

## 5. Risk Stratification of Patients following Myocardial Infarction

In patients with a condition following a myocardial infarction, there exists, with a reduced heart rate variability, a heightened risk of sudden cardiac death (sudden death).

With **clue medical**, it is easily possible to examine such patients after a myocardial infarction on a mobile basis and apply a risk stratification.

In the measurements taken by the patient at home with **clue medical** in the subsequent weeks, noticeably reduced heart rate variability values were recorded on several occasions as well as a slightly increased resting heart rate of slightly higher than 80/min. The reduced heart rate variability was also able to be confirmed in a 24 hour ECG recording.

The patient then underwent programmed ventricular stimulation. In this test, sustained ventricular tachycardia was able to be induced.

A defibrillator implant was recommended to the patient and subsequently performed.

### The employment of clue medical

**clue medical** can be used in patients having suffered a heart attack for follow-up observation.

Particular attention should be given to a changed and/or reduced heart rate variability which is described in many publications as a risk marker for sudden cardiac death (sudden death).

*The 58 year old patient T.I. suffered a heart attack in January 2008. Following coronary intervention, the patient was symptom-free. He presented a moderately reduced left ventricle function.*

### Literature

*Noninvasive Risk Stratification for Sudden Death: Signal-Averaged Electrocardiography, Nonsustained Ventricular Tachycardia, Heart Rate Variability, Baroreflex Sensitivity, and QRS Duration, Kenneth M. Stein Progress in Cardiovascular Diseases Volume 51, Issue 2, September-October 2008, Pages 106-117*

*Heart rate variability in myocardial infarction and heart failure*

*Nipon Chattipakorn, Tanat Incharoen, Natnicha Kanlop, Siriporn Chattipakorn, International Journal of Cardiology 120 (2007) 289-296*

*Heart Rate Variability KENNETH C. BILCHICK, M.D. and RONALD D. BERGER, M.D., PH.D. J Cardiovasc Electrophysiol, Vol. 17, pp. 691-694, June 2006*

