تأثیر مکمل‌های مولتی‌مینerald و ویتامین D بر نتایج بارداری در زنان باردار در معرض خطر پرکلاسیمی: یک آزمایش بالینی

کلید واژگان: مکمل بارداری، پرکلاسیمی، بارداری، ویتامین D

خلاصه:

تجارت: اگرچه هیچ تفاوت معناداری در وزن و میزان دورس بین دو گروه مشاهده نشد، ولی میانگین قند نوزادان نازه تولید شده (51/3±1/7) در مقیاس خطر پرکلاسیمی است. 

مکمل‌های دیگر

نتیجه گیری: مصرف مکمل مولتی‌مینerald و ویتامین D در دوران بارداری، در مقیاس خطر پرکلاسیمی، بازاریابی شده است.

واژگان کلیدی: مکمل‌های دیگر، پرکلاسیمی، B اکلیرس، بارداری
A randomized controlled clinical trial evaluating the effect of multi mineral-vitamin D supplementation on pregnancy outcomes in pregnant women at risk for pre-eclampsia

Asemi Z1,*, Razavi BS2, Ebrahimi Z2, Banahmadi Z2, Salehi S2, Nazemi F2, Khassaf A2, Nori E2

1- Biochemistry and Nutrition Research Center in Metabolic Disorders, Kashan University of Medical Sciences, Kashan, I. R. Iran.
2- Department of Genecology, Faculty of Medicine, Kashan University of Medical Sciences, Kashan, I. R. Iran.

* Corresponding Author: asemi_r@yahoo.com

Abstract:

Background: The objective of this study was to determine the favorable effects of multi mineral-vitamin D supplementation on pregnancy outcomes among pregnant women at risk for pre-eclampsia.

Materials and Methods: This randomized single-blind controlled clinical trial was conducted among 46 pregnant, primigravida, women at risk for pre-eclampsia (aged 18-40 years) at their third trimester. Pregnant women were randomly assigned to receive either the multi mineral-vitamin D supplements (n=23) or the placebo (n=23) for 9 weeks. Fasting blood samples were taken at baseline and after applying a 9-wk intervention to measure serum calcium, magnesium, zinc, iron and 25-hydroxy vitamin D. Newborn's measurements (weight, height and head circumference) were determined.

Results: Although no significant difference was seen in newborn's weight and head circumference between the two groups, mean of newborn's length (51.3±1.7 vs. 50.3±1.2 cm, \( P=0.03 \)) among the newborn's whose mothers were receiving multi mineral-vitamin D supplements were taller than those whose mothers received placebo. As compared to the placebo, consumption of multi mineral-vitamin D supplements also resulted in increased levels of serum calcium (+0.19 vs. -0.08 mg/dL, \( P=0.03 \)), magnesium (+0.15 vs. -0.08 mg/dL, \( P=0.03 \)), zinc (+8.25 vs. -21.38 mg/dL, \( P=0.001 \)) and vitamin D (+3.79 vs. -1.37 ng/ml, \( P=0.01 \)).

Conclusion: In conclusion, multi mineral-vitamin D supplementation for 9 weeks during pregnancy and in pregnant women at risk for pre-eclampsia resulted in increase of newborn's height, increased circulating levels of maternal serum calcium, magnesium, zinc and vitamin D as compared to the placebo group.

Keywords: Supplementation, Pregnancy outcomes, Pre-eclampsia