

Cadaveric Spasm

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CASE HISTORY

It is a case of robbery and strangulation. Three unknown persons entered in the house of deceased for the purpose of robbery. The deceased and her daughter were present in the house at the time of incident. First the robbers tied both the persons and then looted cash and articles worth one lakh Rupees. When the deceased tried to resist and shouted for help she was strangled in front of her daughter. The strangulation is done by soft ligature material.

We conducted the post-mortem examination at 9.55 A.M. on 10.6.03. We found prominent muscle contractions involving muscles of the neck namely, anterior belly of digastric, sternal and clavicular bands of sternocleidomastoid, and platysma. This prominence was seen at the root as well as at the top of the neck.

Discussion

This prominence of neck muscles could be due to either rigor mortis or cadaveric spasm. In this case, in our opinion it was due to cadaveric spasm and not due to rigor mortis. We put forth following arguments in favor of our opinion-

We commonly conduct PME in over night cases where the rigor mortis is seen well developed all over the body, but neck muscles do not become prominent.

We further want to say that these muscles are smaller muscles in terms of muscle mass, therefore even if rigor mortis develops in these muscles (which any how develops in all cases) they would not become prominent. Therefore commonly we do not find prominent neck muscles in cases where rigor mortis is developed all over the body.

We want to postulate that if the contraction of muscles takes place during life, as is the case in cadaveric spasm and as is the present case, the contraction will be strong. In present case that is the situation. While the deceased was strangled her neck muscles contracted and contracted strongly. We also want to say that contracted muscles have become more prominent because of overlying platysma as if harder solid object is seen through thin curtain.

Sydney Smith gave detailed account of cadaveric spasm and multiple case reports involving cadaveric spasm in muscles of hand gripping weapon (suicidal cut throat), weeds, mud etc (drowning) clothes, button etc (victim of homicide) and cadaveric spasm in soldiers in battle field. He also did not mention any case of cadaveric spasm involving muscles of neck. We have tried to review the literature. Neither the literature on strangulation nor on cadaveric spasm mentions any such incident. Though Franklin reports that cadaveric spasm is found in sudden asphyxial deaths, he also does not elaborate further about type of asphyxial deaths and or group of muscles involved.

Because of its rarity and novelty, reported.

References:

- 1] Smith, S (Ed). Taylor's Principles and Practice of Medical Jurisprudence, 11th ed. J.A. Churchill Ltd, London, 1956; 183-86.
- 2] Franklin, CA. (Ed). Modi's Medical Jurisprudence and Toxicology, 21st ed. N.M. Tripathi Ltd, 1988; 173.

Legend of the photographs-

Legend is true for both photographs.

Arrows are numbered.

1. Anterior belly of digastric.
2. Sternocleidomastoid- sternal end.
3. Sternocleidomastoid- clavicular end.
4. Platysma.
5. Double arrow- ligature mark.