

P191

Pellets in right ventricle. Without entry point?

Pinillos Francia G.; Gutierrez Fernandez A.; Alvarez Roy L.; Ruiz Zamora I.; Gomez Llorente M.; Sufrate Sorzano E.; Alonso Perez L.; Aguiar Souto P.; Azcarate Aguero PM.

Hospital San Pedro, Cardiology, Logroño, Spain

Case Report

A 39-year-old male patient was transferred to emergency room by mobile intensive care unit after receiving a firearm wound in the neck while hunting: accidentally hit by a shotgun. Physical examination highlighted the existence of multiple entry holes at right side face and neck and some above the shoulder girdle line, the rest of the thorax and abdomen did not present skin lesions. Axial tomography (CT) showed multiple pellets in the face and neck tissues and two intracardiac pellets in the right ventricle. He did not present pneumothorax, pneumopericardium or pericardial effusion. He underwent surgical intervention by otolaryngology and vascular teams due to right cervical hematoma and secondary alterations to the shot in the right internal jugular vein. Enucleation of the right eye was also necessary. Echocardiographic study showed the presence of a small hyperechogenic mass with posterior acoustic shadow located in interventricular septum. Another similar structure was also found, in the right ventricle, next to the tricuspid annulus: normal tricuspid valve function. Considering the trajectory (blue triangle) of the shot and the absence of thoracic complications, we thought about the plausibility of projectile embolization from the right internal jugular vein.

Discussion: The presence of projectiles in different cardiac structures can occur by direct impact (the most frequent mechanism), passing through thoracic and/or abdominal structures to be lodged in the pericardium and/or myocardium. They are often accompanied by manifestations such as pericardial effusion or pneumothorax as a result of their trajectory. Embolization to the heart is a much more uncommon mechanism by impacting in another anatomical location such as the neck or lower extremities. In these cases there may be no extra-cardiac manifestations and can be an incidental finding of a previous event. In our case the intracardiac pellets were handled conservatively and the rest of the wounds produced by the shot showed a good evolution. The patient remained asymptomatic from a cardiological point of view during hospitalization and follow up. There is no evidence to support the therapeutic attitude that should be followed in these cases. When the patient is stable and the projectiles are non-mobile, conservative treatment with periodic follow-up is a suitable option.

Abstract P191 Figure. A. 3D echo, B. Xplane, C. CT VR.

