A Case of Vasospastic Angina Who Had Significant Bradycardia Recorded Automatically in Implantable Loop Recorder with Delay from Symptom Onset

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We report an interesting case that required careful analysis of the records of implantable loop recorder (ILR). A 68-year-old male patient was referred to our hospital for syncope and chest discomfort in the early morning. He was suspected of vasospastic angina (VSA). Coronary angiography showed normal coronary and acetylcholine provocative test was negative. Head up tilt test was negative. His symptom continued and Holter ECG monitoring could not reveal any arrhythmia. He was performed ILR implantation for the purpose of diagnosing syncope. After several months, his symptom occurred. ILR automatic record showed junctional rhythm and he was diagnosed as symptomatic sick sinus syndrome and recommended pacemaker implantation. Before operation, ILR records were analyzed in detail, automatic record showed junctional rhythm and heart rate was 30/min, but symptom triggered record showed sinus rhythm and heart rate was 60/min. It showed that the bradycardia automatically recorded in ILR occurred long after the symptom onset. Operation was postponed and pharmacological treatment was started for suspicion of VSA. Two days after, symptomatic significant ST elevation was recorded and he was diagnosed as VSA. The ILR record could not show ST segment change. This case demonstrates a VSA patient who has a time lag between onset of symptom and bradycardia which subsequently occurs.

Keywords: syncope, implantable loop recorder