Pregnancy outcomes in Eisenmenger syndrome in the modern management era

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BACKGROUND: There is emerging evidence, that maternal mortality in pregnant women with PAH is lower in modern management era. This concerns patients with Eisenmenger syndrome (ES). In order to obtain further data, we retrospectively collected data of pregnancies in women with ES from 1997 to 2015 period.

METHODS: This multicentric study included women with ES, followed in 7 French tertiary centers. All pregnancies were counted, including miscarriages and abortions. We observed maternal, obstetrical and neonatal outcomes.

RESULTS: Twenty nine pregnancies in 18 women (25 ± 6 years old) with ES were managed during this period. There were 21 complete pregnancies (≥20 week gestation (WG)), 7 abortions, and 1 miscarriage. Six (32%) patients experienced severe cardiac events. The concerned females had lower saturation (79% vs. 89%) and were older. The most common cardiac complications during the complete pregnancies were heart failure (n=4) and deep desaturation (n=3), occurring mainly during the early postpartum period (n=5/6) and after spinal anesthesia (3/6). Heart failure was particularly severe, needing inotropic treatment (n=3) or ventricular assist device (n=1), and leading to the only one death (mortality = 5%). Obstetric complications occurred in 38% of pregnancies. Small gestational for age was diagnosed in 33% (7/21) and was related to basal saturation level of the patient (p=0.03), and to the maternal body mass index (p=0.04). 12/21 (57%) pregnancies were delivered by cesarean section, with 7/12 for cardiac indications. The mean birth weight was 1824 ± 594g at a mean gestational age of 34±3WG. There was a high incidence of prematurity (57%), and no fetal or neonatal death.

CONCLUSIONS: Outcomes of pregnancy in women with ES are improved in the modern management era with a lower rate of maternal mortality. However, the severity of heart failure and the high rate of prematurity and SGA must still discourage ES patients to be pregnant.