



Quality of Care and Outcomes Assessment

DO WOMEN WITH STATIN-RELATED MYALGIAS HAVE LOW VITAMIN D LEVELS?

ACC Moderated Poster Contributions
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Background: HMG-CoA reductase inhibitors (statins) are effective for coronary artery disease (CAD) treatment, but can cause myalgias. Severe vitamin D deficiency is characterized by musculoskeletal pain. We hypothesized that statin-intolerance is associated with low vitamin D levels.

Methods: We assessed 20 female patients with history of daily dose statin myalgias treated with alternative day statin dosing (simvastatin, atorvastatin, pravastatin, rosuvastatin, fluvastatin XL, pitavastatin) twice weekly for 4 weeks then titrated up one day per week to daily dosing, as tolerated. Fasting baseline and follow-up lipid and 25-hydroxy-vitamin D (25-OHD) levels were obtained by retrospective chart review. Alternative day statin dosing was defined as any regimen less than daily.

Results: Mean age was 61 ± 13 and mean body mass index was 26 ± 5 kg/m². 35% had CAD, 50% hypertension, 58% smoking history, and 37% took non-prescribed vitamin D supplements. Overall, 15/20 (75%) remained on alternative day statin dosing due to myalgias. Alternative day statin dosing compared to daily dosing had a significantly lower median 25-OHD level (Figure).

Conclusions: In women with prior statin-related myalgias, Vitamin D levels are significantly lower in women intolerant to daily dosing. Further study is warranted to determine causality and impact of vitamin D supplementation on statin-related myalgias.

Figure: Difference between Vitamin D levels in Alternative Dosing vs. Daily Dosing in statin related myalgias.

