Sewing needles embedded in the cardiac interventricular septum and chest wall

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A 61-year-old woman with a history of anxiety and depression, status post left mastectomy, and with resultant diminished sensation in her left chest wall presented with a 2-month history of left-sided chest pain and shortness of breath. Chest roentgenograms revealed the presence of thoracic foreign bodies consistent with sewing needles (Figure 1). Computed tomographic scanning with 3-dimensional reconstruction demonstrated the location of one the

needles to be in the cardiac interventricular septum and right ventricular apex; the remaining 2 additional needles were embedded in her left chest wall (Figure 2, A). The patient attributed the presence of these needles to accidental penetration while sleeping with her sewing materials nearby. Transthoracic echocardiographic analysis showed the needle as a linear echodensity in the right ventricular cavity extending to the midinterventricular septum (Figure 2, B). Cardiac catheterization revealed no flow-limiting coronary disease (Figure 2, C). The patient was taken to the operating room. At the time of the operation, careful inspection demonstrated the needle's presence approximately 0.5 cm from the left anterior descending artery associated with a surrounding hematoma (Figure 3). By carefully pressing down in the region of interest, we could grasp the needle and remove it en bloc (Figure 3). The chest wall needles were extracted through an incision in the fourth intercostal space.

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FIGURE 1. Three thoracic foreign bodies consistent in appearance with sewing needles are shown on posteroanterior and lateral chest radiographs.

FIGURE 2. A, One needle is seen penetrating the heart and 2 additional needles are seen to be located in the chest wall in this 3-dimensional reconstruction of thoracic computed tomography. B, The intracardiac needle appears as a linear echodensity (*arrow*) extending from the midinterventricular septum into the right ventricular cavity in this echocardiographical image. C, The intracardiac needle is located near the left anterior descending artery in this image from cardiac catheterization.

FIGURE 3. Intraoperative photographs show an epicardial hematoma just medial to the left anterior descending artery and needle extraction from this region. A separate incision was used to remove the 2 additional needles embedded in the chest wall (not pictured). The 3 specimens are shown.