

Effects of depot- medroxyprogesterone acetate (DMPA) administered to lactating women on their male infants

Virutamasen, P; Leepipatpaiboon, S; Kriengsinyot, R; Vichaidith, P; Muia, P. N; Sekadde-Kigondu, C. B; Mati, J. K; Forest, M. G; Dikkeschei, L. D; Wolthers, B. G; d'Arcangues, C

Abstract:

Normal postpartum women, who had a spontaneous vaginal delivery of one full-term male infant, free of congenital abnormalities and other diseases, were recruited for this study. Thirteen women received 150 mg depot-medroxy-progesterone acetate (DMPA), intramuscularly on days 42 + 1 and 126 + 1 postpartum. Infants of nine mothers, who did not receive DMPA, served as controls. Blood samples were collected from treated mothers on days 44, 47, 74, 124, 128, and 130 postpartum for medroxyprogesterone acetate (MPA) measurements. Four-hour urine collections were obtained from all 22 infants in the morning on days 38, 40, 42, 44, 46, 53, 60, 67, 74, 88, 102, 116, 122, 124, 126, 128, 130, and 137. Urinary follicle stimulating hormone (FSH), luteinizing hormone (LH), unconjugated testosterone, and unconjugated cortisol were measured by radioimmunoassay, and serum MPA and urinary MPA metabolites were measured by gas chromatography-mass spectrometry (GC-MS). No MPA metabolites could be detected in the urine of the infants from the DMPA-receiving mothers. Hormonal profiles in the urine samples were not suppressed in comparison with those of the control infants. The present study demonstrates that DMPA, administered to the mother, does not influence the hormonal regulation of the breast-fed normal male infant.