Serum and follicular resistin levels in women with polycystic ovarian syndrome during IVF-stimulated cycles

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摘要

Abstract

BACKGROUND: Resistin is a hormone linking obesity and insulin resistance. The aim of this study was to compare resistin levels in serum or follicular fluid from women with polycystic ovarian syndrome (PCOS) and controls, both of whom were undergoing IVF. METHODS: We compared serum and follicular resistin levels in 21 PCOS women and in 18 healthy, normal ovulation, age- and body mass index (BMI)-matched non-PCOS women undergoing IVF. Correlations between serum or follicular fluid resistin levels and reproductive outcome were evaluated. RESULTS: There was no significant difference in either serum or follicular resistin levels between the control group and the PCOS group as a whole or those with insulin resistance [homeostasis model assessment of insulin resistance index applied to oral glucose tolerance test (HOMAOGTT) <4.7]. However, resistin levels in follicular fluid were unexpectedly significantly lower than serum levels (P<0.0001) in both the PCOS and control groups. No significant correlation was found between resistin levels and BMI, estradiol, LH, or fasting or 2 h glucose or insulin levels or between follicular resistin levels and fertilization rate, implantation rate, clinical pregnancy rate, or early miscarriage rate in PCOS. CONCLUSION: Resistin is unlikely to be a major determining factor in the growth and maturation of oocytes during IVF-stimulated cycles in PCOS.