Chapter 6

ARRHYTHMIAS AND PREGNANCY

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Introduction

Arrhythmias are the most commonly seen cardiovascular complications in pregnant women. In recent years, it has been observed that hospitalizations due to arrhythmia have increased during pregnancy and this increase is thought to be mainly related to atrial fibrillation (AF).[(1)] Also this increase is correlated with the increased number of pregnancies in women with structural heart disease.[(2)] As arrhythmias occur for the first time during pregnancy, it is possible that previously controlled arrhythmias may worsen during pregnancy period. Differential diagnosis and appropriate managemeent of arrhythmias are vital for maternal and fetal health.

In order to meet the increased metabolic demands of the mother and fetus, some physiological cardiovascular adaptations occur during pregnancy. Plasma volume and cardiac output increase by 40-50% of baseline.[(3)] The increase in cardiac output is provided by an increase in stroke volume in the first period of pregnancy and by a gradual increase in heart rate in the following weeks. Heart rate increases by 10-15 beats per minute and peripheral vascular resistance decreases. In multiple pregnancies, the increase in cardiac output may be even higher and be 60-70% higher than the baseline level.[(4,5)] Physiological changes reach their peak as of the second trimester, and cardiac output may increase a little more with autotransfusions that develop due to uterine contractions

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