

Letter to the Editor-Editöre mektup

Cardiac tamponade caused by myocardial erosion secondary to the firearm pellet injury

Ateşli silah yaralanması sonucu meydana gelen miyokard erozyonunun yol açtığı kardiyak tamponad

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A 20-year-old man presented with severe dyspnea after a thoracic firearm injury. Many pellets distributed in the thoracic wall and an enlarged cardiac silhouette was detected on chest X-ray. Electrocardiogram demonstrated regular sinus rhythm with low voltage. Transthoracic echocardiography (TTE) revealed pericardial effusion causing cardiac tamponade and the presence of a swinging retained pellet in the pericardium and the absence of intra and extracardiac shunt (Figure 1 and 2). The patient was transferred to the operating room and examination of the heart showed intrapericardial localization of the pellet and erosion of the left side of the myocardium without any coronary artery and other cardiac injuries (Figure 3). Primary suture of erosion was performed with patch on beating heart successfully. After operation TTE was performed again and revealed no abnormalities. This case highlights the role of TTE in emergency room to exclude or confirm the potential cardiac injury and importance of rapid diagnosis and operation should be emphasized to reduce mortality due to cardiac tamponade [1, 2].

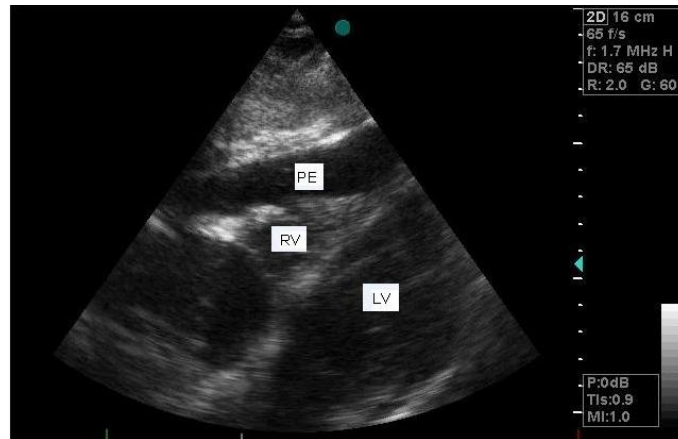


Figure 1. Subcostal view showing a large pericardial effusion causing diastolic collapse of the right ventricle which is an ominous sign of cardiac tamponade. LV: left ventricle; RV:right ventricle; PE:pericardial effusion

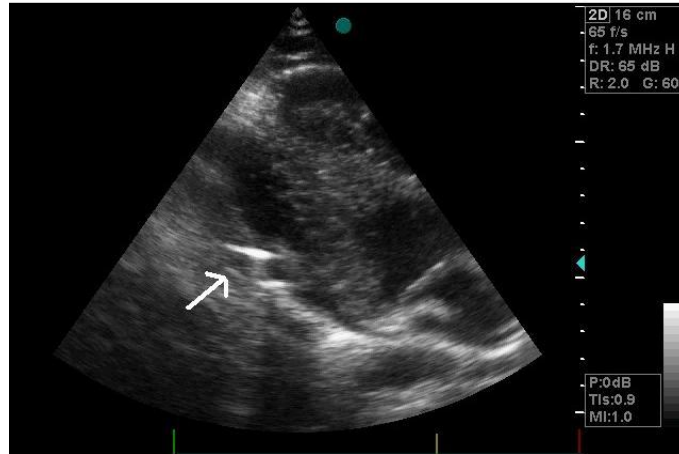


Figure 2. Parasternal long axis transthoracic echocardiographic view showing a retained pellet in the pericardium (arrow).

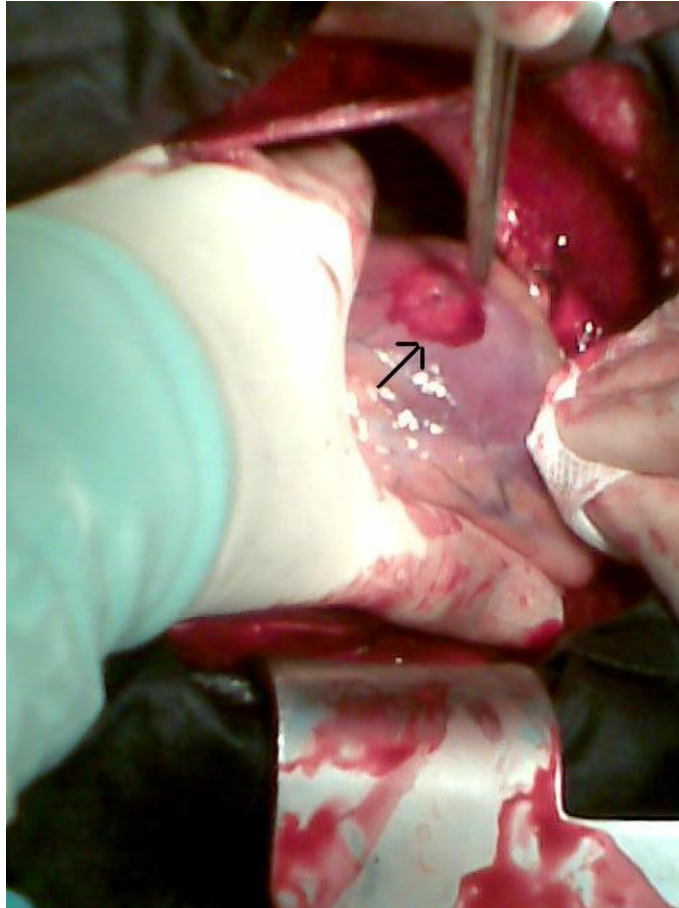


Figure 3. Intraoperative view of the heart showing the erosion of the myocardium (arrow).

References

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