



A DIFFERENTIATED MANAGEMENT ALGORITHM FOR PREGNANT WOMEN WITH IDIOPATHIC CARDIAC RHYTHM DISORDERS

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Introduction. Cardiac rhythm disorders during pregnancy require differentiated assessment because the clinical significance of arrhythmias depends on the presence of structural heart disease, rhythm characteristics, severity of symptoms and gestational age. Current recommendations emphasize individualized assessment using electrocardiography, echocardiography and ambulatory rhythm monitoring when indicated.

Keywords: pregnancy; cardiac rhythm disorders; idiopathic arrhythmia; Holter monitoring; ECG; echocardiography; differentiated management; gestational age.

Objective. To develop an algorithm for differentiated management of pregnant women with idiopathic cardiac rhythm disorders based on clinical, instrumental and laboratory assessment.

Materials and Methods. The study included 50 pregnant women with idiopathic cardiac rhythm disorders and 30 pregnant women with physiological pregnancy who constituted the control group. Clinical examination, ECG, echocardiography, 24-hour Holter ECG monitoring, complete blood count, biochemical analysis, electrolyte assessment and thyroid-stimulating hormone determination were performed. Obstetric status and gestational age were additionally evaluated.

Results. The clinical assessment demonstrated that palpitations were present in 84.0% of women, sensations of irregular heartbeat in 72.0%, exertional dyspnea in 62.0%, and chest discomfort in 50.0%. Holter and ECG assessment identified supraventricular extrasystoles in 22.0%, sinus tachycardia in 18.0%, ventricular extrasystoles in 10.0%, and incomplete bundle branch block in 8.0% of patients. Functional left ventricular overload was observed in 12.0%, while ST-segment depression or T-wave flattening/inversion was identified in 16.0%.

Exacerbation of rhythm disorders occurred in 22.0% of pregnant women and was observed predominantly in the third trimester. The period of 28–36 weeks of gestation was characterized by the greatest clinical activity of rhythm disorders and was therefore considered a period requiring intensified maternal and fetal surveillance.

Based on the obtained findings, a three-stage differentiated management algorithm was developed. Stage 1 involves identification and clinical assessment of cardiac complaints, including palpitations, irregular heartbeat, dyspnea and chest discomfort. Stage 2 includes ECG, echocardiography, 24-hour Holter monitoring and laboratory assessment, with particular attention to hemoglobin, biochemical parameters, electrolytes and thyroid function. Stage 3 consists of differentiation between structural cardiac pathology and idiopathic rhythm disorders, followed by individual risk stratification.



In the absence of structural heart disease, patients with idiopathic rhythm disorders are managed according to symptom severity, Holter findings, gestational age and associated obstetric risk factors. Women with increased arrhythmia activity or unfavorable clinical and obstetric findings require intensified follow-up, repeated rhythm monitoring and assessment of fetal and placental status, including Doppler examination when clinically indicated.

Conclusion. The proposed algorithm provides a structured approach to the assessment and management of pregnant women with idiopathic cardiac rhythm disorders. Differentiation according to structural cardiac status, rhythm characteristics, symptom severity and gestational age allows individualized follow-up and identification of patients requiring intensified maternal and fetal surveillance. Particular attention should be paid to the period of 28–36 weeks of gestation, when increased arrhythmia activity was observed in the studied population.

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