Keywords: G-CSF, AML, pleural effusion, neutropenia, cytokine response.

https://doi.org/10.1016/j.htct.2024.11.026

OP 26

MODERATE CLINICAL COURSE IN SEVERE ANAEMIA

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Introduction: Although iron deficiency anemia is more common in children and women, it can also occur in adult men, depending on their socioeconomic status and health conditions (1). Symptoms of anemia, such as dyspnea, tachypnea, tachycardia, pallor, heart failure, and cognitive dysfunction, can vary based on the severity of the anemia, its onset speed, the patient's age, and physiological condition. In young and generally healthy individuals, chronic anemia may go unnoticed until hemoglobin levels fall below a critical threshold or until physically demanding situations arise (2). We present a case of iron deficiency anemia with a hemoglobin level of 2.8 g/dL, yet the patient did not exhibit anemia symptoms that would disrupt hemodynamics. **Case Report:** A 43-year-old male patient with mental retardation secondary to meningitis during childhood presented to the emergency department in September 2024 with complaints of weakness, fatigue, and exertional dyspnea. On physical examination, blood pressure was 90/60 mmHg, heart rate was 94 bpm, respiratory rate was 18/min, skin and conjunctiva were pale; other findings were normal. Laboratory results showed WBC: $9.2 \times 10^3/\mu$L, hemoglobin: 2.8 g/dL, hematocrit: 9.1%, and platelet count: $365 \times 10^3/\mu$L. The patient was clinically admitted due to severe anemia. LDH and indirect bilirubin levels were normal. Peripheral smear revealed severe hypochromia and microcytic erythrocytes. No schistocytes or atypical cells were observed. For the etiology of anemia, serum Fe: 7 μg/dL TIBC: 294 μg/dL, ferritin: 3.6 ng/mL, folate: 6.68 ng/mL, and vitamin B12 was 375 pg/mL. Due to the hemoglobin level of 2.8 g/dL, the patient received 3 units of red blood cell suspension. After replacement, hemoglobin increased to 7.4 g/dL, and iron replacement was planned. Considering the patient's mental retardation and the difficulty in regular medication adherence, parenteral iron replacement was administered. The patient was discharged with a recommendation for follow-up in 2 weeks. **Results:** According to many anemia grading systems, a hemoglobin level dropping below 6.5 g/dL is considered life-threatening, and patients are theoretically expected to experience a range of symptoms (3). However, the literature reports cases where individuals sought medical assistance with hemoglobin levels below 3 g/dL and hematocrit levels below 10% (4,5). Despite our patient having a hemoglobin level of 2.8 g/dL at the time of admission, serious anemia symptoms such as tachycardia and tachypnea were not observed. As a result, as seen in our male patient, the activation of adaptive mechanisms in chronic anemia can allow for a mild clinical presentation. Even at critical hemoglobin levels, patients may present with moderate symptoms

https://doi.org/10.1016/j.htct.2024.11.027