Sensitivity Analysis for Oral Contraceptives and Vitamin D

Windy Wang 2017-11-16

Purpose: Assess if subjects taking oral contraceptives (OC) are influencing the vitamin D results. OC use has been found to increase 25(OH)D levels.

Number of people on OC

There are 15 subjects who are taking OC out of the 203 women who are pre-menopausal in PROMISE. Five subjects were missing oral contraceptive information.

Subject Characteristics

Subjects who were taking OC were significantly younger (37.00 (4.41)) compared to those who were premenopausal, but were not taking OC (42.77 (6.04)), p<0.001. Although serum 25(OH)D levels were higher in the OC group compared to the non-OC group, the difference was not found to be statistically significant (p=0.358). No other significant differences were found between OC and non-OC groups, but some trends with kidney measures were observed. Subjects taking OC had higher eGFR, lower ACR, and lower uVDBP concentrations. This may be partially explained by age, or perhaps by the beneficial effect of higher 25(OH)D on kidney function.

	No OC	OC	p	test
n	203	15		
Age (mean (sd))	42.77(6.04)	37.00(4.41)	< 0.001	
VitaminD (mean (sd))	52.67 (23.81)	59.21 (37.06)	0.358	
eGFR (mean (sd))	101.81 (13.60)	107.50 (13.54)	0.119	
ACR (median [IQR])	0.57 [0.38, 1.01]	0.53 [0.32, 1.22]	0.991	nonnorm
UDBP (median [IQR])	51.05 [16.43, 98.42]	29.00 [7.29, 86.22]	0.563	nonnorm
udbpCr (mean (sd))	9.30 (20.12)	5.64 (5.78)	0.484	
dmStatus (%)	, ,	, ,	0.578	
NGT	179 (88.2)	13 (86.7)		
PreDM	8 (3.9)	0(0.0)		
DM	16 (7.9)	2 (13.3)		