



Pathology Biology Section – 2011

G71 Blood at the Scene of Death Due to Hanging: Artifact or Antemortem

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After attending this presentation, attendees will understand the distinctive difference between antemortem and postmortem collection of blood, the dynamics of blood collecting at the scene, principles of artifacts, importance of determining that the blood at the scene of crime was not antemortem but was a postmortem phenomenon, correlating the blood with the injuries, and example of dubious presentation of suicidal and homicidal deaths due to asphyxia.

This presentation will impact the forensic science community by showing how suspicion and or allegations of not reporting injuries or reporting incorrectly are related to the evidence of blood at the scene of crime. Blood oozing out of injuries sustained during medical treatment needs to be differentiated from those injuries that were inflicted after the death of an individual. Misinterpretations can be reduced and scope and diagnostic accuracy could be enhanced by the exclusion of antemortem nature of blood at the scene of occurrence.

In India, those who do autopsies are generally not supposed to visit the crime scene. Autopsy opinions about cause and manner of death are sometimes in conflict with the opinion of those who had observed blood at the scene. In order to set aside an autopsy opinion of "suicidal hanging" and to believe that of "ligature strangulation" in three different cases, proving how blood at the scene could be postmortem was a big challenge.

Manner in which the blood at the scene had been perceived during the investigation or even some time after the occurrence and investigation was significant. Such a perception formed the basis to confront the autopsy opinion in three controversial cases. Baring the truth that blood at the scene was not that had oozed out of the injuries sustained during life in these cases makes an interesting case. In the first case of suicidal hanging, bleeding was from the injury that was inflicted after the death by the tip of a scissors used to cut ligature material around the neck. The second case relates to a probe into the reinvestigation of a suicidal death of a hanged victim who had been discovered dead on the fifth day. Earlier investigation and autopsy opinion of hanging were considered botched. The contention was that the victim had injuries; these injuries were not reported and had been missed deliberately both by the investigators and in the autopsy. The blood at the scene was the result of collection from constant dribbling due to postmortem hypostasis. It was not as was being presumed to have collected at the scene from some missed injury on the front of the body of hanged victim. The third case was of a lady found dead in her own house. Co-existence

of a thread like ligature mark around her neck with the fresh bleeding cut throat injury and bleeding sharp weapon injuries on both the wrists remained a mystery. One of these or both of these were the cause of deaths remained the issue. Death was due to ligature strangulation became the diagnosis that blood had come out of the injuries which were caused by shaving blade after the death.

Antemortem looking postmortem blood raised issues to challenge the credibility of the autopsy opinion and or police investigation in three cases. A case study to show how misinterpretations of blood at the scene discredited family version as well as autopsy opinion of hanging in the case of two suicidal deaths will be presented. Inference indicating ligature strangulation appeared weak and ineffective so long as antemortem appearing injuries were found to be postmortem cuts in the third case. It is recommended that death investigators be familiar with the sensitivity to exclude the probability of blood at the scene being postmortem and unrelated to the actual mechanism of death. **Antemortem, Postmortem, Blood**