The effects of HIV infection on pregnancy hormones within 28 weeks of pregnancy

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Background: Pregnancy in HIV-positive women might be associated with at least small increases in risk of adverse maternal outcomes, and these are spontaneous abortion, still birth, foetal abnormality, perinatal mortality, low birth weight, pre-term delivery. These adverse effects might be as a result of endocrine abnormalities in HIV patients. This study was carried out to investigate the possible changes in pregnancy hormones of the HIV infected women within the few weeks of pregnancy prior to antiretroviral therapy.

Materials & Methods: A total of 120 pregnant women with 28 weeks of pregnancy participated in the study. 60 of them were HIV seropositive, while the rest 60 were HIV sero positive were not or had not commenced antiretroviral therapy before the sample collection. Their serum prolactin, estradiol, progesterone, beta-human chorionic gonadotropin, was estimated using Enzyme Linked Immunosorbent Assay method.

Result: It was observed that prolactin and estradiol levels of non-infected pregnant women were significantly higher (p<0.05) than the seropositive pregnant women. The human chorionic gonadotropin and progesterone of the two groups showed no significant change (p>0.05).

Conclusion: HIV infection has no effect on human chorionic gonadotropin and progesterone but has reducing effect on estradiol and prolactin production/metabolism in infected pregnant women. This effect may affect development of the foetus or breast milk production in these women if commencement of antiretroviral therapy is delayed.

Biography
Okeke Chukubike U, obtained Ph.D and M.Sc degrees in chemical pathology from Rivers State University of Science and Technology, Port Harcourt, Rivers State, Nigeria. He obtained Fellow of Institute of Medical Laboratory Sciences in Hematology and Blood Group Serology in 1999. He have publications in reputable journals. He is currently working as a lecturer in department of Prosthesis and Orthopedic Technology, School of Health Technology, Federal University of Technology Owerri, Imo State, Nigeria. He has been collaborating with my professional colleagues in laboratory medicine researches. His research interests are endocrinology, metabolic diseases, hematology and molecular biology.

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