Hamed Ali Alghamdi, Pediatr Ther 2017, 7:2(Suppl)
DOI: 10.4172/2161-0665-C1-039

Different approaches of vitamin D replacement in vitamin D insufficient children and adolescents

Hamed Ali Alghamdi
Al-Hada Armed Forces Hospitals, Saudi Arabia

Given a high rate of bone development early in life, adequate serum concentrations of vitamin D are crucial for a developing child. There has also been a piquing interest on vitamin D in pediatric patients due to the recent epidemiologic reports suggesting that vitamin D may protect against autoimmune diseases and play a role in innate immunity. Studies focusing on vitamin D status in pediatrics and adolescents are yet to start. Source of vitamin D is either by ingestion or by cutaneous production. 7-dehydrocholesterol converts to vitamin D3 on exposure of skin to ultraviolet B radiation, and dietary sources may provide either vitamin D3 or vitamin D2. Low vitamin D status is endemic because of indoor lifestyle with low dietary intake and sun-avoiding behaviors. Based on different treatment modalities reported in literature that vary according to dose, duration and whether there is a need for loading dose or not and the amount of maintenance dose needed, "A randomized clinical trial comparing 3 different replacement regimens of vitamin D in clinically asymptomatic pediatrics and adolescents with vitamin D insufficiency" is done which is a study to highlight 3 different replacement regimens for asymptomatic vitamin D insufficiency using either only the recommended dietary allowance alone, high loading dose with low maintenance dose and low loading dose with high maintenance dose. We followed vitamin D levels initial, at 4 months and 12 months and measured biochemical bone markers initial and at 4 months time points trying to prioritize one regimen. From the study, we advise to use low loading dose and high maintenance dose rather than the opposite to achieve steady increase in serum 25 (OH) D with no hypercalcemic side effects as a replacement for vitamin D insufficiency and the study also doubt the adequacy of 400 IU cholecalciferol as a way to treat asymptomatic vitamin D insufficiency or even to maintain steady levels of vitamin D.

Biography

Hamed Ali Alghamdi is a Pediatric Endocrinologist, graduated from King Faisal Specialist Hospital and Research Center in Riyadh in 2003. Later, he had collaborations both in practical fields being Consultant Pediatric Endocrinologist and Director of Al Hada Armed Forces Hospital and also academic fields being Collaborator-Assistant Professor at Medicine College in Taif University and Chairman of the Local Committee for Pediatrics Fellowship in the Western Region of Saudi Arabia. He is an eminent member of Saudi Society for Endocrine and Metabolic Diseases and Saudi Society for Pediatric Medicine. He shared his research experience in many conferences and has 5 international publications.

abumdin@yahoo.com

Notes: