H150 Radically Invasive Projectiles (R.I.P.s) and Other Unusual Ammunition: A Case Series

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Learning Overview: After attending this presentation, attendees will be familiar with the characteristics of the R.I.P. and will better recognize the radiographic and autopsy findings associated with various unusual ammunition.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by sharing cases of unusual ammunition experienced by forensic pathologists in an urban setting with an exceedingly high rate of gun violence.

The landscape of firearms and ammunition is ever-changing, with different styles of ammunition becoming more readily available and other styles falling in and out of favor. Since recovery and identification of bullets and bullet fragments is an integral part of any death involving a firearm, this presents a challenge for examiners encountering either long-defunct, unique rounds or novel, highly engineered ammunition.

G2 Research's R.I.P. bullets are one such brand of novel ammunition that is rapidly growing in popularity. R.I.P. bullets are solid copper projectiles into which eight trocar spires are machine carved. The trocar design reportedly increases stability while allowing the bullet to function like a saw and effectively pass through solid barriers, such as sheetrock, cinderblock, and metal. When the R.I.P. bullet strikes a soft target, however, the solid base penetrates deeply into the target while the trocar elements break off and bore outward into adjacent structures. The R.I.P. bullet is therefore designed to have the maximum stopping power of a hollow-point bullet with the collateral damage of a frangible projectile. At autopsy, the R.I.P. bullet's design results in atypical wound patterns and paths, which can be difficult to interpret, especially in the setting of multiple projectiles. Awareness of the extremely sharp trocar fragments is particularly important as they can be a hazard to the examiner and the technician performing the case.

While basic knowledge of ammunition is essential for the forensic pathologist, those practicing in an urban setting are increasingly exposed to unique ammunition and need to become more attuned to its distinct characteristics. In most cases, forensic pathologists are initially confronted with these challenging bullets when radiographic imaging is performed, revealing foreign bodies with unusual shapes and contours, sometimes mimicking clothing or personal belongings. Familiarity with the characteristics of unique ammunition, such as the R.I.P. bullet, is indispensable when confronted with one of these challenging cases.

This presentation describes the unique radiographic and autopsy findings in several cases encountered at the State of Maryland Office of the Chief Medical Examiner involving unusual ammunition including: G2 Research's Radically Invasive Projectiles, Taurus Judge .410 bore shot shells, MagSafe® ammunition, PolyCase® ARX composite ammunition, Expanding Full Metal Jacket bullets, #4 buckshot, conical pellet shot shells, black powder rounds, and snake shot ammunition.

Ammunition, R.I.P., Ballistics

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