

124 Tiny but useful transportable remote monitoring device during SARS-CoV-2 pandemic

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A 45-year-old woman, without cardiovascular risk factors and affected by chronic migraine, presented to the emergency department due to the onset of a typical chest pain. After performing an electrocardiogram she was promptly transported to the Cath lab, with the diagnosis of ST segment elevation myocardial infarction (STEMI), for urgent coronarography. A spontaneous dissection of the first obtuse marginal branch was detected which was treated with two drug eluting stents implantation. A day after the procedure, during a migraine crisis, at the continuous electrocardiographic monitoring it was registered a brief episode of complete atrioventricular block, which regressed spontaneously after a few minutes. For this reason, she underwent atropine test which resulted negative for AV conductance defects. No more episodes were recorded during the hospital stay, however it was decided to implant a loop recorder (Biotronik BIOMONITOR III) before the discharge. The patient received a remote monitoring device in order to allow a closer follow-up in course of the COVID-19-related lockdown, that caused a relevant reduction in the outpatients' services. A few months later a sinusual pause of about 9 s was recorded with the emergence of an idioventricular rhythm at 25 b.p.m. When contacted by telephone the patient reported being hospitalized because of pulmonary complications of SARS-CoV-2 infection. She referred of being bedridden, without any cardiac monitor and of being asymptomatic for syncope. Thus, she was transferred to a Cardiology Unit dedicated to patients affected by SARS-CoV-2 disease, for further diagnostic investigations. This represents a case in which the remote monitoring technology resulted fundamental in the management of patients with implantable devices, in particular during COVID-19-related lockdown. However, it is at least as much important to encourage the patient to carry the transmitter with him, even in the case of unexpected events or hospitalizations, in order to gain access to all the information store in the CIED which might be useful to the diagnosis of the underlying disease. Biotronik has developed the smallest remote transmitter in commerce (CardioMessenger Smart) which is functional to this kind of use. Moreover, it has an automatic interrogation function which can send the alerts about the arrhythmic events quicker than the other brands and so it's more practical in situations where the patient is hospitalized in non-cardiological units.