

A case of Takotsubo cardiomyopathy with COVID 19

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A 71-year-old woman was admitted to our hospital after fainting. Her past medical history included arterial hypertension, hypercholesterolaemia, and normotensive hydrocephalus treated with a ventriculoperitoneal shunt. She was taking amlodipine and rosuvastatin. She was dyspnoeic at rest, afebrile, with a heart rate of 75 b.p.m. and a blood pressure of 119/76 mmHg. Hypoxaemia was present (PaO_2 of 56 mmHg) despite a 100% O_2 non-rebreathing mask. The patient was put on mechanical ventilation. Contrast-enhanced brain CT was negative. The chest CT showed ground glass opacity involving 10–20% of the lungs (*Panel A*). Blood tests showed elevated troponin T (412.7 ng/L, normal <14). The ECG showed sinus rhythm with prolonged QT interval (QTc 521 ms) (*Panel B*). The nasopharyngeal swab PCR test was positive for a SARS-CoV2 infection.

The patient underwent a coronary angiogram showing significant lesions on the proximal LAD and the first diagonal arteries. Two drug-eluting stents were successfully placed. The ventriculogram showed regional wall motion abnormality unrelated to the coronary lesions, compatible with a median Takotsubo.

(*Panels C and D*; [Supplementary material online, Video 1](#)).

To our knowledge, this is the first description of median Takotsubo syndrome in a patient with COVID-19. This case stresses the importance of the differential diagnosis of troponin elevation as other causes such as Takotsubo syndrome might be found in SARS-CoV2 infection.

Conflict of interest: none declared.

[Supplementary material](#) is available online at *European Heart Journal – Cardiovascular Imaging*.

