

## SUBCONJUNCTIVAL HAEMORRHAGE IN HANGING

Holhos Larisa-Bianca\*, Cosmin Mihai Vesa\*, Bontea Mihaela\*, Razvan Parvan\*, Corina Beiusanu\*, Radu Carmen-Corina\*, Coroi Mihaela Cristiana\*

\*Faculty of Medicine and Pharmacy, University of Oradea, 10, 1 Decembrie Sq., 410073, Romania

\*Doctoral Studies Department, Biomedical Science, 1 University Str., 410087, Oradea, Romania

\*Faculty of Medicine and Pharmacy, Arad, LiviuRebreanu Str. 86, Romania, student

\*Department of Ophthalmology, Emergency County Hospital, 65 Gheorghe Doja Str., 410169, Oradea, Romania

### **Abstract**

*Hanging was first introduced in England after 450 a. Hr., being practiced until 1965 and was the most widespread method of execution during history and because of this reason they were classified as judicial and non-judicial. Hanging consists of a ligature with careful knot placed below the occiput and complete suspension of the entire body weight of the victim. Non-judicial are those that take place in homes and jails and are frequently due to incomplete suspension, with part of the victim's body laying on the ground.*

**Key-words:** hanging, subconjunctivalhaemorrhage, knot

### **INTRODUCTION**

Hanging is one of the main methods of life ending in the world and there is even a book written by a macedo-romanian doctor who revolutionized the international scientific world with his investigations and innovations about hanging. The book is about Mina Minovici (1868-1941), a forensic doctor who self experimented the mechanical autostrangulation effects of asphyxia.

The main counties in Romania where hanging is chosen as a main life ending method of death are those where people of Hungarian nationality are the majority. In most of the cases, people who want to suicide themselves through hanging make a knot or a double-ring which is convoluted around the neck and is made of a wire, a belt, a chain, a scarf or a rope (Fig. 1).



Fig. 1. Chain used for hanging.  
Drawing made by Albisor (Romocian) Celestina

There are two positions of the body in hanging: the one in which the body is in complete suspension like in Fig. 2 and the other one in which the body is still in contact with the ground like in Fig. nr 3.



Fig. 2. Complete hanging (the body does not touch the ground).  
Drawing made by Albisor (Romocian) Celestina



Fig. 3. Incomplete hanging (the body does touch the ground).  
Drawing made by Albisor (Romocian) Celestina

The incomplete hanging is the most interesting and most used by women because is painful and the death is sudden because of the cerebral anaemia. If the knot is located at the posterior part of the neck than almost always the head has an anterior and down inclination, the chin being in contact with the chest. When the knot is located on the lateral part of the neck, the head will be tilted to the right or to the left. The stages of death through hanging are the loss of consciousness, spasms and muscular contractions and the last one is the death which ends the process. An important indicator for a lethal hanging is a subconjunctival haemorrhage even if it is not specific and it disappears with the occurrence of signs of putrefaction. Subconjunctival haemorrhage appears due to the raised venous/capillary pressure sufficiently to cause the haemorrhage of the face and neck above the level of ligature.

## MATERIAL AND METHOD

We analyzed 86 people death in 2017 through hanging, complete and incomplete method. 13 chose to hang in an incomplete method and summarized 15%, while the rest of 73 chose the complete method and summarized 85%, Chart 1,2.

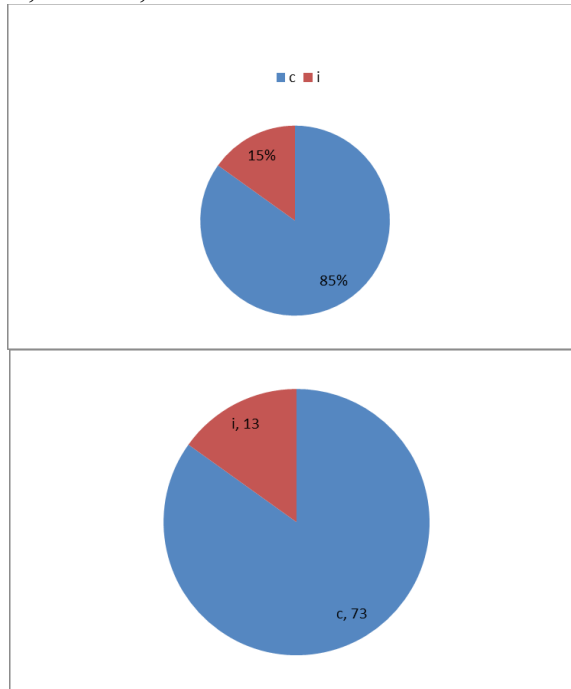
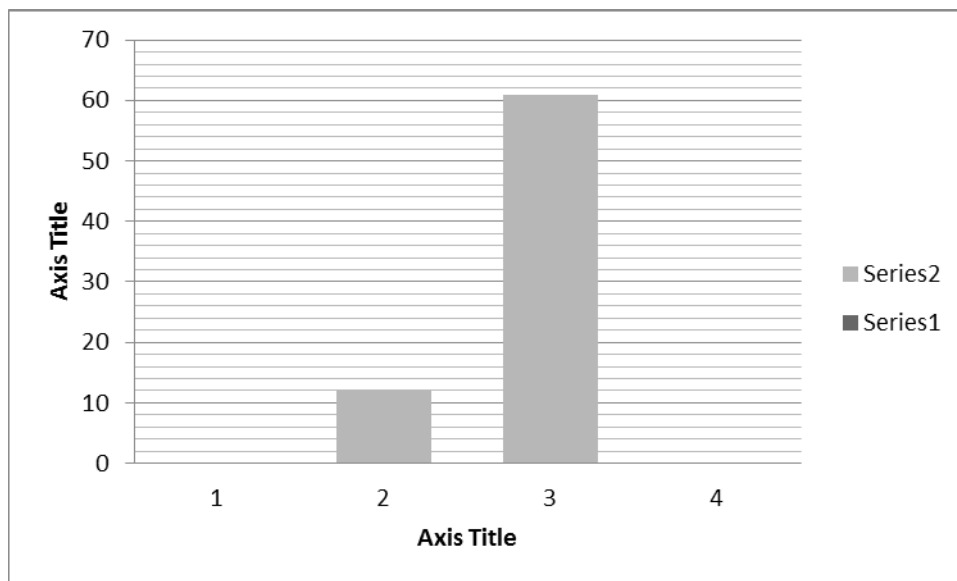


Chart 1 and 2. 13 people hanged in an incomplete method, summarizing 15% and 73 death through complete method, summing 85%

Those with complete method were separated into two groups: one consisted of those with subconjunctivalhaemorrhage and the second group without subconjunctivalhaemorrhage. The first group had 12 bodies in which subconjunctivalhaemorrhage was discovered after death and the second group had 12 bodies without any subconjunctivalhaemorrhage (Graphic 1).



Graphic 1. The two groups, with and without subconjunctivalhaemorrhage

In the incomplete hanging method, no body was identified as having subconjunctivalhaemorrhage.

#### CONCLUSIONS

Identifying a subconjunctivalhaemorrhage in patients whose death happened by hanging is a certain sign of a traumatic death and is considered to be a hallmark of asphyxial deaths, being in fact just a vascular phenomena related to mechanical factors, unrelated to asphyxia or hypoxia.

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