### **CASE REPORT**

# A fatal case of self-inflicted abdominal stab wound

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#### Abstract

In general, suicide by stab wound is rare especially among females and often challenges the medico-legal acumen of an autopsy surgeon while deciding the manner of death. In this report, we present a case of a 46 year old woman found dead in her home with a single abdominal stab wound. No other injury including hesitation wounds was found during autopsy. History given by the relatives revealed that she was mentally unstable and was suffering from a chronic illness. The death was labeled a suicide based on the findings observed during autopsy along with those found at the crime scene and the personal history of the victim.

#### Keywords

Suicide; Stab wound; Abdomen

# Introduction

In comparison to other means of suicide, death due to selfinflicted sharp force injury is uncommon constituting only 0.6 % of all suicides in India. A gender disparity is also observed in such deaths with male accounting for most of the cases.<sup>1</sup> The sharp force injury (SFI) frequently encountered in such deaths is the incised wound; stab wound, on the other hand, is usually seen in homicides.<sup>2</sup> Therefore, a suicide by stabbing is often view with suspicion of foul play and presents an autopsy surgeon with a difficult task of differentiating a suicide from a homicide.<sup>3</sup> In this report, we present a case of a female suicide by stab wound to the abdomen.

### **Case report**

The dead body of a 46 year old female, who was found dead in her house, was brought to the mortuary for Medico-legal autopsy. Following the examination of the police inquest, the history given by the relatives and the police statements, it is learned that the woman was staying alone in a single room house, having a single entry and exit door, within the same campus along with her other relatives. As per history, she had history of seizures and mentally unstable for which no medical diagnosis and treatment was taken. There was also history of self-harm in the past. On the morning of that fateful day, she had an attack of seizure and later in the evening she was found dead inside her house which was locked from inside because of which the door had to be forcibly opened. On examination of

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Received: 9<sup>th</sup> November, 2020; Revision received on: 20<sup>th</sup> August, 2021 Accepted: 29<sup>th</sup> August, 2021 the crime scene, (Fig 1) the dead body was lying in a supine position on the bed with blood present underneath and side of the body, blouse pulled upwards and the blood stained knife lying in the vicinity.

# **Autopsy findings**

All the clothing was blood stained and bore neither cuts nor tears. Dried blood stains were observed over the chest, abdomen, upper thighs, forearms and hands. The eyes were congested and the body appeared pale. Extrusion of the intestines along with mesenteries through an abdominal wound was also observed. (Fig 2) Rigor mortis was fully developed all over the body and the post - mortem staining was present on the back and fixed.

On external examination, one vertically placed stab wound was observed over the upper abdomen, through which the intestines extruded out, measuring 4.5 cms x 2 cms, abdominal cavity deep with red clean cut margins situated on the midline, 5 cms above the umbilicus and 81 cms above heel. The beveling was present on the right side with undermining of the margins on the left and the track of the wound involved the skin, subcutaneous tissues and rectus muscle up to the abdominal cavity. No other injury was present externally.

Internally, the jejunum including the adjacent mesenteries was cut measuring 2.5 cms x 2 cms and situated 391 cms away from the ileo-caecal junction. (Fig 3) The peritoneal cavity contained 500 ml of blood and all the other organs appeared pale. The stomach contained 250 gms of semi digested food matter, yellowish in colour, with no specific smell.

### Discussion

The present case, based on the circumstances, crime scene examination and autopsy findings, was labeled as a suicide by the concerned investigating agency and the factors facilitating this decision are the body was found in a room locked from inside, weapon present in the crime scene, undisturbed crime scene, history of chronic illness, history of mental illness, clothes were not cut and the absence of defence wound.

Examination of the place of occurrence plays an important part in any crime investigation and the present case is no different, where it provides vital clues as to the manner of death i.e suicide; a majority of suicides are committed at home,<sup>4-6</sup> inside a room, usually a bedroom,<sup>5</sup> locked from inside and absence of any sign of struggle. Furthermore, the weapon or means used to carry out the act is usually present at the crime scene.<sup>7</sup>



Figure 1: Crime scene



Figure 2: Extrusion of the intestines and mesenteries through the stab wound



Figure 3: Injuries to the small intestines and mesenteries

Even though suicide by sharp weaponis uncommon,<sup>2,8</sup> more so in females who usually employ or use non-violent means,<sup>1</sup> they do occur especially among the mentally ill.<sup>6,9,10</sup> In such cases, knife is frequently used<sup>6,9</sup> because of its accessibility being a common household item and the injuries often seen are the incised wounds.<sup>8</sup> While a suicide by stabbing is comparatively rarer,<sup>2,11</sup> they are often carried out by people with history of mental illness.<sup>12</sup> The location of the suicidal injuries is usually dictated by the type of SFI inflicted where incised wounds are frequently seen in the upper limbs<sup>4,5,8</sup> and stab wounds in the left chest.<sup>4,5,8,9</sup> However, suicidal stab wound to the abdomen, although infrequent,3 do take place and have been reported earlier<sup>13,14</sup> including in females.<sup>15</sup> As far as multiplicity of the injuries and manner of death is concerned, literature shows conflicting evidences where, on one hand, some authors suggest homicide to be associated with more number of injuries in comparison to suicide<sup>8,16</sup> while others found no significant difference between the two,<sup>17</sup> but it has also been reported that single SFI do occur in suicide<sup>5,6</sup> including single stab wound to the abdomen.<sup>18</sup>

A proper inspection of the clothing may indicate the manner of death as the clothes in suicides are often raised or pulled up to expose the unexposed area of the body<sup>2,3</sup> for infliction of wounds resulting in absence of cuts in them.<sup>5,16</sup>

Apart from the above, the other important findings which are missing in this case and if present strongly suggest suicide are the hesitation wounds and suicidal note, seen in 35-77  $\%^{4,6,8,9,19}$  and 52 – 63 $\%^{5,11}$  of the cases respectively.

### Conclusion

Suicide by stab wound to the abdomen is rare and questions are often raised regarding the manner of death as stab wound is often associated with homicide. In addition to crime scene examination and autopsy findings, personal history of the victim e.g history of chronic illness, mental illness, previous attempt etc, also play important role in determining the manner of death. In the present case, the death was labeled a suicide based on the crime scene findings of room locked from inside, no sign of struggle and weapon found at the scene, the autopsy finding of intact clothing and absence of defence wound along with history of chronic illness and mental illness. So to conclude, all these factors together should be taken into consideration in deciding the manner of death.

#### Conflict of interest: None to declare

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