October 6th, 2010

Early-onset severe preeclampsia occurs in roughly 2 to 3 percent of pregnancies, and it contributes to about 15 percent of preterm births in the U.S. each year. New research shows that pregnant women with low vitamin D levels are at higher risk for this condition.

PREGNANCY COMPLICATIONS MAY BE RELATED TO LOW VITAMIN D LEVELS

Studies have linked low vitamin D levels to an increased risk of many diseases, including type 1 diabetes, asthma, heart disease, certain cancers and depression. A new study has found that women who develop a severe form of pregnancy-related high blood pressure tend to have lower blood levels of vitamin D than healthy pregnant women.

Preeclampsia is a syndrome marked by a sudden increase in blood pressure and kidney dysfunction. Early-onset severe preeclampsia is a particularly serious form that arises before the 34th week of pregnancy.

In a recent study, researchers compared vitamin D levels in 50 women with early severe preeclampsia to vitamin D levels of 100 healthy pregnant women. The average vitamin D level in the preeclampsia group was 18 ng/mL compared to an average of 32 ng/mL in the healthy group. A 10 ng/mL increase in vitamin D levels was linked to a 63 percent reduction in risk of the complication.

Since total vitamin D levels in the blood seem to be linked to an increase in this pregnancy complication, further study is needed to understand the impact of vitamin D deficiency on pregnancy outcomes.

Robinson CJ, Alanis MC, Wagner CL, et al. Plasma 25-hydroxyvitamin D levels in early-onset severe preeclampsia. 2010. Am J Obstet Gynecol 203, ePub ahead of print. (http://www.ajog.org/article/S0002-9378(10)00811-2/fulltext)

ssentials of health