

March Hemoglobinuria- Anemia Due To Marching

Dr. Manju Tyagi, Dr. Prakhar Garg, Dr. Alok Kumar Singh, Dr. Pallav Mishra

Abstract

Introduction

Marchhemoglobinuria is a form of hemolytic anemia due to mechanically induced damaged to red blood cells, which result in hemoglobinuria. Repetitive impacts to the body may cause mechanical trauma (hemolysis) of red blood cells. It a rare abnormal condition characterized by presence of hemoglobin in the urine, occurs after strenuous physical exertion on prolonged exercise, such as marching or distance running.

Case presentation

We describe here a 24 year old male who presented with complain of generalized weakness, pain B/L lower limb and reddish brown discoloration of his urine after a religious march bare footed of about 180km which continued for 4 days on physical examination pallor present and his urine examination revealed blood in urine and blood picture showed Hb-6.2, MCV-113.6, RBC-1.34, reticulocyte count-3.5%, LDH-410, ESR-110, Sr. bilirubin-2.7, uribilinogen-1.5, haptoglobin 0.2 and direct coombs test was negative. The urine sample was negative for myoglobin and other causes of hemolysis and hematuria was excluded and after 3 days there was resolution of his symptoms and investigation showed normal urine study.

Conclusion

The association of mechanical trauma induced hemoglobinuria is being recognized. We however feel prevalence of such activities causes trauma to red blood cell causing hemolysis resulting in release of free hemoglobin from lysed cells which filtered into the urine. We hope to raise the awareness of trauma induced hemolysis in evaluation of patient with hemoglobinuria.

Date of Submission: 08-01-2025

Date of Acceptance: 18-01-2025
