

# Arrhythmia in pregnant women of Morocco

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An increasing number of women are delaying pregnancy until later in life, enhancing their risk of developing arrhythmias as the incidence of heart disease increases with age(1).

The cardiovascular changes during pregnancy increase the occurrence of arrhythmia previously experienced or de novo. Arrhythmias should be thoroughly investigated to determine if there is a reversible etiology, and risks/benefits of treatment options should be fully explored.(2)

**Aim of the study** Is to describe the epidemiological aspects, the clinical, and therapeutic profile of pregnant women developing arrhythmia, whether or not were carrying heart disease

## METHODS:

It is retrospective, a cross sectional study, spread over 15years, between January 2000 and December 2015, conducted in maternal intensive unit care, of the university hospital center IBN ROCHD CASABLANCA, MORROCCO.

Were included:

every pregnant woman who was admitted for a decompensated heart failure, a cardiogenic shock complicated with arrhythmias, or isolated arrhythmia; in women not known as heart disease carrier and/ or in women known with heart disease.

The statistical analysis of the data was carried out by the software epi info version 3.5.3. For the descriptive part, the quantitative variables were expressed on average with standard deviation and the qualitative variables were expressed in percentage and frequency. For the analytical part, an uni varied analysis was carried out by comparing the means and the percentages respectively by the Student test and the KHI TWO test.

## RESULTS:

During the study period, 80 pregnant women were admitted in maternal intensive unit care, for arrhythmia during pregnancy.

The average age was 32, 77 +/- 6, 74, the medical story of rheumatic fever was frequently found (75%), and 80% of women in labor were followed for rheumatic valve disease. 38, 7% were followed by a cardiologist, while 23.7% of heart disease had been discovered only during pregnancy. More than half of the pregnancies weren't followed by an obstetrician (66.2%). Symptoms was dominated by dyspnea (97, 5%) and palpitations (85%);

The type of arrhythmia are: supraventricular tachyarrhythmia in 80%, ventricular tachycardia in 6.25%, ventricular fibrillation in 6% , and premature atrial complex in 7.75%

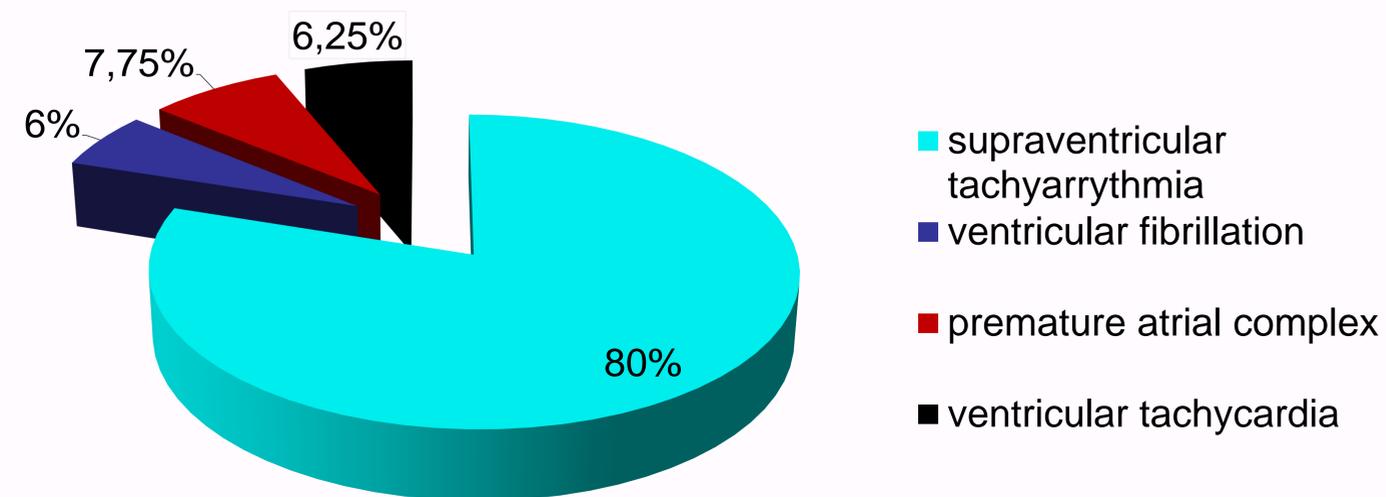
The mean fraction ejection is 43,48 +/- 8,02; the most frequent valvular heart disease is mitral stenosis in 43%, followed by péripartum cardiomyopathy in 15%.

30% of patients had an atrial fibrillation, 10.3% were treated by an antiarrhythmic agent, and 25% was on anticoagulants and ant thrombotic agents.

22% were complicated by thromboembolic complications as pulmonary embolism (8cases) , vein thrombosis of the lower limb (8cases), and ischemic stroke in 2 cases.

A cardiogenic shock has occurred in 21.21%, and pulmonary edema in 45% and 3.75% had a cardiac arrest after a ventricular fibrillation.

## pourcentage



## DISCUSSION

In the series JASTROW et al (3), arrhythmia has occurred in 9.9% of women in labor, and was recognized as a predictor of complications during the peripartum. In the cohort of RUYS et al (4), atrial fibrillation is a cause of maternal-fetal complications in 1.2%, ventricular rhythm disorders are responsible for maternal complications in 2.9%.

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3. Jastrow N, Meyer P, Khairy P, Mercier LA, Dore A, Marcotte F, et al. Prediction of complications in pregnant women with cardiac diseases referred to a tertiary center. Int J Cardiol. 2011 Sep 1;151(2):209-13. PubMed PMID: 20659773.

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pourcentage

