

Vocal Cord Palsy and Neutropenia: Unusual Presentation of B-12 Deficiency in Adult Patient, A Case Report

Abdulmajeed Alharbi, MD¹*, Brandon Speedy, MS¹, Sadikshya Sharma¹, Samantha David, MD¹, Li Wang, MD¹, Ruby Nucklos, MD¹

¹Division of Internal Medicine, Department of Medicine, The University of Toledo, Toledo, OH 43614

*Corresponding author: Abdulmajeed.Alharbi@utoledo.edu

Published: 05 May 2023

Background: Vitamin B12 deficiency commonly causes megaloblastic anemia and rarely pancytopenia. Manifestations of anemia may include gastrointestinal and neurological symptoms which can persist if not treated immediately.

Case Presentation: Patient is a 67-year-old male who presented with severe leukopenia. The lab work was subsequent to a 6-week-course of cefepime for osteomyelitis. On arrival, the patient endorsed pharyngitis, dyspnea, cough productive of clear sputum, and headaches present for 5 days. Initial workup redemonstrated severe leukopenia (WBC: 2.2) with an Absolute Neutrophil Count of 0. The next day, the patient was experiencing dysphagia with thick, white oral secretions that required suctioning and had a strong productive cough. Video swallow study demonstrating severe impairment of pharyngeal swallow with gross aspiration. The patient's blood culture, sputum culture, and RPP all come back within normal limits. On the 6th day of admission, the patient's WBC improved to 10.2 and his Absolute Neutrophil Count was 5.8. He could communicate well, and his dysphagia and dysphonia improved. Repeat Video Swallow Study on day 7 demonstrated only mild oral and pharyngeal phase dysphagia and repeat laryngoscopy revealed normal right vocal cord with persistent left vocal cord paralysis.

Conclusion: B12 deficiency may present in wide different ways. This case highlights the fact that manifestations of vitamin B12 deficiency can be highly variable and underscores the need to keep this disorder on the differential diagnosis in a variety of clinical presentations. Clinicians should be aware of different hematological and neurological presentations.