

Case Report of a Pace-Maker Related Death

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We report on a patient who at the age of 78—4 years prior to his death—consulted his doctor with the classic symptoms of the ‘Sick Sinus Syndrome’ (dizziness, confusion, fatigue, and syncope). The diagnosis of a bradycardic sinus node dysfunction was confirmed by a cardiologist. After implantation of an anti-bradycardia pacemaker the patient made a full recovery.

Due to a worsening of the medical situation the patient was admitted to hospital care 8 weeks before his death. A cardiac decompensation with a global cardiac insufficiency was diagnosed. For the duration of 8 weeks the patient's condition was treated with drugs. At that point the patient died in the hospital. In the death certificate the primary cause of death was stated as ‘cardiac decompensation’.

An autopsy was performed by the resident pathologist. The pacemaker generator was left in place above the pectoralis muscle. The electrode showed signs of stretching but was still connected to the generator. During the second post-mortem examination before cremation the pace-maker was explanted.

Telemetric interrogation of the pacemaker generator showed battery to be depleted. No electrical output could be measured from the generator terminals. The generator functioned flawlessly after opening the hermetically sealed PM with a diamond saw and replacement of the dead battery.

It is highly probable that the pacemaker was defective due to the drained battery even 8 weeks before the death of the patient and thus cause of the global cardiac insufficiency. Thus the faulty pacemaker has to be seen as the cause of death and the ‘type of death’ would have to be classified as ‘not natural’.

From a forensic point of view a thorough investigation of an implanted pacemaker seems to be of paramount importance for finding the precise cause of death.