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Vitamin D₃ Analogues and Laboratory Tests Interactions: Public Health Awareness Glance

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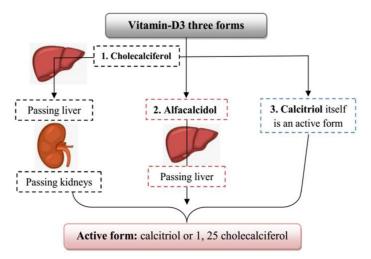
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Dear Editor-in-Chief

Vitamin-D is available in the market in three different forms; cholecalciferol, alfacalcidol both of them are inactive and converted into active form calcitriol.^[11] The conversion of both occurs by passing on liver hepatocytes by (25-hydroxylase) and kidneys (1-alfa-hydroxylase) while alfacalcidol is converted into active form only by the liver.^[2,3] Thus, it means that those individuals whose Renal Function Tests (RFTs) and Liver Function Tests (LFTs) are raised they are unable to get benefits from cholecalciferol and those with raised LFTs will not get benefits from alfacalcidol thus the selection of choice in this condition will be calcitriol or 1, 25-dihydroxycholecalciferol is depicted in the (Figure 1).^[4-6] To the best of our knowledge this will be the first attempt to highlight the selection of Vitamin D₃ from different analogues. The main aim of this short comment to aware the public regarding the use of better alternative for the patients from the rest of three.



It is concluded that those patients who are renal compromised will not get benefits from the cholecalciferol, while hepatic compromised patients cannot get from alfacalcidol. Consequently, those patients who are both hepatic and renal compromised can get benefits from the calcitriol which should be the selection of choice for the prescribers.

Recommendations

To further confirm these interactions, additional clinical studies are required.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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