## TO NORWANDER OF FORMANDER OF FO

## Pathology/Biology - 2017

## H65 Children's Hangings: A Case of an Accidental Event

Diana Maltez Alves, MA\*, Instituto Nacional de Medicina Legal, Jardim Carrilho Videira, Porto 4050-167, PORTUGAL; Luis Vaz Cardoso, INMLCF, I. P., Jardim Carrilho Videira, Porto 4050-167 Porto, PORTUGAL; and Maria Carneiro de Sousa, PhD, National Institute of Legal Medicine and Forensic, Jardim Carrilho Videira, Porto 4050-167 Porto, PORTUGAL

After attending this presentation, attendees will better understand the relevant roll of the forensic team in identifying (and notifying the pertinent authoritys of) potential risk and injury situations, especially those involving children and their environment.

This presentation will impact the forensic science community by drawing attention to the importance of scene investigations and interviews in cases involving accidental hanging, which may provide vital clues about the circumstances and etiology of the death, as in the presented case, in which doubts about the analysis of the death were raised by the public attorney.

Hanging is a type of violent death. Although most deaths by hanging have a suicidal medicolegal etiology, it's possible to have an accidental etiology; however, both suicidal and accidental hangings are considered uncommon in the pediatric age.

This study describes a case of an 11-year-old boy, whose autopsy was performed in the North Branch of the National Institute of Legal Medicine and Forensic Sciences, located in Porto, Portugal. Police records, social information, and autopsy data were analyzed.

The boy was found dead by relatives in his room from an incomplete hanging on a swing. No relevant personal or psychopathological background was found, nor any social concerns regarding his family. Attached to the police report, there was a product recall from the company manufacturer of the swing concerning to safety issues and injury risk.

The autopsy found the following: (1) a hanging mark on the left anterolateral aspect of the neck, incomplete, with a triple parallel groove, reddish, rising front to back and right to left and an incomplete single purplish mark, with the same orientation, on the right posterior aspect of the neck; (2) an ecchymotic mask ending in the hanging mark; (3) blood infiltration of the left sternocleidomastoid, sternothyroid bilaterally, and right omohyoid muscles; (4) a linear reddish area on the right, compatible with a swing strap abrasion; (5) epicardial blood suffusions; and, (6) diffuse cerebral edema. Toxicological screening was negative for alcohol, drugs, or medication. Histological lung findings (vascular congestion, multifocal alveolar distension, signs of recent intra-alveolar hemorrhage – petechial type) were consistent with a mechanical asphyxia. Thus, it was concluded that the cause of death was asphyxiation by hanging, with an accidental medicolegal etiology.

Although such deaths are uncommon, it is important to be aware of their existence in order to prevent their occurrence. Children, because of their curiosity and boldness, can very often put themselves in potential risk and injury situations. Hence, not leaving children unattended and paying special attention to toys and their materials, which could be potentially hazardous, are important to prevent most of these accidental deaths.

## Hanging, Children, Accident

Copyright 2017 by the AAFS. Unless stated otherwise, noncommercial *photocopying* of editorial published in this periodical is permitted by AAFS. Permission to reprint, publish, or otherwise reproduce such material in any form other than photocopying must be obtained by AAFS.