Disparities in Postmortem Changes Leading to Suspicion of Manner of Death in a Dyadic Suicide Pact: A Case Report

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ABSTRACT

Dyadic deaths are deaths occurring at the same time or one after another involving two or more people. It may be broadly described as homicide-suicide or suicide-suicide. we hereby describe a case of dyadic death involving a boy and a girl, both died by suicidal hanging. However, history of the incident and different autopsy findings of both bodies raised suspicion of some foul play. The autopsy was performed in a tertiary care center by forensic experts and after meticulous autopsy it was clear that it was case of suicidal pact by the girl and boy resulting from failed love affair and strict opposition by both the families.

Keywords: Suicide, Dyadic Death, Hanging, Pact.

INTRODUCTION

Dyadic deaths are deaths occurring at the same time or one after another involving two or more people. It may be broadly described as homicide-suicide or suicidesuicide (1). Dyadic death's suicide-suicide subtype is frequently referred to as a suicide pact. In pact suicides, there are typically two adults involved. (2). In these types of pact hanging is usually preferred mean of suicide because ligature materials are readily available and hanging results in a painless death (3). The human body undergoes sequential changes after death due to a combination of internal and external factors such as such as climate change, presence of body fat, crime scene and body kept in open or closed environment. These changes primarily serve in estimating the post mortem interval and information relating to the cause and manner of death. (4).

We are presenting an autopsy case of dyadic death involving a boy and girl, both were found hanging from a tree on outskirts of village they were living. Both dead bodies were showing different stages of putrefaction which led to suspicion about manner of death.

CASE DETAILS

The dead bodies of 18-year male and 16 year female were brought to the Department of Forensic Medicine, GGSMCH Faridkot for post-mortem examination with alleged history of suicidal hanging. After procurement of the crime scene photos from police and information by relatives, it is found that both the lovers were missing from their houses from the midnight and later on they were found by a passer-by hanging from a tree on the outskirt of nearby village. Allegedly both had hung themselves with separate dupattas (a female garment). Boy's body was hanging in front Dr. Malvika Lal et.al. Disparities in postmortem changes leading to suspicion of manner of death in a dyadic suicide pact: a case report

of the girl's body on the same branch of the tree. (Fig 1) Later police was informed and dead bodies were taken for post-mortem examination.

Autopsy Findings Male

On external examination the dead body was well built and wearing a black, orange coloured T shirt, khaki coloured pant, Clothes were intact. There was clenching of tongue between teeth with dribbling of saliva from left angle of mouth. There was an oblique ligature mark over upper part of neck above thyroid cartilage in the form of a reddish imprint abrasion (Fig 2) measuring 25 cm long with the maximum width of 2.4 cm. Internal examination of neck showed white glistening band of subcutaneous tissue. Marginal ecchymosis was present. Strap muscles, thyroid gland, thyroid cartilage was unremarkable, hyoid bone was intact. Visceral organs were congested and had started to show early putrefactive changes. Stomach contained about 200 ml of yellowish brown colour contents with atypical odour and walls were congested. Rigor mortis was absent. Greenish discolouration of skin of face, neck and torso was present. Marbling was present over front of chest and both shoulders, with peeling of skin (Fig. 3) There was no other external injury mark.



Figure 1. Dead bodies hanging from same branch of the tree.



Fig 2. Ligature mark present high up on front of the neck



Fig 3: Greenish black discolouration of forehead and marbling of skin over chest.

Female

The dead body of girl was thin built wearing a light blue coloured T shirt. And black coloured lower. Clothes were intact. There was clenching of tongue with dribbling of saliva from left angle of mouth. (Fig 4.) There was an oblique ligature mark in the form of a reddish imprint abrasion measuring 23.5cm long, with the maximum width of 2.4 cm encircling upper part of neck above thyroid cartilage. On dissection there was a white glistening band of subcutaneous tissue underneath ligature mark. Strap muscles, thyroid gland, thyroid cartilage was unremarkable. Hyoid bone was intact. Rigor mortis was present only in the lower extremities. There were no

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apparent putrefactive changes as were present in dead boy of male. visceral organs were congested, Stomach contained around 150ml of yellowish brown colour contents. Chemical analysis of viscera was done to rule out intoxication for both dead bodies. The chemical reports were negative for intoxicants and common poisons. There was no other external injury mark.



Fig 4: Clinching of tongue between teeth.

DISCUSSION

As per the inquest report provided by the police both boy and girl were students and were in love for quite some time. The families of both knew about the relationship and there was a strong opposition to this relation from the families. Due to this strong opposition the couple decided to end their lives by hanging. Both boy and girl a chunni to hang themselves used xxxxxxxx showing psychological profile of the victims i.e. "They wanted to be together and not live without each other." The history that the family of girl called the boy to their house the night before the incident and dead body of both boy and girl found hanging next day raised the suspicion of some foul play, also there were variation in post-mortem findings regarding the time since death.

Cohen has described the suicide pact to be an agreement between two or more people

about committing suicide at the same time. (5) The decision to die together is usually taken when the couple's union is at risk. Suicide by hanging is considered an easy way by the people to come out of their stress related problems (6) The forensic experts are expected to tell the cause and manner of death and provide time since death to aid in the justice. After death the body undergoes various immediate and late changes which are dependent on various factors. Several factors affect the onset and either accelerate the rate of post-mortem alterations or retard it. The presence of body fat, open wounds on the body, sepsis or infection, and the placement of the cadaver in the open are all factors that speed up the rate of post-mortem change. Those who are improperly dressed, the cold, and keeping the body in a cold storage facility all slow the postmortem modifications dramatically. (7). The presented cases occurred in the month of May and temperatures reached up to to a maximum of 46 degrees Celsius. The time since death was estimated considering the observed findings and correlated with factors like the well built body of boy, anaemic body of female, environmental factors.

The position of the boy being in front of the girl make it to be in more exposed to environmental factors than female body and the atypical odour contents of stomach of the boy was an also taken in to account during the autopsy. So after meticulous autopsy findings we came to a conclusion that the time since death was estimated to be 24 to 36 hours for the female and 36 to 48 hours for the male as the putrefactive changes that was seen on the boy's body was a result of combined effect of the environmental factors, built of the boy. The cause of death was given as hanging and manner of death as suicidal. No poison or intoxicant was detected on visceral chemical examination of both boy and girl.

CONCLUSION

In conclusion it was a clear case of dyadic death by a suicide-suicide pact by a girl and

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boy who were in love and desperate. Although initial history, inquest report and post-mortem findings suggested some foul play. Police should investigate the case thoroughly based on facts rather than statement of relatives of deceased. The forensic expert should also try to visit to the crime scene to corroborate the findings at autopsy with the circumstantial evidence.

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