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Clinical Image
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Leptospirosis- Induced Glucose-6-Phosphate Dehydrogenase Deficiency

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Clinical Image

A 32-year-old male patient was found with laptospirosis by testing his serum anti-leptospira (Laptospira-IgM level: >100 U/mL) and later on, hospitalized due to respiratory distress, high grade fever and muscle weakness. Glucose-6-Phosphate Dehydrogenase (G6PDH) deficiency was detected by performing serum G-6-PD quantitative test (level: 1.5 U/g Hb). During admission, his hemoglobin, red blood cell count, haematocrit, SaO_2, bilirubin, aspartate aminotransferase, alanine aminotransferase and album was 8.60 g/dL, 2.82 M/µL, 27.6, 83%, 40 mg/dL, 1527 U/L, 2074 U/L and 2.7 g/dL, respectively. Patient was intubated (with tracheostomy). His acute hemolytic anemia was severe and uncontrolled blood loss was observed (Figure 1).

G6PDH is a centrally responsible enzyme in pentose phosphate pathway of cells. G6PDH deficiency is a genetic abnormality and mostly becomes latent. G6PDH deficiency can be triggered by a stimulus and in this case, it was triggered by laptospirosis within a very short time [1].

Figure 1: Profuse bleeding through tracheostomy site due to G6PDH deficiency.

Reference

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