

Case #35

NAME Educational Activities Committee

Case provided by:

Dr. Catherine Miller (Associate Medical Examiner)
Palm Beach County Medical Examiner





1. The decedent was a young male who was discovered in his home with an apparent gunshot wound.
What are the radiopaque foreign objects seen on the LODOX images?
O Displaced dental amalgam
Radically Invasive Projectile (RIP) trocars
O Air gun pellets
O .22 caliber handgun rounds
O Snake shot

Answer...

C. Air gun pellets! (CORRECT ANSWER, 10.53% responses)

Air gun pellets come in a variety of shapes and sizes. The pellets in this case were Crosman .177-Caliber Lead-Free PowerShot Fast Flight Penetrator Pointed Pellets.

At autopsy, the decedent was found to have been shot nine times with a pump-action air gun. Of note, these particular pellets are sabot rounds – they come incased in an orange plastic sabot, which is radiolucent. One sabot was discovered deep in the decedent's right cheek



A. Displaced dental amalgam (12.35% responses)

Dental amalgam is a mixture of mercury, silver, tin, and copper, and is radiopaque on radiographs. It can be dislodged from or with the tooth in settings of trauma. Amalgam can appear smooth on radiographs, but more often it has an irregular appearance, conforming to the cavity it is filling in a given tooth

B. Radically Invasive Projectile (RIP) trocars (64.37% responses)

Radically invasive projectiles consist of a solid base 'slug' and six to eight tine-shaped 'trocars'. The projectiles are designed to break apart on impact into individual trocars and the base, causing significant damage. The trocars of a radically invasive projectile are small, and may mimic air gun pellets on radiology



Photo Courtesy of Bin im Garten - CC BY-SA 3.0



Photo courtesy of Dr. Jessica Dwyer,
Dallas TX, Southwestern Institute of Forensic Sciences

D. .22 caliber handgun rounds (4.45% responses)

.22 caliber rounds are small caliber and are a popular bore diameter used in handgun and rifle ammunition. This caliber round can be challenging to locate during the course of a forensic autopsy.

E. Snake shot (8.30% responses)

Also known as rat short and dust shot, snake shot is a handgun or rifle cartridge that is loaded with small lead pellets. The pellets are typically round, though they can deform upon entry into the body.



Example of small caliber (.22) snake shot ammunition broken into components including the plastic cap, shot, and small cardboard wads. Photo provided by Dr. Reade Quinton, Mayo Clinic Rochester.