

CASE REPORT

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Unusual Suicidal Smothering by Means of Multiple Loops of Adhesive Gummed Tape*

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ABSTRACT: In suicidal asphyxia smothering is very rare, especially when caused by winding strips of adhesive tape around the head to cover the nose and mouth. The authors report a very unusual case in which the deceased, a 66-year-old man, was found with two strips of tape wound around his head: the first, more superficial tape was wrapped six times and the second was wrapped nine times. Only integration of the crime scene data with those of the autopsy and the patient's psychological profile enabled identification of the event as suicide.

KEYWORDS: forensic science, asphyxia, suicidal smothering, adhesive gummed tape

Suicide by smothering has rarely been reported in literature (1). In the few cases described, mechanical occlusion of the respiratory orifices was generally caused by placing a plastic bag (or a hood of some impervious substance, usually polythene or other plastic), around the head and securing it around the neck with a rope or other tie (2,3). Suicidal smothering by winding strips of adhesive tape around the head to cover the nose and mouth is an even rarer method, and in such cases it may be difficult to establish whether suicide or homicide has occurred (4–7). The following report describes a very unusual case in which the suicidal nature of the event was established by integrating the data deriving from the crime scene investigation, autopsy findings, and the psychological profile of the deceased person.

Case Report

On 28 Nov. 1997 at 8 p.m., a car (Fiat Uno) was discovered in the open countryside in an isolated area in the province of Bari, Italy, far from urban traffic. A dead man was seated in the driving seat. The deceased, an obese man, was fully dressed and wearing an overcoat, and was identified as a 66-year-old local resident. The car engine was turned off and cold. The car keys were in the

ignition in the “off” position, the windows were closed and the doors were locked from the inside: no damage was observed inside or outside the car. The cadaver presented various layers of adhesive packing tape, 5 cm in width, passed many times around the head to completely obstruct the mouth and nostrils, covering the ear lobes laterally and the occipital region posteriorly. Part of the coat collar was caught up in some of the layers of tape. The free end of the tape was located posteriorly, at the occipital level, where it was partly twisted upon itself. The victim was holding in his hands a roll of adhesive tape just like the one around his head. On the left side of the body, in the side pocket of the driver's door, a kitchen knife was found (with a serrated blade) bearing traces of glue and minute fragments of adhesive tape. The thanatological data recorded by the doctor called to the scene (8.30 p.m. of 28 Nov. 1997) stated that at the time of discovery, the cadaver showed rigor mortis, and hypostasis that was partly mobile on digital pressure, but congruous with the sitting position. Neither the body temperature nor that of the environment were measured because the crime scene examination of the body was not performed by a medical examiner or forensic pathologist. The body was removed at 9 p.m. on 28 Nov. 1997 and at autopsy, carried out at 5 p.m. of 29 Nov. 1997. The hypostasis, reddish-blue in color, was fixed and present in sites compatible both with the sitting position and the supine position of the cadaver during its transfer to the mortuary. There were two strips of tape (Fig. 1): the first, more superficial layer had a clear-cut end at the level of the nape of the neck. It was wound clockwise six times around the head, while the other end, again clear-cut, was deep in the left cheek. The second strip, underneath the first, had its free end anteriorly at the level of the mouth and had been wound clockwise around the head nine times, with the deep end again in the left cheek. When this was unwound, the respiratory orifices were freed; it is possible that minimal breathing could still have occurred when this had been applied, which would explain the second tape. Hypostasis was also present on the face, above and below the area compressed by the tape (Fig. 2). The cadaver also showed signs of putrefaction phenomena (marbling and putrefactive blotchiness), while rigor mortis was wearing off. Few petechial haemorrhages were also present on both sclera. No other lesions were observed; examination of the inside organs revealed the presence of cerebral oedema, acute congestion of the vessels of various organs; few petechiae of the pleura and epicardium. Approximately 80 cc. of food were found in the stomach, in an advanced stage of digestion. Histological analysis of the lung showed acute congestion of the vessels and

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FIG. 1—Details of the victim's face after removal of clothing.



FIG. 2—Peculiar distribution of hypostasis above and below the skin areas compressed by the double layer of adhesive tape wound around the head.

acute alveolar emphysema with the appearance of initial putrefactive autolysis. Tests for alcohol, drugs, or toxic substances in the blood, urine, and bile yielded negative results. The time of death was established at about 18–24 h before discovery of the body, i.e., the night between the 27 and 28 November 1997. Enquiries ascertained the psychological profile of the victim, who had suffered for some time from a depressive syndrome and had several times declared a wish to commit suicide. He had left his home at 4 p.m. on 27 Nov. 1997, after eating a plain meal and leaving all personal belongings. He never returned. The Carabinieri exhibited to the prosecutor the fingerprints, all belonging to the victim, found on the adhesive tape around the head and face (on much of the surface of both strips), on the roll in his hands, on the kitchen knife and inside the car. The strips showed signs of having been cut with a serrated blade, just like that of the knife found on the crime scene.

A simulation of the event was carried out in our laboratory to investigate how it could have been done. Five healthy adult volunteers each wound a lightly adhesive tape, 5 cm wide, made of paper and therefore allowing the passage of air, around their heads fifteen times, holding their breath throughout. The mean

time taken to complete the maneuver was between 40 and 50 s and none of the subjects showed signs of bradycardia or loss of consciousness.

Discussion

The absence of any other lesions on the body or on the clothes excluded any aggression by third parties and any attempt at self-defense. In view of the victim's heavy build, it seemed improbable that anyone could have wound adhesive tape around his nose and mouth without eliciting any defensive reaction. Homicidal smothering may, in fact, be suspected when there is a considerable disparity of strength between the offender and the victim or the victim is debilitated by injuries, disease, or drugs or other toxic substances (8): in the case in question toxicological analysis yielded negative results. There were no lesions present implying any attempt to overpower and immobilize the victim (9). The proximal ends of the two bands of adhesive tape were on the left side of the face and wound clockwise, in a left to right direction, compatible with its having been done by a right-handed person like the victim. As stated above, this maneuver was shown in our laboratory to be possible in a short time (40–50 s) before bradycardia and cerebral anoxia leading to loss of consciousness and cardiorespiratory arrest would onset (10).

The inside of the car showed no signs of damage and the deceased's fingerprints were all over the crime scene (knife, roll, and strips of adhesive tape). The medical records of the victim indicated a highly depressed person who had refused the advised therapy. On these bases, the case was classified as suicidal smothering (11).

The case illustrated underlines the importance of integrating the data recorded at the scene of the crime with those found at autopsy (including toxicological analyses) and those on the victim's psychological profile to aid interpretation of the nature of the event, above all in unusual cases of death such as this one caused by suicidal smothering (12–14).

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