

عنوان مقاله:

Relationship between vitamin D consumption during pregnancy and neonatal congenital heart disease

محل انتشار:

مجله کشت ها و گردش خون، دوره 1، شماره 3 (سال: 1399)

تعداد صفحات اصل مقاله: 5

نویسندگان:

Mohammad Hosein Arjmandnia - Qom University of Medical Sciences, Qom, Iran

Mostafa Vahedian - Qom University of Medical Sciences, Qom, Iran

Maryam Yyosefi - Qom University of Medical Sciences, Qom, Iran

Mehrnam Amouei - Rafsanjan University of Medical Sciences, Rafsanjan, Iran

Sajad Rezvan - Rafsanjan University of Medical Sciences, Rafsanjan, Iran

Mohammad Hossein Assi - Qom University of Medical Sciences, Qom, Iran

Millad Siamaki - Qom University of Medical Sciences, Qom, Iran

Akram Barati - Qom University of Medical Sciences, Qom, Iran

Amir Hossein Naderi - Qom University of Medical Sciences, Qom, Iran

Alireza Sharifi - Qom University of Medical Sciences, Qom, Iran

خلاصه مقاله:

Background and Aim: Interactions between genetic and environmental factors, including modifiable maternal nutrition and lifestyle, play a significant role in the pathogenesis of most congenital heart defects (CHD). This study was conducted to investigate the relationship between periconceptional maternal vitamin D status and the prevalence of CHD in offspring. Materials and Methods: This case-control study was conducted on 660 neonates referring to Masoumeh Hospital, Qom, Iran, from April 2016 onwards. The subjects were divided into two groups of CHD and healthy patients. The instrument applied to collect the necessary data was a research-made checklist including demographic data and risk factors related to the study, which was filled by mothers. Independent t-test and Chi-square test were used to analyze quantitative and qualitative variables, respectively. A logistic regression test was also utilized, and the p-value of less than 0.05 was considered significant. Results: The mean age of mothers was obtained as 30 years in both groups. It was revealed that 94 (28.5%) and 159 (48.2%) of mothers in the case and control groups consumed Vitamin D in pregnancy. There was a significant difference between vitamin D intake and CHD in the two groups ( $p < 0.001$ ). The economic status of 53.3% of families with CHD patients was reported to be low. According to the results, 70.6% of mothers in the case group were highly educated. Conclusion: Based on the results, vitamin D consumption during pregnancy was associated with the reduction of neonatal CHD. Moreover, economic status was found as another risk factor affecting the development of neonatal CHD.

کلمات کلیدی:

Vitamin D, Congenital Heart Disease, Pregnancy

