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Elasomeran

## Autoimmune haemolytic anaemia: case report

A 42-year-old woman developed autoimmune haemolytic anaemia following administration of elasomeran vaccine [route and dosage not stated].

The woman had a medical history of hypertension, iron deficiency anaemia due to menorrhagia, congenitally deaf and mute and provoked venous sinus thrombosis, which was treated with unspecified anticoagulation. However, the unspecified anticoagulation was stopped due to worsening menorrhagia. On 7 April 2021, she had received first dose of elasomeran [mRNA-1273] vaccine against COVID-19. After a week, she experienced worsening dizziness and lightheadedness, palpitations, progressive shortness of breath with activity, mild spells of blurred vision, lack of energy, generalised weakness and easy fatigue with the workplace and home activities for 2 weeks. She was then admitted to hospital with progressive symptoms, which limited her physical activity in the previous few days. She had been receiving iron supplementation with stable iron levels. Her menorrhagia was noted to be stable and her periods lasted for 7 days, with the initial 4 days being a little heavier. On admission, her haemoglobin was found to be 4.5 g/dL with MCV of 90fL and absolute reticulocyte count of  $19.9 \times 10^9$ /L. She also had mildly elevated indirect bilirubin. A peripheral blood smear showed a few polychromasia, schistocytes and anisocytosis. Her LDH was noted to be 4332 IU/L and her haptoglobin was <6 mg/dL. The indirect Coombs' test was noted to be positive, and the direct Coombs' test was observed to be positive for IgG and C3, along with identification of warm autoantibodies. She had mildly elevated ferritin and severely low vitamin B12 level. A positive finding was observed for intrinsic factor antibodies and gastric parietal cell IgG antibodies.

The woman started receiving unspecified steroids, methylprednisolone and cyanocobalamin. On admission day 7, her haemoglobin improved. On the day of discharge, she still had schistocytes with improved haemoglobin. She was discharged on admission day 10 with improvement in her symptoms. A regimen of prednisone, along with cyanocobalamin replacement therapy was prescribed. After a week, on follow-up examination no schistocytes on the peripheral smear was noted, and laboratory findings revealed improvement in haemoglobin, LDH and absolute reticulocyte. After 2 weeks, her haemoglobin improved.

Jaydev F, et al. A Case of Autoimmune Hemolytic Anemia after the First Dose of COVID-19 mRNA-1273 Vaccine with Undetected Pernicious Anemia. Case Reports in Hematology 2022: 1-5, 29 Jan 2022. Available from: URL: http://doi.org/10.1155/2022/2036460