

#### CLINICAL CASE OF DILATED CARDIOMYOPATHY IN A GIRL

Shadieva Halima Nuridinovna Assistant of the Department, PhD

Khaidarova Sarvinoz Khaydarzhonovna Assistant of the Department, PhD, Samarkand State Medical Institute Department of Propaedeutics of Children's Diseases, Regional Children's Multidisciplinary Medical Center

#### Summary

The article describes a clinical case of DCMP in a girl, complicated by the formation of a blood clot and heart rhythm disturbance by the type of ventricular extrasystole, Itsenko-Cushing's syndrome and chronic gastritis. The abolition of corticosteroids, the appointment of anticoagulant therapy with heparin and warfarin, the regular intake of drugs for the treatment of chronic heart failure led to thrombus lysis, restoration of normal heart rhythm, a decrease in the size of the left ventricle and an increase in EF from 28 to 42%.

Keywords: DCMP, LV thrombus, extrasystole, anticoagulant therapy

### Relevance

According to the definition of the WHO Expert Committee, dilated cardiomyopathy (DCM) is a heart disease of unknown etiology, characterized by non-obstructive LV expansion, reduced myocardial contractility, which is accompanied by severe heart failure [1,2,3,4,5,6,7].

The first manifestations of the disease are considered to be a decrease in exercise tolerance, fatigue and weakness, after a certain time a clear picture of congestive heart failure develops. The disease proceeds in waves, has a progressive course and a number of complications [4,5,6]. Thrombus formation significantly aggravates the course and prognosis of DCMP, since such patients are at high risk of sudden death, they have a high frequency of repeated episodes of thrombus formation and thrombosis, decompensation, and slow recovery of myocardial systolic function [8].

### Aim

To describe a clinical case of DCMP in a girl who received long-term ineffective treatment with corticosteroids and had complications in the form of thrombus formation in the LV cavity and ventricular extrasystole.



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## **Description of the Clinical Case**

Patient Yu., 11 years old. The first signs of the disease appeared 10 months before admission to our department: shortness of breath and fatigue, were not examined, and had not received treatment at that time. A few months later, the girl's condition deteriorated sharply, generalized edema and severe shortness of breath appeared. A diagnosis of DCMP was made, she was repeatedly hospitalized in some cardiological centers of Uzbekistan, where corticosteroid therapy was started. At the first admission to our department, she was hormone-dependent, with shortness of breath, palpitations, generalized edema, persistent vomiting, and lack of appetite.

The general condition of the patient was severe. Severe edema on the limbs, ascites. The skin is pale. The girl has signs of Itsenko-Cushing's syndrome (disproportionate obesity, moon-shaped face). Breathing rate - 30 per minute. Pulmonary sound was dulled in the lower parts of lungs. Weakened vesicular breathing. There are no rales. Apical push was in the 6th intercostal space on the left. The borders of the heart were expanded in both directions, mainly to the left. Heart sounds are muffled, frequent extrasystoles are auscultated. Systolic murmur, at the apex. Heart rate was 120 per minute. Blood pressure: on the right hand - 100/90. The abdomen is painful in the epigastric region. The liver is dense, painful, protrudes 3-4 cm from under the edge of the costal arch. The spleen is palpated 1 cm below the edge of the costal arch. The stool is regular. Oliguria. ECG: sinus tachycardia, signs of blockade of the posterior branch of the left branch of the His' bundle, hypertrophy of the left ventricle, right atrium, frequent ventrical exstrasystoles. EchoCG: EDS -7.2 cm, ESS-6.3 cm, RA -5.0 \* 5.8 cm, MVF -1.5 d, TVF - 2.5 d, LV trombus - 1.5 \* 4 .2 cm, located nearer to the apex, LV EF - 28%. Chest x-ray: pulmonary pattern is enhanced, cardiomegaly - the heart is enlarged in diameter due to both ventricles. EGDFS: signs of erosive gastritis.

She was discharged home after the disappearance of edema, the cessation of vomiting, the appearance of appetite. Shortness of breath appeared only with moderate physical exertion.

Based on the obtained clinical, laboratory and instrumental indicators, a clinical diagnosis was made: "Dilated cardiomyopathy. FCIII. Complications: NRS according to the type of ventricular extrasystole. Thrombus in the LV cavity. Concomitant diagnosis: "Chronic gastritis". The patient was assigned diuretics, ATF inhibitors,  $\beta$ -blockers, digoxin, heparin, warfarin, proton pump inhibitors, corticosteroids - canceled. After the treatment, the patient's condition improved. At the time of discharge, complaints of weakness, fatigue, moderate condition, no edema, heart rate - 88 beats/min. According to EchoCG, there was a decrease in the size of the mass formation in the left ventricle to 1.5 \* 3.6 cm, an increase in LV EF up to 33%. It was



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recommended to continue therapy, including daily warfarin under the control of INR. During repeated examinations, complete lysis of the thrombus was noted after 6 months, it was recommended to take thromboass 50 mg, external symptoms of Itsenko-Cushing's syndrome were not observed. On the ECG, a decrease in the number of PVCs, on EchoCG: a decrease in LV EDR to 5.6 cm, LV EF - 42%. Against the background of such treatment, the girl's weight decreased by 7 kg!

# Conclusion

DCMP is one of the severe and still understudied diseases in childhood. Late diagnosis, improper management of such patients lead to the development of various complications. Routine administration of hormone therapy does not lead to an improvement in the condition of patients; on the contrary, it can aggravate the situation by developing Itsenko-Cushing's syndrome and gastritis. A timely complete clinical examination and the appointment of adequate therapy leads to a certain improvement in the quality of life of such patients, a decrease in the symptoms of heart failure, and helps prevent the development of complications, in our case, thromboembolic ones.

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