Not just a toy: accidental cardiac injury from an air rifle

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A 25-year old male presented overnight with a single air rifle wound to the chest. A CT scan revealed a developing pericardial effusion with a pellet in the right ventricle (Figs 1 and 2). A right atrial entry wound was primarily repaired while on cardiopulmonary bypass in theatre.

Figure 1: Chest computed tomography. (Left) Axial 1 mm section showing metal opacity within the right ventricle. (Right) Coronal 1 mm section showing metallic opacity (with streak artefact) overlying the right ventricle. Surgical exploration was expedited and the patient made a full recovery despite the pellet not being located.

Figure 2: CT volume 3D reconstruction. The right thoracic rib cage and the lateral wall of the right ventricle are removed. The central metallic pellet and its proximity to the aorta (posterior) are visualized.