A Happy Ending

In the Intensive Care Unit

A frail woman in her sixties was brought to the emergency department (ED) by her daughter, a medical student, because of fever and chest pain. The ED physician assigned her a telemetry bed and started the work-up. After the electrocardiographic leads were attached, the monitor showed sinus bradycardia, with a rate of approximately 30 bpm. Her oxygen saturation reading was also abnormal. Arterial blood gas analysis showed that she was acidotic and hypoxic. After deciding to intubate and externally pace her, the ED physician placed transcutaneous pacemaker pads on the anterior chest wall. Results of cardiac isoenzyme measurement were within normal range, thus ruling out the possibility of myocardial infarction. She was transferred to the intensive care unit.

In the intensive care unit, the night resident (one of the authors) took charge of the case and telephoned the attending cardiologist on call regarding the persistent bradycardia. The attending cardiologist suggested preparing the patient for transvenous pacemaker placement. Having assembled all necessary tools, the resident scrubbed, dressed, and stood bedside as the attending cardiologist arrived. The attending cardiologist spoke to the patient's daughter and explained that her mother had a slow heartbeat and needed a transvenous-pacing device as a temporary measure only. In all probability, the procedure would be successful, and, after her mother's recovery, a decision could be made regarding the need for a permanent pacing device. Satisfied by the explanation, the daughter gave her consent and the resident, with the cardiologist present, began the procedure. The resident inserted the sheath via the right internal jugular vein and, after encountering some resistance, inserted the pacing wires as well. As the voltage was increased slightly, however, the patient went into asystole. The wires were partially withdrawn, and the heart rate appeared to return. The attending cardiologist adjusted the wires, but each time they were inserted, the result was the same—asystole. After the third attempt, the patient had a persistent asystolic rhythm, and a code was called. The procedure was aborted and resuscitation measures were begun.

A team of residents and therapists entered the patient's room; resuscitation measures were continued for the next 15 to 20 minutes, with no success. The attending cardiologist finally sent the residents back to their respective jobs and emerged to talk to the daughter. With exhaustion evident on his face, he explained to her what had happened, apologizing that the resuscitative measures were unsuccessful.

Back in the room the patient was still on the ventilator as the nurse covered her with blankets. The nurse was called by another patient and briefly left the room. To her surprise when she returned, there was cardiac activity on the monitor. Rushing out to get the attending cardiologist and resident, she could only point to the room and the patient. The team returned quickly to the room and confirmed the cardiac activity. Heart rate was 32 bpm. They performed auscultation and examined her. She had appropriate reflexes and an intrinsic rhythm. Transcutaneous pacemaker pads were put back on and she was stabilized

The chief resident (one of the authors) learned of the incident the next morning. Everyone shared responsibility for what had happened. A lack of communication among team members was the crux of the problem. It was discovered that the patient, on arrival at the ED, had been septic and hypothermic, conditions in which transvenous pacing is contraindicated. When the code was canceled and the blankets were placed over her body, she warmed up sufficiently for cardiac activity to return. An important lesson was learned by all. The patient survived for a few more years and did not pursue litigation.

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