

Pregnancy: tolerance and outcomes in women with Ebstein's anomaly

*Gouton M., Goldman C., Bakloul M., Sassolas F., Bozio A., Di Filippo S.
Hôpital Cardio-Vasculaire et Pneumologique Louis-Pradel, Lyon, France*

Pregnancy in women with congenital heart disease is a challenge for cardiologists and obstetricians, facing the potential risk of serious events. In women with Ebstein's anomaly, pregnancy may induce arrhythmias or increase cyanosis and dyspnea, and therefore has long been contraindicated.

Aim: To assess the tolerance and mother and offspring outcomes in pregnant women with Ebstein's anomaly, in an attempt to define some factors of risk.

Material and methods: clinical status and outcomes of pregnancy (mother and offspring) in women with Ebstein's anomaly were analyzed. The presence of a Wolf-Parkinson-White syndrome and/or cyanosis was recorded.

Results: 22 women had 47 pregnancies (1 to 6 pregnancies; 2.13 pregnancies/woman): 4 were cyanotic and had 6 pregnancies (1.5/w) with 5 livebirths and 1 therapeutic abortion. Premature birth occurred in 3 of the 5 livebirths (60%). The 18 non cyanotic women had 41 pregnancies (2.3/w) with 3 miscarriages, 1 abortion and 37 live births (90 %). Prematurity occurred in 7/37 live births (19%). Mean birth weight was respectively 2.130 and 2.660 kg for the newborns from cyanotic and noncyanotic mothers ($p=0.03$). All pregnancies were well tolerated, no maternal death occurred. 11 women out of 22 (10/18 non cyanotic vs 1/4 cyanotic) had no cardiac symptom during pregnancy. 5 of them were in Stade A of Carpentier, 4 in stade B and 2 in grade C. Dyspnea increased in 3 of 18 noncyanotic vs 3 of 4 cyanotic, asthenia in 3 of 18 vs 3 of 4 ($p=0.02$). 7 women had a Wolf-Parkinson-White syndrome (32 %): of them 4 (57%) had no arrhythmia, 2 experienced palpitations and 1 had a well tolerated supra-ventricular tachycardia (SVT). Among the 15 women without WPW syndrome, 10 (67 %) had no arrhythmia, 3 had palpitations and 2 SVT. Neither life-threatening nor severe arrhythmia occurred

Conclusion: Pregnancy in women with Ebstein's anomaly is well tolerated, especially in non cyanotic mothers (less arrhythmias, less prematurity, greater birth weight). Therefore, Ebstein should not be a contra-indication for pregnancy, even in cyanotic women. However, to insure optimal tolerance, preventive closure of the inter-atrial shunt might be proposed prior to pregnancy.