Cardiovascular events in young women with Polycystic ovary syndrome

Data on the occurrence of cardiovascular events in women with Polycystic ovary syndrome (PCOS) are limited. Objective: To assess the prevalence of cardiovascular events in young women with PCOS.

Methods-patients: This retrospective study included 253 Brazilian women diagnosed with PCOS (Rotterdam criteria), and 162 without PCOS, aged 18-40 years, who were followed up for a period of 1-13 years. Cardiovascular event occurrence was determined by patient charts review, data cross-checking, and active search by phone. The Chi-square test, Fisher's exact test, and multivariate logistic regression analysis adjusted for age and BMI were used with significance level at 5%. Results: Median age was 25 years (21-29) among women with PCOS, and 29 years (25-34) among those without PCOS, p<0.0001. The prevalence of acute myocardial infarction, cerebrovascular accident, congestive heart failure, angina pectoris, venous thromboembolism, pulmonary thromboembolism, and death did not differ between women with and without PCOS (4.8% x 4.9%, p=0.68). In women with PCOS, however, the prevalence of obesity, arterial hypertension, glucose intolerance, type 2 diabetes mellitus, hypertriglyceridemia and insulin resistance was higher than in those without PCOS (p<0.05). Insulin resistance was the only factor to influence the occurrence of cardiovascular events in patients with PCOS (OR: 4.73; CI95:1.04-21.5) p=0.8128, but not in those without PCOS. Conclusions: In this study, the prevalence of cardiovascular events did not differ between young women with and without PCOS, even though the prevalence of cardiovascular event risk factors was higher in women with PCOS. Prospective studies are necessary to estimate the actual rates of morbidity and mortality due to cardiovascular disease in women with PCOS.