Casestudy # 5 **Effects of other Diseases on the Cardiovascular System**

Effects of other Diseases on the Cardiovascular System

Diabetes, kidney and thyroid disease as well as a number of otherdiseases are also manifested in cardiac parameter changes, in particular heart rate variability changes.

With **clue medical**, all of the aforementioned groups can be easily tested and monitored in the course of disease.

In the HbA1C test ultimately performed, a value of over 10(normal: up to 6) was found and the diagnosis was confirmed. The patient was started on insulin therapy.

Since then, the patient has been well controlled and properly treated.

The 65 year old patient M.B., was suspected of having diabetes mellitus.

A test with **clue medical** showed a considerably reduced heart rate variability.

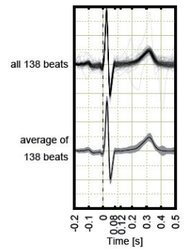
This strengthened the suspicion that the patient was suffering from long-standing untreated diabetes.

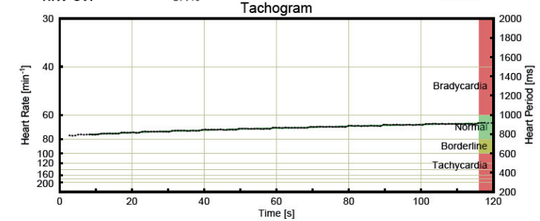
clue medical

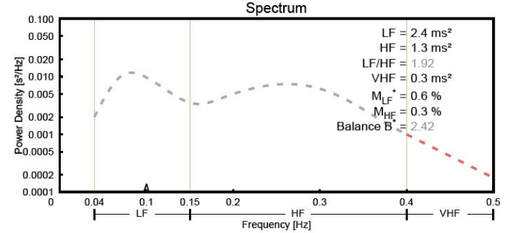
Surname:
First Name:
Date of Birth:

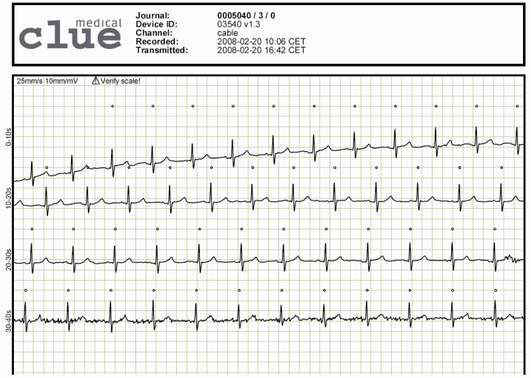
Remarks:

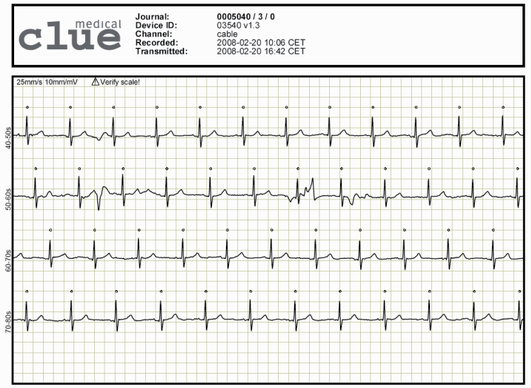
Journal:	**0005040 / 3 / 0**
Device ID:	03540 v1.3
Channel:	cable
Recorded:	2008-02-20 10:06 CET
Transmitted:	2008-02-20 16:42 CET
Heart Rate:	69.9 min^{-1}
Heart Period:	858 ms
HRV-SDNN:	3 ms
HRV-CV:	0.4%

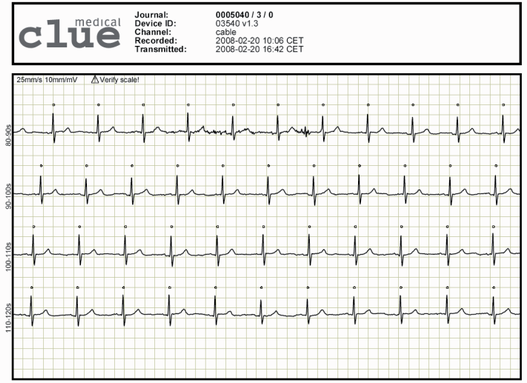












Use of clue medical

Even with non-cardiac diseases such as diabetes, kidney and thyroid disease, measurement of heart rate variability using **clue medical** can provide interesting additional information with prognostic significance.

Literature

Heart rate variability (HRV) in kidney failure: measurement and consequences of reduced HRV
Reena Ranpuria1, Martica Hall2, Chris T. Chan3 and Mark Unruh1 Nephrol Dial Transplant (2008) 23: 444–449

Cardiovascular autonomic neuropathy: diagnosis and management.
Vinik AI, Erbas T. Curr Diab Rep. 2006 Dec;6(6):424-30.

Diabetic Autonomic Neuropathy
Aaron I. Vinik, MD, PHD, Raelene E. Maser, PHD, Braxton D. Mitchell, PHD and Roy Freeman, MD Diabetes Care 26: 1553-1579, 2003