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Warfarin Treatment during Pregnancy in Patients with Prosthetic Mitral Valves

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To the Editor,

The administration of warfarin or heparin during pregnancy to women with prosthetic valves carries a substantial risk both to the mother and to the fetus [1, 2]. The case histories of 3 women with Starr-Edwards mitral valves, who became pregnant against medical advice, are reported. All of them avoided the intake of drugs, except warfarin sodium which was given throughout the gestation period, keeping the prothrombin time between 20 and 25% of normal. Prior to the deliveries and at the beginning of labor, warfarin was discontinued and instead, 15,000 U/day of heparin was administered intravenously.

Case Reports

The 1st patient, aged 22, underwent a valve replacement 1 year prior to her first pregnancy. During the next 3 years she became pregnant three times: all gestations terminated by spontaneous abortions at the end of the first trimester. There was no evidence of hemorrhage in the placental remnants. 2 years later her fourth pregnancy was uneventful and she gave birth to a healthy infant. After 4 years she had another uneventful pregnancy, however, this time she gave birth to a cyanotic male infant with multiple congenital defects, namely pulmonic atresia, intraventricular septal defect, patent ductus arteriosus, anomalous venous drainage of the right upper pulmonary veins to the superior vena cava, and an accessory upper lobe in the right lung with a supernumerary bronchus.

The 2nd patient had two uneventful pregnancies and deliveries 2 and 4 years after heart surgery. Both children, presently aged 6 and 4 years, are healthy.

The 3rd patient also had an uneventful pregnancy and delivery 2 years after surgery. Her child, presently aged 2, is well developed and healthy.

Discussion

The prevention of pregnancy is the accepted policy in women with prosthetic valves. According to Hall et al. [2], both warfarin and heparin are potential embryo-pathic agents, i.e., a normal outcome can be anticipated only in approximately two thirds of these pregnancies, regardless of the anticoagulant used. Furthermore, it has not yet been proved that decreased doses of anticoagulants may prevent congenital anomalies although, according to Russo et al. [3], a prothrombin time kept at about 40% of

normal during the last 2 trimesters of pregnancy might help to avoid the risk of embolic accidents as well as that of fetal or placental hemorrhage.

The presently reported data support the policy of the necessity of discouraging pregnancies in women with prosthetic valves.

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