HEMOSTATIC MARKERS IN WOMEN WITH POLYCYSTIC OVARY SYNDROME COMPARED TO HEALTHY CONTROLS
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Objective: To evaluate some markers of the hemostatic system and clinical and laboratory parameters of women with PCOS. Subjects and Methods: A cross-sectional study was conducted to evaluate 45 women with PCOS at the Department of Obstetrics and Gynecology, School of Medical Sciences, University of Campinas (UNICAMP) and 45 women with normal ovarian function, paired for age (± 2 years) and body mass index (BMI) (± 2 kg/m^2). Main outcome measures: waist/hip ratio (W/H ratio), the Ferriman-Gallwey index (FGI), fasting glucose, fasting insulin, total testosterone (TT), free testosterone (FT), plasminogen activator inhibitor-1 (PAI-1), thrombin-activatable fibrinolysis inhibitor (TAFI), D-dimer and the thrombin generation test (TGT). The groups were compared using Student's paired t-test or the Mann-Whitney test. Significance level was defined at 5%. Results: Women in both groups were young (26.13±4.31 and 26.22±4.28 years, respectively) and overweight (29.32±6.37 and 29.25±6.32 kg/m^2, respectively). However, the women with PCOS had a higher W/H ratio (0.79±0.08 and 0.76±0.05; p=0.03), FGI (9.42±5.32 and 0.62±0.83; p<0.01), TT (0.53±0.30 and 0.30±0.29 ng/ml; p<0.01) and FT levels (1.42±1.00 and 0.88±0.32 pg/ml; p=0.02) compared to those in the control group. There were no statistically significant differences between the two groups with respect to glucose or insulin levels or the homeostasis model of assessment - insulin resistance (HOMA-IR). Thrombin generation lag-time (T lag) was significantly shorter in women with PCOS compared to controls (25.65±2.61 and 26.76±2.11 s, respectively, p=0.03), suggesting a higher risk of hypercoagulability. The other hemostatic markers did not differ between groups. Conclusion: Thrombin generation is faster in young women with PCOS compared to young women with the same BMI but without PCOS, increasing thromboembolic risk.