## **Multiple drugs**

## Angioedema and lack of efficacy: 4 case reports

In a case report, four women aged between 56-69 years were described, of whom three women developed angioedema during treatment with aspirin, paracetamol, celecoxib, lisinopril or oxycodone/paracetamol. Additionally, three of these four women exhibited lack of efficacy during treatment with dexamethasone or methylprednisolone for angioedema [routes, durations of treatments to reactions onset and outcomes not stated; not all dosages stated].

Patient 1: A 56-year-old woman was diagnosed with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection by real-time qRT-PCR and was admitted to the ICU for acute respiratory failure. Two days after admission, she required intubation and mechanical ventilation. Subsequently, she received off-label treatment with hydroxychloroquine for COVID-19 along with unspecified interleukin-6 [IL-6] and unspecified antagonist trial. Thirteen days after intubation, she developed tongue oedema and protrusion, upper airway oedema and was diagnosed with angioedema. Thus, she received dexamethasone 20mg followed by 3 doses of 10mg every 8 hours for 4 days. Additionally, she was receiving various concomitant medications. However, dexamethasone therapy did not alleviate her angioedema symptoms [lack of efficacy]. She required tracheostomy 25 days after intubation, due to high-risk extubation.

Patient 2: A 58-year-old woman had been receiving home medications including aspirin, lisinopril and oxycodone/paracetamol [Oxycodone-APAP] along with glimepiride, insulin-degludec and venlafaxine. She was diagnosed with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection by real-time qRT-PCR and was admitted to the ICU for acute respiratory failure. Five days after admission, she required intubation and mechanical ventilation. Subsequently, she received off-label treatment with hydroxychloroquine for COVID-19 along with unspecified interleukin-6 [IL-6] and unspecified antagonist trial. Ten days after intubation, she developed tongue oedema and protrusion, upper airway oedema, laryngeal oedema and was diagnosed with angioedema. Development of angioedema was attributed to aspirin, lisinopril and oxycodone/paracetamol. She received dexamethasone 10mg followed by 3 doses of 6mg every 8 hours for 7 days. However, dexamethasone therapy did not alleviate her angioedema symptoms [lack of efficacy]. A previously failed extubation on day 11 required reintubation on the same day due to hypoxia and stridor. Eventually, she was extubated after 27 days.

Patient 3: A 63-year-old woman had been receiving home medications including aspirin and celecoxib along with various concomitant medications. She had allergy to unspecified tetracyclines and unspecified macrolides. She was diagnosed with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection by real-time qRT-PCR and was admitted to the ICU for acute respiratory failure. One day after admission, she required intubation and mechanical ventilation. Subsequently, she received off-label treatment with convalescent-anti-SARS-CoV-2-plasma [Convalescent plasma] for COVID-19. Ten days after intubation, she developed tongue oedema and protrusion and was diagnosed with angioedema. Development of angioedema was attributed to aspirin and celecoxib. Eventually, she died 14 days after admission due to cardiac arrest, secondary to septic shock and respiratory failure.

Patient 4: A 69-year-old woman had been receiving home medications paracetamol [acetaminophen] and aspirin along with various concomitant medications. She had allergy to prochlorperazine and trimethobenzamide. She was diagnosed with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection by real-time qRT-PCR and was admitted to the ICU for acute respiratory failure. Three days after admission, she required intubation and mechanical ventilation. Subsequently, she received off-label treatment with hydroxychloroquine for COVID-19. Fourteen days after intubation, she developed laryngeal oedema, tongue oedema and protrusion and was diagnosed with angioedema. Development of angioedema was attributed to aspirin and paracetamol. She received methylprednisolone 40mg and dexamethasone 10mg every 6 hours for 2 doses for 2 days. However, dexamethasone and methylprednisolone therapy did not alleviate her angioedema symptoms [lack of efficacy]. She required tracheostomy 22 days after intubation.

Batarseh E, et al. Angioedema in African American patients hospitalized for COVID-19. American Journal of Respiratory and Critical Care Medicine 202: 1581-1583, No. 11, Dec 2020. Available from: URL: http://doi.org/10.1164/rccm.202006-2223LE