



### **G117 Migration of a Bullet in the Lumbosacral Spinal Canal: A Case Report and Review of the Literature**

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After attending this presentation, attendees will understand rare cases in common medicolegal autopsy practice, descriptions of different types of spinal canal migration reported in the literature, and mechanisms and conditions that could induce a bullet migration.

This presentation will impact the forensic community by explaining a well known but relatively rare phenomenon in common medicolegal autopsy practice.

Reported here is a case of a 22-year-old man who was hit by a gunshot on the left part of the chest in the sixth intercostal space. The bullet had a previous course in a first victim.

The X-Ray examination of the body of the 22-year-old man showed a metallic object projected at the level of L1. At autopsy, examiners described that the bullet during its trajectory induced a pulmonary lesion, gastric perforation, pancreas, and hepatic lesion and left renal vein and artery perforation. The bullet then entered the spinal canal through the L1-L2 intervertebral foramen. Classical laminectomy at the lumbar level was performed, the dura was opened, and the bullet was found at the L5- S1 level. This case illustrates a bullet migration due to gravitational forces as its kinetic energy decreased after an intermediary target (the first victim) and collision with body structures.

The different cases reported in the literature, particularly the different types of migration will be discussed. If migration of T10-S1 seems to be more frequent, some authors reported a C1 to S2 or cranium to L4 migration. In one case, a migration from S1 to L4 level in the cranial direction, because of the patient's position, was also described. The different mechanism of migration and the symptomatic effect of this phenomenon will also be discussed.

#### **Bullet, Migration, Spinal Canal**