

⁽¹⁾ Medico-legal Office of Aveiro – National Institute of Legal Medicine, IP - Portugal

⁽²⁾ Faculty of Medicine - University of Coimbra - Portugal

INTRODUCTION

Although infrequent, deaths by electrocution occur. Usually in fatal cases the manner of death is accidental, rarely homicidal and occasionally suicidal. In suicide the victim frequently has a professional skill or some knowledge in electricity, creating a more or less complex electrical device that will produce the fatal shock.

CASE REPORT

An 87 year old man, was found dead in his home. The body was in the garage, lying down on his back (Fig.1), presenting a bandage tying up two metal plates around his chest (Figs.2,3), attached by two copper wires to a welding device, which was connected to the electrical current (Figs.4,5,6,7).



Fig.1



Fig.4



Fig.5



Fig.6



Fig.7



Fig.2



Fig.3

Some notes were found in his home, allegedly written by the deceased, where it could be read “I’m in the garage” (Fig.8), “You can touch the dead man” (Fig.9), and some safety instructions about how to disconnect the electrical device (Figs.10,11).

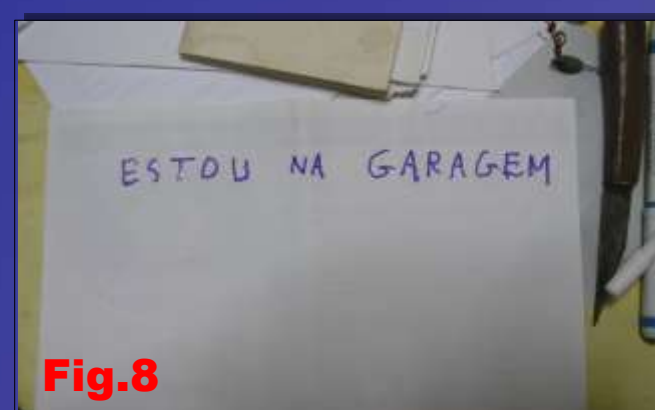


Fig.8



Fig.9



Fig.10



Fig.11

The deceased was a retired nautical driver with electrician skills acquired during his professional activity. Currently he was living in a retirement home.

In the morning of that day, the victim stated that he was not feeling so well and he wanted to die at home.

The autopsy revealed four fourth-degree burning areas (charring injuries) on the victim's chest (front and left surface) surrounded by an erythematous halo on the location of the two plates (Figs.12,13). Toxicological analyses were negative.



Fig.12



Fig.13

References:

- (1) Di Maio, V.J.M. and Di Maio, D.J., *Electrocution*, in *Forensic Pathology*, 2nd ed., CRC Press, Boca Raton, FL, 2001, p. 410.
- (2) Werner, A.H., *Death by electricity*, *NY Med J* 1923; 118498-500
- (3) Wright, R.K., Broisz, H.G. and Shuman, M., *The investigation of electrical injuries and deaths*. Presented at the meeting of the American Academy of Forensic Science, Reno, NV, February 2000
- (4) Sornogyi, E. and Tedeschi, C.G., *Injury by electrical force*, in *Tedeschi, C.G., Eckert, W.G., Tedeschi, L.G. (Eds): Forensic Medicine*. Philadelphia, WB Saunders Co, 1977, pp 645-676
- (5) Bruner, J.M.R., *Hazards of electrical apparatus*. *Anesthesiology* 1967; 28:396-425