Medical Expertise

"Development of the European Network in Orphan Cardiovascular Diseases"
„Rozszerzenie Europejskiej Sieci Współpracy ds Sierocych Chorób Kardiologicznych"

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CASE SUMMARY

Authors presented a case of a 22-year-old female patient with a cardiac tumor. The tumor was diagnosed after birth. She has remained in close pediatric follow-up. Repeated cardiac echo studies showed size of the tumor stable throughout the years. No significant rhythm abnormalities.
Currently, she presents with easy fatigue, dyspnea and palpitations. She is treated with propapfenone 150mg 3 times a day.
Echocardiography reveals normal size heart chambers, preserved left ventricular ejection fraction, EF 57%, left ventricular tumor originating from the interventricular septum sized 27x45x34mm, interatrial septum thickness, no valvular pathology, no fluid in the pericardium. 24-hour ECG Holter monitoring shows isolated ventricular ectopic arhytmia. Cardiac magnetic resonance presents abnormal tissue structure of 47x33x79mm located in anterior part of intraventricular septum close to the anterior wall. A fibroma is suggested.
The authors are in doubt if she is a candidate for surgery now?

Indications for treatment are poorly defined due to the lack of published data on these rare neoplasms.

DISCUSSION

Primary cardiac tumors are rare at all ages. Over 75 percent of primary cardiac tumors are benign. Most common benign primary cardiac tumors found in adults are myxomas and papillary fibroelastomas, whereas in children rhabdomyomas and fibromas. Others include teratomas, hamartomas or lipomas. Cardiac tumors can either be symptomatic or found incidentally. Clinical manifestation depends on the location of the tumor and not on its histopathology. They can present with thromboembolic complications, valvular interference, direct invasion of the myocardium, resulting in impaired contractility, arrhythmias, heart

block, or pericardial effusion with or without tamponade.

Fibromas usually localize in the ventricular muscle. The size varies but may become quite large. Fibromas do not tend to regress spontaneously. Left ventricle is most often affected. Myocardial dysfunction presenting with heart failure and conduction disturbances are seen most frequently. Echocardiography and MRI are diagnostic modalities of choice. Symptomatic tumors should be resected. Complete resection of very large tumors may carry a burden of serious complications. Cardiac transplantation may sometimes be necessary.

EXPERT'S OPINION

1. Conservative treatment and close follow-up is recommended at present.
2. Antiarrhythmic drugs should be considered.
3. Cardiopulmonary exercise test should be performed in order to assess the patient's physical capacity.
4. If the patient becomes symptomatic, partial tumor resection should be considered.
5. All available therapeutic options must be discussed with the patient in detail.

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