Pregnancy in congenital cardiac disease: an increasing challenge for cardiologists and obstetricians -- a prospective multicenter study.

Abstract:
OBJECTIVES: Aim of this study was to assess the occurrence of pregnancy-related complications of mother and child during pregnancy, delivery and puerperium in women with CCD prospectively. STUDY DESIGN, POPULATION: This prospective multicenter study included 122 pregnancies in 106 women with CCD (72 with, 34 without previous cardiac surgery). Patient age was 17-44, median 26 years. Cardiac and non-cardiac complications, mode of delivery, abortion, and CCD of the newborn were assessed. RESULTS: Initially all women were in Functional Class I or II. Worsening during pregnancy occurred in 25.5% (n=27), mainly during the second and third trimester. Significant problems due to bleeding, hypertension, rhythm disturbances, endocarditis, liver congestion, increasing cyanosis or death, occurred in 11.3%. Twelve per cent of deliveries were premature. Five women had therapeutic abortion, nine spontaneous abortions, nine preterm births, and one intrauterine death. Seventy-nine per cent (n=85) delivered spontaneously; 21.3% (n=23) had caesarean section. Of the 111 live born children, 5.4% (n=6) had a CCD. CONCLUSIONS: Most women with CCD and a good functional class before pregnancy tolerate pregnancy without major problems. However, pregnancy may induce serious cardiac
and obstetric complications. The specific risks require an individualized multidisciplinary patient-management by experienced physicians.