4th World Congress on
POLYCYSTIC OVARIAN SYNDROME
October 26-27, 2018 | Boston, USA

Sebastiao Freitas de Medeiros

Federal University of Mato Grosso, MT, Brazil

Comparison of steroidogenic pathways among normoandrogenic and hyperandrogenic Polycystic ovary syndrome patients and normal cycling women

To compare the corticosteroidogenic enzyme activities between normal cycling non-Polycystic ovary syndrome (PCOS), and normoandrogenic PCOS (NA-PCOS) and hyperandrogenic PCOS (HA-PCOS) patients. This cohort study was conducted at Julio Muller University Hospital and Tropical Institute of Reproductive Medicine and Menopause, and enrolled 114 non-PCOS women and 355 PCOS patients. The steroidogenic enzyme activities were measured using the serum steroid product/precursor molar ratio. In the Δ5 pathway the 17,20 lyase activity was equally low in the NA-PCOS and HA-PCOS women compared with the non-PCOS women ($P < 0.01$ and $P < 0.001$, respectively). In the Δ4 pathway, the 17,20 lyase activity was higher only in the HA-PCOS group ($P < 0.001$). The 17-hydroxylase activity was the same in PCOS and non-PCOS subjects ($P > 0.05$). The 3β-hydroxysteroid dehydrogenase II (3β-HSDII) activity was higher in the conversion of dehydroepiandrosterone into androstenedione in the HA-PCOS than in the NA-PCOS ($P < 0.05$) and the non-PCOS patients ($P < 0.01$). The aromatase activity was lower in the HA-PCOS than in the NA-PCOS ($P < 0.05$) patients and non-PCOS subjects ($P < 0.01$). In HA-PCOS subjects, the 17,20 lyase activity was related to insulin, estradiol, total testosterone concentrations and free androgen index in the Δ5 pathway. 3β-HSDII showed weak correlation with estradiol in the HA-PCOS group. Anthropometric parameters had little impact, if any, on the steroidogenic enzyme activities. The NA-PCOS and HA-PCOS patients demonstrated different enzyme activities, and the results provided new directions for future studies including PCOS patients with different phenotypes.

Biography

Sebastiao Freitas de Medeiros has completed this Master Degree at age of 34 years from the University of Sao Paulo, Brazil and PhD studies from the University of Adelaide, Australia. He is Associated Professor at the Federal University of Mato Grosso and Director of the Tropical Institute of Reproductive Medicine. Currently, he is President of the Brazilian Society of Gynecology Endocrinology. He has published 100 papers and has been serving as an editorial board number of the Brazilian Journal of Obstetrics and Gynecology and Editor-Chief of the journal Femina (Edited in Portuguese language)

de.medeiros@terra.com.br

Notes: