A Hunting Accident

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A 65-year-old male was admitted to the emergency department after sustaining a gunshot wound to his chest and abdomen, owing to a hunting accident. He was initially haemodynamically stable with a blood pressure of 120/70, and his ECG showed no particular disturbance. Computed tomography revealed multiple buckshot in his thorax and his abdomen (Figure 1). In the heart, two lead shots were situated in the interventricular septum, accompanied with a slight hemopericardium.

Echocardiography in the emergency room confirmed at least one lead shot clearly visible in the interventricular septum, with a straight posterior reinforcement (Figure 2 and Video1, supplementary material). Ultrasound showed also the slight hemopericardium, normal left and right ventricular function, no valvular injury, and no evidence of a ventricular septal defect. Assessment of other lesions showed several abdominal and thoracic lead shots, especially in his liver and his lungs, but fortunately with no intraparenchymatous or intraperitoneal significant hemorrhage requiring urgent surgery.

The patient initially had a good haemodynamic, and the pericardial effusion was minimal; he was transferred in intensive care unit for close monitoring. After approximately 3 hours of observation, the patient experienced a progressive drop in blood pressure, associated with an increase in his hemopericardium which led to a transfer in a cardiac surgery centre, and a pericardial drainage. The surgeon evacuated 400 ml of haemorrhagic pericardial fluid, and placed sutures on a right ventricular free wall injury. The patient was discharged from the Hospital 8 days after surgery. His clinical and haemodynamic condition was good, and the echocardiography at discharge showed the ventricular septal pellets, with no associated complications.

Treatment of intracardiac foreign bodies in emergency conditions is usually based on early surgical intervention [1,2]. Limited data exist regarding the conservative management of intracardiac material after trauma [3,4]. In our case the medical staff decided to evacuate the compressive pericardial effusion, but not to remove the myocardial lead shots.

Declarations of Interest
The authors declare no conflicts of interest.

Acknowledgements
The authors agree to abide by the requirements of the “Statement of publishing ethics of the International Cardiovascular Forum Journal” [5].

Keywords: lead shot, myocardial injury, intracardiac foreign bodies

Citation: Niamkey T, Ricci JE, Messner P, Soullier C. A hunting accident. International Cardiovascular Forum Journal 2016;8:129-130. 10.17987/icfj.v8i0.342

Figure 1. Cardiac computed tomography revealing two lead shots situated in the interventricular septum in a four-chamber view (A) and in a short axis view (B).

Figure 2. Subcostal view (A) and parasternal short axis view (B) of a transthoracic echocardiogram demonstrating at least one lead shot within the interventricular septum.
References
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