is very

important in the potential suspect of AR. Echocardiography is a key element of non-invasive diagnosis of AR, it allows to specify the anatomy and mechanism of valve regurgitation. Two forms can be distinguished, acute as a result of e.g. aortic dissection, endocarditis, and chronic

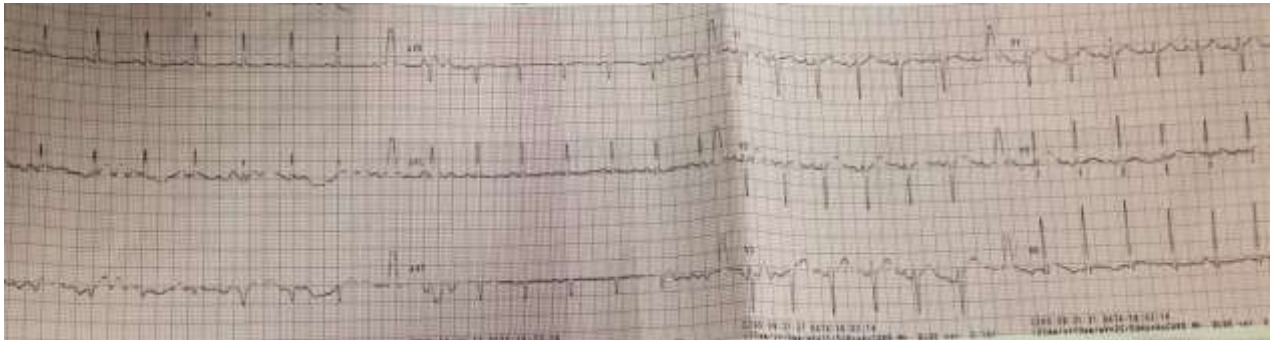


Figure1. ECG performed on admission

that may be asymptomatic for several years [1]. Despite the lack of symptoms an irreversible left ventricular dysfunction develops in some patients. Among patients with severe chronic AR without surgical treatment risk of sudden death is about 10-20% per year [2, 3]. In this paper we present a case report of patient with a rapidly progressing aortic regurgitation associated with tricuspid and mitral valve regurgitation and 2-vessel ischemic heart disease.

A case report

A 73-year-old patient with symptoms of stable angina CCS class II (Canadian Cardiovascular Society) was admitted to the Department of Cardiology in February 2016 in order to perform invasive diagnosis of ischemic heart disease. The patient felt not regular retrosternal chest pain with radiation of the pain to interscapular area, exercise intensifies pain. Patient was treated with hypertension. In January 2014 in echocardiography found: left ventricular hypertrophy, enlargement of the aortic root (4.2 cm, N. <3.8 cm), extension of the left atrium (4.0 cm, N. <3.6 cm), and the right ventricle (diastolic dimension of 3.0 cm, N. <2.5 cm). Mild aortic regurgitation (II°) and a small mitral regurgitation (I°), and tricuspid valve regurgitation (I/ II°) was also found. In echocardiography performed in October 2015 significant increase in aortic valve disease (III°) and slightly elevated systolic blood pressure in the pulmonary artery (35 mm Hg) was found. In addition, in an interview paroxysmal atrial fibrillation (AF) which was recorded in the twenty-four hour Holter monitoring in October 2015, and recurrent upper respiratory tract infections in the past 12 months. On admission ECG discrete upper ST in V5, V6 (Fig. 1). In chest X-ray image aortic configuration of the heart (enlargement of the left ventricle and left atrium, a wide ascending aorta).

In coronary angiography in February 2016 two vessel coronary artery disease: stenosis of about 80% in the confluence of the diagonal branch of the left coronary artery and stenosis of about 80% in the proximal segment of the intermediate branch of the left coronary artery. Decision about the treatment of cardiac surgery was made. The implantation of biologic prostheses for aortic valve and LIMA-LAD coronary artery bypass graft (left internal mammary artery and the left anterior coronary artery anastomosis) was performed. The postoperative and postoperative course was complicated. The patient was referred to sanatorium treatment.

Conclusions

Aortic valve insufficiency may be characterized by a rapid progress, which is why it is necessary to identify risk factors. The determination of comorbidities, the severity of angina symptoms, the patient's lifestyle and the collection of family history are necessary to plan the correct diagnostic and therapeutic procedures. According to the guidelines of the European Society of Cardiology (ESC), the indication for surgical treatment of aortic regurgitation is severe AR in symptomatic patients, severe AR coexisting with impaired left ventricle function in asymptomatic patients. Aortic valve intervention should also be considered in patients with moderate AR undergoing CABG or surgery within another valve. Currently, valve replacement using a biological or mechanical prosthesis is the most common method of surgical treatment.

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