Abstract: **P1004**

Diagnosis and management of fetal cardiac arrhythmias: about 100 cases

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**BACKGROUND:**
Fetal cardiac arrhythmia complicates 1-2% of pregnancies and presents a major risk of morbidity and mortality in 10% of the cases. Different questions raised by this pathology must be asked: Is it necessary to treat the rhythm disorder? What are the risks of an anti-arrhythmic treatment for the fetus and its mother? In case of failure, should the fetus be extracted at the cost of prematurity, or must the therapeutic escalation be attempted?

**Purpose:**
To emphasize the primordial role of fetal echocardiography in the diagnosis and management of fetal cardiac arrhythmias through our own experience and a review of the literature.

**Methods:**
We present a series of 100 cases of fetal rhythm disorders diagnosed and treated in our department of pediatric cardiology during the last 12 years.

**Results:**
The diagnosis was made at an average gestational age of 30 weeks of amenorrhoea. Extra-systoles were by far the most frequent (50 cases), followed by hetero-topic tachycardia (28 cases) and complete atrio-ventricular blocks (22 cases). We have excluded bradycardia and sinus tachycardia from our study. Our attitude regarding extra-systoles was mostly a simple surveillance and the total post natal disappearance was the rule. The tachycardias were distributed as follows: 9 flutters, 16 junctional tachycardias and 3 chaotic atrial tachycardias. 10 patients were in feto-placental anasarca. The medical treatment resulted in a reduction of the in utero tachycardia in 14 cases, 9 were only post nataly reduced and 6 died. Mono-therapy was the rule and dual therapy was indicated in case of resistance to medical treatment or in front of a table of foeto-placental anasarch. With a mean follow-up of 2 years, there was no recurrence. A complete atrio-ventricular block was diagnosed in 22 fetuses at an average gestational age of 26 amenorrhoea weeks. 4 patients had associated heart disease. The ventricular rate varied from 35 to 70 beats per minute. 7 fetuses were in heart failure. An immunoassay was positive in 10 mothers. At birth, the presence of antibodies against SSA and / or SSB was detected in 8 newborns. 15 patients were stimulated epicardially, including the neonatal period. Six patients died.

**Conclusion:**
We conclude that if the prognosis of fetal tachycardia is generally satisfactory, the atrio-ventricular blocks are more reserved because the conduction disorder is irreversible, and even in the absence of associated congenital cardiopathy, complications related to Stimulation in the newborn doesn’t remain risk-free.