Successful PCI with stenting for total occlusion of right coronary artery in a female patient with acute coronary syndrome in COVID -19 era

Baatyr A. Zhakypov, Zairbek A. Syrgaev, Abai K. Turdubaev

Scientific Research Institute of Heart Surgery and Organ Transplantation, Bishkek, Kyrgyzstan

COVID-19 pandemic is currently the most urgent health problem. However, at the time when all the emphasis shifted to the coronavirus many patients with other diseases experienced serious difficulties in getting help, especially patients with heart disease. We present here the case of acute coronary syndrome with total occlusion of right coronary artery successfully treated with PCI and stenting during COVID-19 pandemics.

A 58-year-old woman woke up at about 2 am due to discomfort in the left chest area. At first, she did not understand the meaning and thought it would pass. However, by 6 am the pain began to intensify having burning and pressing character. She was admitted to the intensive care unit by ambulance service. On electrocardiogram (ECG) she had ST-elevation in

inferior leads – II, III, AVF (Fig. 1 top), but her troponin level was normal.

After receiving informed consent from patient and her relatives, we decided to perform coronary angiography and PCI with stenting. On coronary angiography, a total occlusion of right coronary artery (RCA) was revealed (Fig. 2, Video 1). Video 2 and Figure 3 demonstrate stenosis of RCA where thrombus was formed. After deployment of stent, the full patency of RCA was restored (Video 3, Figure 4). The ECG (Fig. 1 bottom) showed resolution of ST segment elevation. The patient is in excellent condition and feels well.

Patients should seek medical care promptly in case of chest pain and heart disease despite pandemics and timely applied treatment by heart team is life-saving.

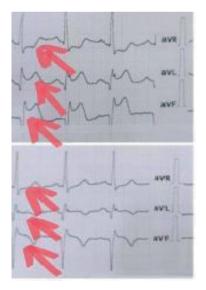


Figure 1. Top) ST-segment elevation in leads II, III and aVF, q wave II, III, aVF and ST depression in lead I, aVL; Bottom) ST segment resolution in leads II, III, aVF, q wave and negative T wave II, III, aVF



Figure 2. Total occlusion of right coronary artery (red arrow)

Video 1. On the video of coronary angiography total occlusion of the right coronary artery is seen (visit www.hvt-journal.com)

Video 2. The video shows stenosis of the right coronary artery after the lumen was restored (visit www.hvt-journal.com)

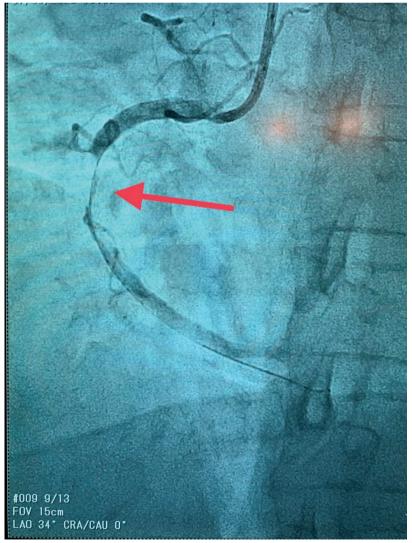


Figure 3. Stenosis of right coronary artery is seen after the lumen was restored (where the thrombus was formed)

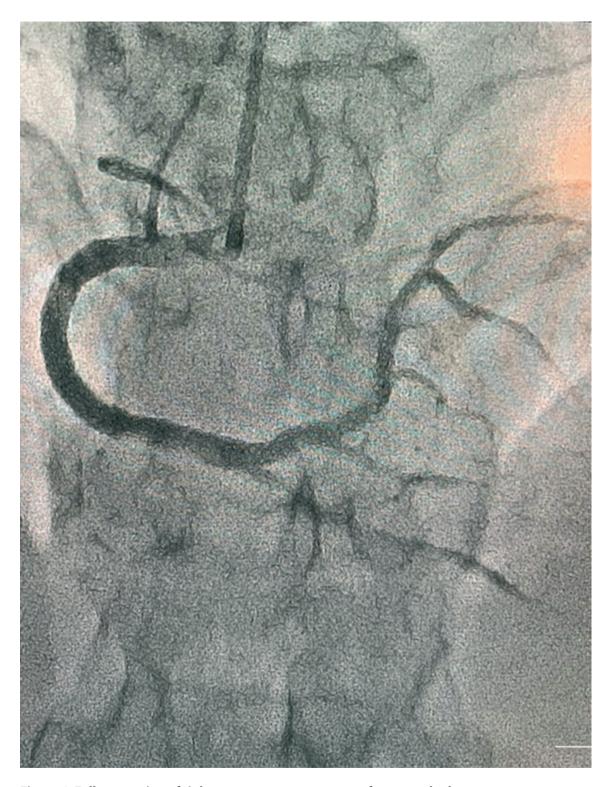


Figure 4. Full restoration of right coronary artery patency after stent deployment

Video 3. Full restoration of right coronary artery patency after stent deployment (visit www.hvt-journal.com)