Palpitations in young people: subjective feelings versus objective electrocardiographic data - a case report

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Case report: Through Holter ECG diagnostic results we will present the case of 38-year-old male, who has daily palpitations when falling asleep. Full diagnostics were performed through Outpatient Clinic, and the findings were unremarkable considering his age. We conducted a CT coronary angiography, 24-hour ECG recording, 24-hour ambulatory blood pressure monitoring, and neurological assessment. The findings were all within acceptable ranges, but the patient continued to complain of daily palpitations when falling asleep, causing further mental stress because the complaints were getting more and more pronounced, while the results of our assessments showed nothing out of the ordinary. Holter monitoring uncovered a detail not described in current practice since the device was worn during the time of discomfort. The patient marked the time of discomfort on the machine at the exact moment it was occurring, providing a valuable data point, an ECG image of the reported issue. A heart rate acceleration below 100 beats-per-minute was recorded, which would be considered normal under a regular ECG. However, precisely these accelerations recorded frequently during the night led to the need for treatment with other methods. Consequently, a moderately severe sleep apnea was determined by polysomnography.

Conclusion: Holter ECG gives us the possibility to review the ECG at any time through 12 channels, and in the above case we had the opportunity to see the whole story, which led to recording the heart accelerations through this diagnostic procedure. This prompted a broader diagnostic testing leading to uncovering the cause of discomfort and subsequent diagnosis, proving once again that normal findings do not necessarily mean a healthy patient. 1-3

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