Reactions 1855, p111 - 15 May 2021

Chloroquine

Prolonged corrected QT interval following off label use: 2 case reports

In a case series, two patients (a woman aged 40-years and a man aged 51-years) were described who developed prolonged corrected QT (QTc) interval while receiving off label treatment with chloroquine for COVID-19 infection.

Patient 1: A 40-years-old woman with history of contact with a COVID-19 positive patient (her husband), presented to a hospital in Indonesia due to complaints of cough, chest discomfort, mild fever and mild headaches. A real-time PCR (RT-PCR) test showed positive result, and a diagnosis of COVID-19 infection was confirmed. Subsequently, off label treatment was started with azithromycin 500mg once daily, chloroquine [chloroquine sulfate] 500mg twice daily, oseltamivir 75mg twice daily and high dose ascorbic acid [vitamin-C]. At this time, her QTc-interval was 459ms. She was also noted with mild anxiety and was prescribed low dose alprazolam, but only partial effect was noted. Later, on day 4 of COVID-19 infection treatment, an ECG showed normal sinus rhythm with an increased QTc interval of 510ms. Hence, her azithromycin, chloroquine and oseltamivir therapies were discontinued, and she was placed under close monitoring. After receiving supportive treatment for four days, her QTc returned to baseline. Two days later, she tested negative for COVID-19 infection and was discharged home.

Patient 2: A 51-years-old man with history of contact with a COVID-19 positive patient, presented to a hospital in Indonesia due to sore throat. A real-time PCR (RT-PCR) test showed positive result, and a diagnosis of COVID-19 infection was confirmed. Subsequently, off label treatment was started with azithromycin 500mg once daily, chloroquine [chloroquine sulfate] 500mg twice daily, oseltamivir 75mg twice daily and high dose ascorbic acid [vitamin-C]. At this time, his baseline QTc-interval was less than 500ms. On day 3 of treatment, an ECG showed prolonged QTc interval of 530ms. Hence, his chloroquine therapy were discontinued. Subsequent ECG showed normal sinus rhythm with return of QTc-interval to baseline. He was discharged home on day 11 of hospitalisation after negative RT-PCR test.

Widyaningsih PD, et al. Chloroquine-induced prolonged QT interval in COVID-19 patients in Indonesia: Case series. Biomedical and Pharmacology Journal 14: 1-5, No. 1, Mar 2021. Available from: URL: http://doi.org/10.13005/bpj/2094