Pregnancy in women with cardiovascular disease in the Guidelines era: an Italian single centre experience

Santacesaria S., Cataldo S., Annoni G.A., Corbella P., Fiocchi S., Vignati G.M.
Niguarda Hospital, Milan, Italy

INTRODUCTION Risk-tailored multidisciplinary management in specialised centres is recommended for pregnant women with cardiovascular diseases. Migrations and unavailability of specialised clinics make this not always applicable. Our aim was to determine pregnancy outcome with regard to modality of referral to our joint cardiac-obstetric clinic.

METHODS All women referred between 2011 and 2014 were included. Timing and reason for referral were recorded and two groups were identified: women evaluated prior to pregnancy (Group I) and women who were not (Group II). Pregnancies were managed as recommended by ESC guidelines. Maternal death, heart failure, arrhythmias, thromboembolic events and need for urgent surgical or endovascular procedure were defined as cardiovascular events. Gestational age and delivery mode were recorded.

RESULTS There were 110 pregnancies in 108 women (median age 33±5 years). 51 patients (47.2%) were in Group I, 57 (52.8%) in Group II. Congenital (43.6%) and valvular (26.8%) disease were the most frequent diagnosis. 32% patients were in WHO risk class III or IV. 30% were referred for onset of symptoms, 70% for risk assessment and follow-up planning. Women in Group II were seen later in pregnancy than Group I (p 0.009). 16 (14.5%) cardiovascular events occurred: 8 cases of heart failure, 6 tachyarrhythmias, one patient had mitral surgery due to endocarditis and one had ICD implantation for refractory ventricular arrhythmias. No maternal deaths occurred. Events were more common in Group II (p 0.01), in women in WHO risk classes III-IV (p <0.001) and in patients referred for symptoms (p < 0.001). Mean gestational age at delivery was 38 ± 2 weeks, delivery was preterm in 16% of cases, being more common in high risk classes (p 0.01). Cesarean section was performed in 48% of pregnancies, being indication mainly cardiac in high risk patients.

CONCLUSIONS There were no mortality and an overall acceptable incidence of cardiovascular events but a relevant percentage of women were referred late in pregnancy and/or for symptoms. Events were more frequent in this group. Further efforts are needed to optimize referral to specialised centres.