Infective endocarditis involving the pulmonary valve in a patient with malignant melanoma

A 28-year-old man with malignant melanoma was referred to cardiology clinic because of persistent fever and suspected infective endocarditis. He had generalized pain and subcutaneous melanoma nodules on his body. No significant murmur was heard on cardiac auscultation. The patient had had a central jugular venous catheter that was removed after the occurrence of fever. The laboratory examination showed severe anemia and mild thrombocytopenia. Methicillin resistant Staphylococcus aureus was determined in his blood culture. Transthoracic echocardiography revealed 12x11 mm in size an irregularly shaped mobile mass with myocardial texture, adherent to ventricular aspects of pulmonic valve that was concordant with vegetation. (Fig. 1 and 2, see corresponding video movies 1 and 2 at www.anakarder.com). The vegetations were seen at two cusps of pulmonic valve and largely prolapsed into the pulmonary artery every systole. Moderate pulmonary regurgitation was also present. Diagnosis of infective endocarditis was established and antibioticotherapy including vancomycin plus gentamycin was initiated. Despite disappearance of fever with appropriate treatment, no significant improvement was detected in control echocardiography, which was performed on 25th day of the therapy.

Isolated pulmonary valve endocarditis (PVE) is extremely rare condition. Few cases are reported in literature (1-2). Use of central venous catheters reaching the right heart, intravenous drugs abuse, presence of congenital heart disease and immune compromised situations such as alcoholism and sepsis may be considered as predisposing factors of PVE. Central jugular venous catheterization has been thought as an initiating factor in our patient. The indications for surgery are as follows: persistent fever, recurrent pulmonary embolism, heart failure that was not
controlled with medical treatment and enlargement of the vegetation despite the medical therapy. Although our patient had the risk of pulmonary embolism, surgical debridement was not performed because of poor life expectancy. In spite of the deterioration of the patient’s clinical condition, he and his family refused any more intervention and he was discharged on his intention. Follow-up examinations could not be performed.

References