LIFE THREATENING ANEMIA IN PATIENTS WHERE BLOOD TRANSFUSION IS NOT AN OPTION

Carolina Gonzalez, MD; Giulianna Betancourt, MD; Irma Munoz Verdugo, MD; Bassem Chaar, MD, Advocate Christ Medical Center Internal Medicine Residency Program

BACKGROUND

Anemia is considered life threatening when hemoglobin levels are below 5. Refusal of human blood and blood products makes treatment for severe anemias challenging. Jehovah’s Witnesses (JW) believe that it is against the will of God to receive blood transfusions. Therefore, for JW patients, requiring blood transfusions, alternative treatments should be utilized. Erythropoietin and iron infusions can restore endogenous hemoglobin (Hg). Although obvious, another strategy is to reduce phlebotomy frequency and utilization of pediatric-sized phlebotomy tubes.

CASE DESCRIPTION

A 39-year-old female, JW presented to the hospital referred by her father due to confusion and menorrhagia. On admission, the patient had a syncopal episode and was intubated for airway protection and transferred to Intensive Care Unit. Initial laboratory evaluation was remarkable for a hemoglobin of 1.7, hematocrit 7, lactate acid 19, pH 7.08, Pco2 20, bicarbonate 6, and troponin 91. EKG was remarkable for sinus tachycardia.

Vaginal ultrasound was remarkable for uterine mass of 6 cm (about 2.36 in). A gynecology exam revealed a punctuate lesion and it was cauterized with silver nitrate. She was diagnosed with severe microcytic anemia secondary to profound iron deficiency due to neglected chronic blood loss anemia in setting of menometrorrhagia. This was complicated by hypovolemic shock with secondary organ injury.

INTERVENTIONS & TIMELINES

The patient received erythropoietin, vitamin K, tranexamic acid, folate and iron infusions. The patient was admitted to the ICU. The patient was placed on folate and iron, and phlebotomies were deferred. The patient showed clinical improvement and was discharged 2 weeks later. 1 month after her admission Hg was 9.4.

DISCUSSION & CONCLUSION

Treatment for severe life-threatening anemia could be challenging in JW patients and other patients refusing blood and human products. However, there are alternative options besides human blood products, including, iron infusions, folate and decreasing phlebotomy frequency even if they are in the ICU.

REFERENCES

