Case History

It was a murder case. The victim was killed by a gunshot. The inlet wound was located in his Right eye. The bullet trimmed and perforated his Right eyelid and eyeball. The soot blackened outer surface of the Right eyelid and the tattooing dispersed mainly on the right side of his face. It was a near shot. The medicolegist conducted the post mortem examination and without further elaboration, he gave his opinion about the direct cause of death, which was obvious and easy in such cases. However, upon my reviewing these documented photos, I have noticed that the deceased was biting his lower lip centrally i.e. biting the lower lip with the upper central incisors which apparently was not noticed by the medicolegist during his first examination and autopsy.

Discussion, Explanation and Consequence

In normal conditions, the jaw drops suddenly after death due to primary relaxation. Therefore, most of deceased are found with opened mouth.

The rigor mortis that takes place (2-4) hours after death will mostly keep that position. The expression of biting lower lip, as it was the case in the photo, could be interpreted to cadaveric spasm that took place during life only due voluntary action of muscular movement. It will not be possible to deliberately simulate this action after death because upon dropping the jaw after death, as a result of primary relaxation, the mouth will open. If rigor mortis develops in the mouth region it will be too difficult to open or close the mouth for any attempt of simulating this situation. In this case, I believe that biting of the lower lip expression as it is seen in the photo has taken place before death and it was a cadaveric spasm. It continued until the stage of rigor mortis. Apparently the biting lip action took place at the moment of death when the victim pulled up his lower lip and inwards while his upper central teeth biting it tightly. This action indicates the state of anger of which the victim had. If this expression took place voluntarily before death as in normal conditions, the lips will separated immediately after death due to sudden drop of the jaw in the primary relaxation. This expression is a vital voluntary sign. It never takes place after death, and it never continues after death unless it is due to cadaveric spasm. The victim in the photo was fired by a gunshot. Most probably, he saw the assailant and he was in an extreme status of anger. Therefore, he was found in that expression of lip biting position, which was consistent with the boiling anger and an indication of its intensity. This expression may be also interpreted as a combination of anger and regret. This sign is a cultural stereotype in Arabic countries. Many authors [1, 2] gave detailed account of a cadaveric spasm and multiple case reports involving cadaveric spasm in muscles of hand gripping weapon (suicidal cut throat), weeds, mud (drowning), and cadaveric spasm in soldiers in battle field. They did not mention any case of cadaveric spasm involving this expression (biting lower lip). The literature did not mention any such incident. I am reporting the case because it is rare, unique and never mentioned before.

References