O10-5

Frequency of Miscarriage, Stillbirth and Pregnancy Termination in Women with Congenital Heart Defects in Germany, Hungary and Japan


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Introduction:
The 2011 ‘ESC Guidelines on the management of cardiovascular diseases during pregnancy’ define maternal predictors for neonatal events (preterm birth, small for gestational age, respiratory distress syndrome, cerebral haemorrhage, foetal/neonatal death) in pregnancies in women with heart disease. It is unknown whether these predictors also lead to an increased number of miscarriages, stillbirths and terminations of pregnancy (TOP), particularly regarding patients with congenital heart defects (CHD). In the general population, miscarriages and stillbirths occur in 15–20%. In the participating countries, stillbirth occurs in below 0.5% of all pregnancies.

Methods:
In a multicentre cross-sectional questionnaire-based study, 634 women with CHD (Germany 61%, Hungary 24%, Japan 15%) were surveyed over a period of twelve months concerning courses of pregnancy. 309 out of 634 women were pregnant at least once (578 pregnancies). Patients were grouped into those with and those without existing maternal predictors for neonatal events. The predictors were NYHA > II or cyanosis, maternal left heart obstruction, smoking during pregnancy, multiple gestation, use of oral anticoagulants during pregnancy, mechanical valve prosthesis. The outcomes were miscarriage/stillbirth and TOP (miscarriages and stillbirths were grouped together).

Results:
In 75 women with predictors, a total of 141 pregnancies occurred (group I, 24%); In 234 women without predictor, a total of 437 pregnancies occurred (group II, 76%). There have been no significant differences between the participating countries.

<table>
<thead>
<tr>
<th></th>
<th>Group I (n=141)</th>
<th>Group II (n=437)</th>
<th>p</th>
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</thead>
<tbody>
<tr>
<td>Miscarriage/stillbirth</td>
<td>27 (19.1)</td>
<td>70 (16.0)</td>
<td>0.536</td>
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<tr>
<td>TOP</td>
<td>22 (15.6)</td>
<td>24 (5.5)</td>
<td>0.002</td>
</tr>
<tr>
<td>Combined</td>
<td>49 (34.8)</td>
<td>94 (21.5)</td>
<td>0.042</td>
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</table>

Conclusions:
Underlying maternal predictors for neonatal complications do not lead to a significantly higher number of miscarriages or stillbirths. However, TOP occurred significantly more frequently in this group. In presence of maternal predictors for neonatal events pregnancies in women with CHD are less likely to be successful.