

G78 A Modern "Martyr's Crown": A Fatal Case of Multiple Self-Inflicted Nail Gun Shots

Francesco Maria Morreale, MD*, Christoforo Pomara, MD, and Stefano D'Errico, MD, Institute of Legal Medicine, University of Foggia, Ospedali Riuniti, via L. Pinto 1, Foggia, I-71100, Italy; and Rocco Maglietta, MD, Hospital San Carlo, Potenza, I-85100, Italy

After attending this presentation, attendees will understand an atypical case of multiple nail gun shots in a 62year-old man. The peculiarity of the case is represented from the surprising sequence of radiological images.

This presentation will impact the forensic community by underlying the role of a correct and complete radiological store in cases of foreign bodies injuries.

The case of a 62-year-old man, who was taken to the emergency room with multiple head wounds, is presented. He complained only of headache, and spontaneously declared that he had shot himself in the head with multiple nails from a nail gun, which he handed over to the physicians. He was conscious, oriented to place and time, and had no focal neurological or cognitive defects. Only the finding of a foreign metallic body on the surface of the scalp in the right temporal region alarmed the physicians, who immediately hospitalized the patient. Radiographs of the head demon- strated seven injuries with foreign metallic bodies inside. This reproduced the typical appearance of the "Martyr's Crown." A CT scan confirmed the presence of multiple nails penetrating the skull in the right (5) and left (2) temporal regions. A subarachnoid hemorrhage was also detected; the ven- tricular system was unremarkable. Four days after admission, a surgical approach was attempted to pull out nails, six of which were pulled out by cutting the scalp and temporal muscles; the last one, not on the surface, required a craniotomy. The patient awoke one hour after surgery, but his clinical condition rapidly worsened. He became comatose, and died after 10 days of hospitalization.

Few cases of unsuccessful attempted nail gun suicides are reported in literature, fewer cases of successful suicides are described most frequently the head and the left side of chest represent the preferred targets of the body.

Nail guns have been used since the 1950s, designed as a powerful industrial tool to drive nails into various hard surfaces with ease. Recent years have seen an increased diffusion in the domestic environment, too. The ease of use and speed of these tools enhance productivity at the cost of increased potential for traumatic injury. The nail gun fires a single nail or bolt, as projectiles, into wooden or metal surfaces. It could be compared to conventional firearms, being capable of firing projectiles of up to 10 cm into fully stressed concrete at a velocity up to 424 m/sec.

International literature records nail gun related injuries, sometimes lethal, with two categories of forensic interest: industrial accidents and suicide attempts

In conclusion, the case report represents an atypical case of nail gun suicide; highlights the rarity of the event in the literature, and points out the absence of any clinical sign until surgery.

Nail Gun, Successful Suicide, Cerebral Ischaemia