

## Deferasirox

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**COVID-19 infection and asymptomatic COVID-19 reinfection: case report**

A woman in her 30s [exact age at the reaction onset not stated] developed COVID-19 infection during treatment with deferasirox as iron chelation therapy. Later, she developed asymptomatic COVID-19 reinfection during treatment with deferasirox.

The woman, who had transfusion-dependent beta thalassaemia major (TD-BTM), hypothyroidism and type II diabetes mellitus, presented to the haematology department (at the age of 31 years) for follow-up and routine blood transfusion. Prior to the current presentation, she had been receiving treatment with deferasirox 1080mg daily [route not stated] as iron chelation therapy. Prior to the current presentation, she was previously admitted to the hospital with complaints of fever, sore throat, dyspnoea, fatigue and cough for duration of 4 days. The PCR via nasopharyngeal swab test for COVID-19 infection was found to be positive. The chest X-ray revealed multiple subtle opacities in bilateral mid and lower zones suggestive of infective changes. Laboratory findings revealed low haemoglobin and albumin levels and slightly decreased RBC count; however, WBC, platelet, CRP, lymphocyte, D-dimer, LDH, ALT and AST levels were elevated. She also had significantly elevated ferritin levels. Based on these findings, COVID-19 infection secondary to the deferasirox therapy was considered.

The woman was hospitalised for 12 days; however, no oxygen supplementation was required. At that time, she received an off-label treatment with azithromycin 500mg twice daily for 7 days, dexamethasone 6mg daily for 7 days and SC enoxaparin sodium [enoxaparin] 40mg daily for COVID-19 infection. At that time, she also received blood transfusion and underwent splenectomy for TD-BTM. PCR test performed 19 days later was found to be negative, indicating improvement in COVID-19 infection. However, at the age of 31 years, she presented (current presentation) to the haematology department for follow-up and routine blood transfusion. On current presentation, she had been receiving treatment with deferasirox as iron chelation therapy for thalassaemia along with metformin/sitagliptin [sitagliptin/metformin], insulin, tramadol and levothyroxine sodium [levothyroxine]. On current presentation, she was found to be asymptomatic for COVID-19 infection, and her vital signs were found to be within normal range. Before admitting her for the blood transfusion, PCR via nasopharyngeal swab (performed 55 days after the initial PCR) was performed, which revealed positive result, indicating asymptomatic COVID-19 reinfection (recurrence of COVID-19 infection). At that time, she had low haemoglobin level and decreased RBC count; however, WBC, platelet and lymphocyte counts were elevated. She was admitted to the quarantine facility and was isolated; however, no oxygen supplementation was required. Additionally, she did not receive any specific COVID-19 treatment. PCR test performed 18 days later revealed negative results.

Okar L, et al. First report of COVID-19 reinfection in a patient with beta thalassemia major. *Clinical Case Reports* 9: 861-865, No. 2, Feb 2021. Available from: URL: <http://doi.org/10.1002/ccr3.3682> 803548588