## Infliximab

## COVID-19 pneumonia: case report

A 60-year-old woman developed COVID-19 pneumonia following treatment with infliximab.

The woman, who had acute severe ulcerative colitis (ASUC), presented with a severe disease flare and was admitted on 28 February 2020. One week previously, she received infliximab [infliximab biosimilar CT-P13] infusion; however it was discontinued due to unspecified severe reaction. Laboratory investigations revealed mild anaemia, body temperature of 36.8°C and CRP level of 35 mg/dL. Sigmoidoscopy demonstrated severe disease with large, deep ulcers and mucosal friability. She thus started receiving parenteral nutrition supplement [total parenteral nutrition], along with unspecified corticosteroids and anti-thrombotic prophylaxis. However, no improvement was noted in the following 5 days. An elective colectomy and rapid steroid tapering was initiated. She subsequently developed fever, dyspnoea and dry cough. She was diagnosed with COVID-19 on 12 March 2020. Subsequent chest X-ray and CT-scan revealed several pulmonary infiltrates and regions of parenchymal thickening along with bilateral ground-glass opacities, which confirmed the diagnosis of COVID-19-related pneumonia.

The woman therefore started receiving off-label treatment with hydroxychloroquine and darunavir/cobicistat for the COVID-19-related pneumonia, along with supplemental oxygen [*dosages and routes not stated*]. Her ASUC symptoms aggravated with persistent hypoalbuminaemia, which required albumin supplementation and blood transfusions for worsening anaemia. In the absence of any COVID-19 surgery protocol, colectomy was delayed because of COVID-19-related risks of postoperative respiratory failure and due to her nutritional status, exhibiting lack of efficacy with parenteral nutrition supplement. Repeat nasopharyngeal swabs tested positive for for COVID-19. The immunosuppressive therapy with infliximab was considered as a risk factor for development of infection. She later developed a septic shock due to a central venous catheter-related infection. She was therefore treated with daptomycin and meropenem, which promptly resolved the septic shock. The respiratory conditions gradually improved. Chest CT scan done on 7 April 2020 showed a substantial regression of pneumonia. Her nasopharyngeal swabs continued to test positive for COVID-19. On 19 April 2020, an urgent laparoscopic colectomy with terminal ileostomy was performed. However, recurrent discharge from the inflamed rectal stump and a new central venous catheter-related infection was noted and she started receiving a combination of meropenem, daptomycin and caspofungin. Eight days after surgery, on 18 April 2020, her body temperature was found to be stable at 37°C, along with decreased rectal discharge and improvement in the serum inflammation markers. On 28 April 2020, she tested negative for COVID-19 and was discharged on the following day.

Ruscio MD, et al. A Challenging colectomy for acute severe ulcerative colitis complicated by covid-19. Inflammatory Bowel Diseases 26: E120-E122, No. 10, Oct 2020. Available from: URL: http://doi.org/10.1093/ibd/izaa186 803521877