

Vitamin B6 Deficiency Manifesting as Oral Soreness in an Elderly Patient with Multiple Comorbidities

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Introduction

1. Vitamin B6, a water-soluble essential nutrient, serves as a coenzyme in more than 100 enzymatic reactions, crucial for amino acid metabolism, neurotransmitter synthesis, and hemoglobin formation.
2. Common symptoms of vitamin B6 deficiency encompass a wide range of manifestations, including microcytic anemia, electroencephalographic abnormalities, dermatitis with cheilosis (scaling on the lips and cracks at the corners of the mouth), glossitis (swollen tongue), as well as psychological symptoms such as depression and confusion, and weakened immune function.
3. Deficiency in this vital vitamin can occur due to poor dietary intake, malabsorption disorders, medications, and certain medical conditions.

Case

- An 84-year-old patient with an extensive medical history, including stroke, chronic atrial fibrillation, sick sinus syndrome, and hypertension, was admitted to the hospital due to septic shock secondary to a urinary tract infection.
- Following the successful resolution of the infection, the patient expressed discomfort in the form of oral soreness and lip irritation.
- Despite the absence of noticeable lesions or erythematous patches, the patient's subjective discomfort prompted a thorough investigation.
- Laboratory assessment of vitamin levels indicated a deficiency in vitamin B6. Upon recognition of the deficiency, the patient was promptly initiated on vitamin B6 supplementation.
- Remarkably, the patient reported a swift alleviation of oral discomfort, further reinforcing the association between vitamin B6 deficiency and the observed symptoms.

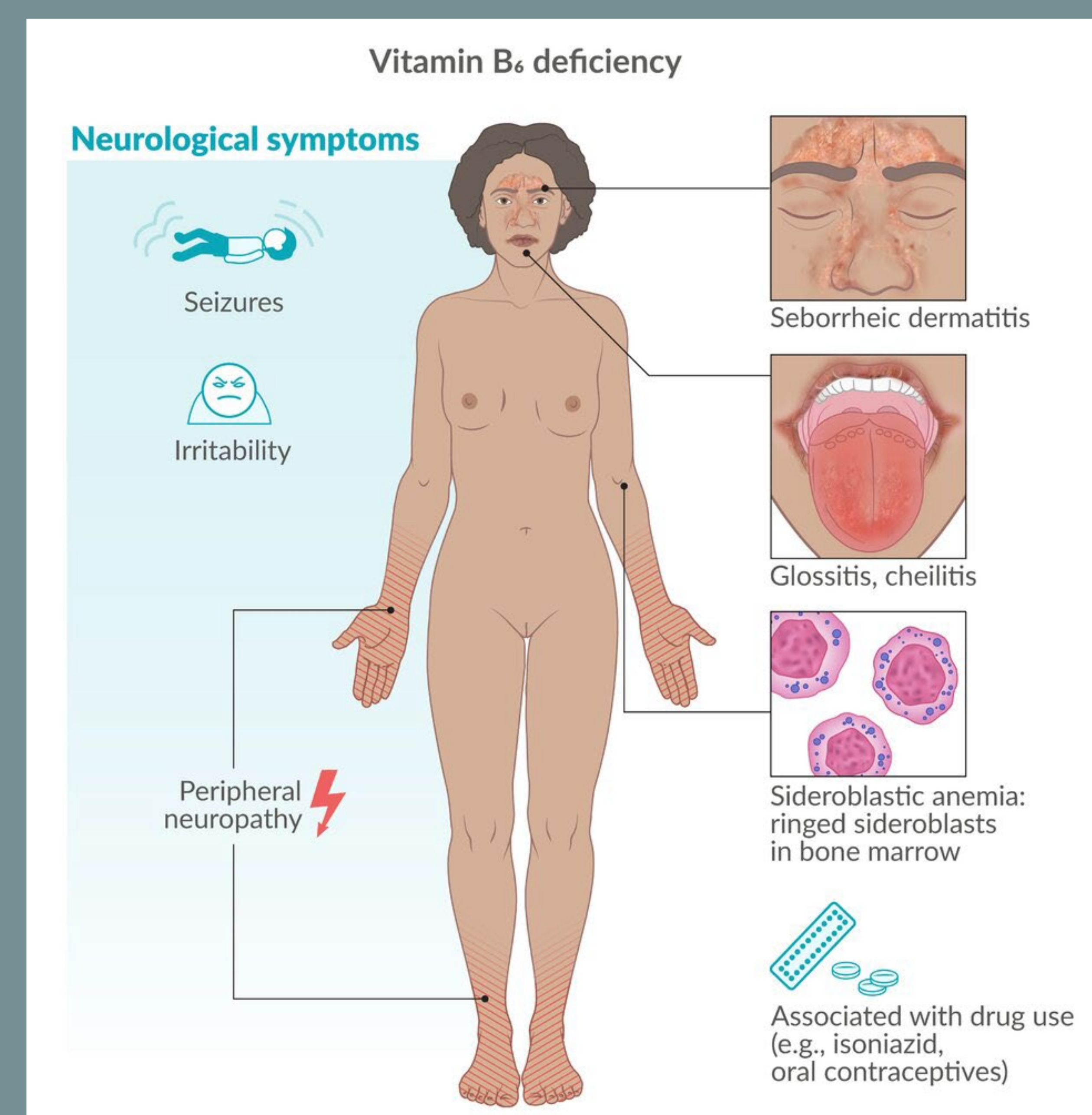


Image 1. Vitamin B6 Deficiency (taken from Amboss)

Conclusion

- This case highlights the intricate interplay between vitamin B6 deficiency and clinical symptoms, particularly in an elderly patient with multiple comorbidities.
- The unanticipated presentation of oral soreness underscores the diverse ways in which vitamin B6 deficiency can manifest, even in the absence of overt dermatological changes.
- The case also underscores the necessity of considering nutritional deficiencies in patients with complex medical histories, as these deficiencies can exacerbate preexisting health conditions and hinder the recovery process.
- Healthcare professionals must remain vigilant for subtle signs of nutrient deficiencies, particularly in elderly patients with intricate medical profiles, as prompt recognition and intervention are essential for ensuring optimal patient outcomes.
- In conclusion, this case report serves as a reminder of the critical role played by vitamin B6 in maintaining overall health and its potential to influence a myriad of bodily functions.
- It further emphasizes the need for healthcare providers to remain attuned to the signs of vitamin deficiencies, particularly in the context of diverse and sometimes unrelated symptoms.
- Recognizing and addressing such deficiencies can significantly enhance the well-being and quality of life for patients with complex medical histories.

Acknowledgements

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