Images in Emergency Medicine: Pacemaker Extrusion Causing Chest Pain

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Figure.

A 55-year-old Hispanic male had a pacemaker placed in Mexico approximately one year prior to presenting to the Emergency Department. He noticed minor discomfort in his left chest one month earlier but did not see a physician. The discomfort steadily increased and he saw a small piece of metal poking through the skin. He assumed it was a staple or something minor related to the surgery; however, it gradually increased in size over the next few weeks until he realized it was the pacemaker itself eroding though his chest wall. A cardiology consultation was called, and an EKG showed that the pacemaker was still functioning normally. He was admitted with a plan for operative repair.

Pacemaker erosion or extrusion has been reported in 0.9% of patients receiving the device.[1] The two main causes are infection and pressure necrosis.[1,2,3] Infection has been shown to be reduced by antibiotic treatment during the peri-placement period, and pressure necrosis appears to be influenced largely by the size of the device, complexity of the connections and technical skill with which the pocket is created.[1,2] After extrusion, the pacemaker should be considered contaminated and removed.

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