

Considerations Regarding Vitamin D in Foot and Ankle Treatment and Surgery, James D. Michelson et al.
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Vitamin D deficiency is a widespread issue that can significantly impact bone health and healing, particularly in patients undergoing foot and ankle surgery. This article discusses the prevalence of vitamin D deficiency in surgical populations and its implications for fracture healing and surgical outcomes.

This report highlights the findings from various studies indicating that many patients scheduled for foot and ankle surgery present with low vitamin D levels. Preoperative assessments often identify these deficiencies, including serum 25-hydroxyvitamin D measurements. The consequences of vitamin D deficiency can include delayed healing, increased risk of complications and poorer overall surgical outcomes.

In the reviewed cases, patients exhibited a range of vitamin D levels, with many falling below the recommended thresholds. Vitamin D's impact on calcium metabolism is crucial, as adequate levels are necessary for optimal bone mineralization and repair. Vitamin D and calcium supplementation is often recommended for patients with identified deficiencies, particularly those with fragility fractures or undergoing arthrodesis.

The etiology of vitamin D deficiency in surgical patients is multifactorial, including factors such as limited sun exposure, dietary insufficiency, and underlying health conditions that may impair vitamin D metabolism. Additionally, certain medications can further exacerbate deficiencies.

Healthcare providers play a pivotal role in identifying and managing vitamin D deficiency in patients presenting with foot and ankle pain or those scheduled for surgery. Preoperative screening and subsequent management of vitamin D levels are essential to optimize surgical outcomes and promote effective healing.

In conclusion, addressing vitamin D deficiency in foot and ankle surgery patients is critical for improving recovery and minimizing complications. The need for further research to establish standardized protocols for screening and supplementation in this population is a promising avenue for future advancements.



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