Irish Medical Journal
Established 1867

Issue: Ir Med J; Vol 114; No. 9; P480

Delayed Diagnosis in ANCA-associated Vasculitis Due to COVID-19 Pandemic

R. Harrington, S.A. Al Nokhatha, R. Conway

Department of Rheumatology, St. James's Hospital, Dublin, Ireland.

Dear Sir,

The coronavirus disease 2019 (COVID-19) pandemic has had a profound impact on medical care. A significant strain has been placed on acute hospital systems to care for patients with COVID-19. However, the impact of delayed presentation, delayed diagnosis, and delayed treatment of other medical conditions may have an even greater burden in the longer term. As an exemplar of this phenomenon, we present two cases of antineutrophil cytoplasm antibodies (ANCA)-associated vasculitis (AAV) in which diagnosis was delayed due to initial suspicion of COVID-19. The clustering of AAV cases following COVID-19 lockdowns has been reported previously [1]. Delayed presentation has been suggested as an explanation for an absence of cases during lockdown followed by a compensatory increase post-lockdown [1]. However, we would like to suggest another mechanism whereby cases of AAV are initially diagnosed and treated as COVID-19 due to overlapping clinical features.

The first case was of a 65-year-old lady who presented with new onset right foot drop following a 6-week prodrome of coryzal features and sinusitis. She had developed otalgia, arthralgia, myalgia, and anosmia and was advised to isolate at home by her primary care physician. Laboratory testing demonstrated an acute kidney injury (creatinine 119 µmol/L), with an active urinary sediment, and elevated inflammatory markers (C reactive protein (CRP) 157 mg/L, erythrocyte sedimentation rate (ESR) 100 mm/hr). A polymerase chain reaction (PCR) test for SARS-CoV-2 was negative. Urinary protein creatinine ratio (uPCR) was elevated at 99 mg/mmol and red cell count (RCC) was 360 RCC/µL. c-ANCA was positive with a proteinase 3(PR3)-antibody titre of 177. A diagnosis of granulomatosis with polyangiitis (GPA) was made and treated with glucocorticoids and rituximab.

In the second case a 58-year-old lady presented with conjunctivitis, wrist and knee arthralgia, following a prodrome of fever, cough, sore throat and dyspnoea. CRP was 51 mg/L and ESR 47 mm/hr. She was initially reviewed over telehealth and a provisional diagnosis of COVID-19 and associated reactive arthritis was made and treated with prednisolone 20mg daily.

Chest radiograph demonstrated a right lower lobe opacity, computed tomography of the thorax demonstrated multiple cavitating pulmonary nodules. SARS-CoV-2 PCR was negative. Bronchoscopic evaluation showed severe nasal and post-nasal inflammation with subglottic stenosis and focal bronchial inflammatory change. Endobronchial biopsy demonstrated granulomatous inflammation and a subsequent c-ANCA was positive with a PR3 antibody titre of 50. A diagnosis of GPA was made and treated with glucocorticoids and rituximab.

Our cases were initially suspected of having COVID-19 and managed as such. The initial evaluation was limited due to pandemic restrictions. Persistent symptoms accompanied by negative SARS-CoV-2 PCR led to further investigation and diagnosis of AAV. Both cases have responded well to treatment and are in clinical remission. Our cases illustrate the potential for a delayed diagnosis of AAV during the COVID-19 pandemic even when patients present during their initial illness. Our cases have had no lasting negative consequences following the diagnostic delay; however, this is a very real concern in conditions such as AAV and we must remain vigilant for such presentations.

Keywords: COVID-19; ANCA-associated vasculitis; Delayed diagnosis

Corresponding Author:
Dr Richard Conway
Department of Rheumatology,
St. James's Hospital,
Dublin 8,
Ireland.
E-Mail: drrichardconway@gmail.com

References:

1. Gauckler P, Bettac EL, Nairz M, et al. What comes after the lockdown? Clustering of ANCA-associated vasculitis: single-centre observation of a spatiotemporal pattern. Ann Rheum Dis. 2020;80:669-671.10.1136/annrheumdis-2020-219212.