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Case Report

All murders are culpable homicides, but all culpable homicides are not murders

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ABSTRACT

There is always a correlation between any trauma and disease that the trauma may have caused death or disease would have caused the death where the trauma may have been aggravated the disease process. This is very important in the aspect of legal system that the IPC sections may vary, and the role of a forensic surgeon to clarify it medically. Here is the case where the deceased died due to her pre-existing illness, which the alleged accused is not aware of, but the alleged accused is charged of murder under S 302 IPC instead of culpable homicide not amounting to murder under S 304 IPC.

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1. Introduction

Myocardial infarction (MI) is one of the serious health issues which cause a problem in day to day life and sometimes even death.¹ Left ventricular (LV) rupture is deadly but not uncommon occurrence in patients with acute myocardial infarction patients. Incidence of LV free-wall rupture post-acute myocardial infarction (AMI) is less than 1%, but the death rate is extremely high.² It can also occur in blunt or penetrating cardiac trauma, cardiac infection, aortic dissection, primary or secondary cardiac tumours, and infiltrative diseases of the heart. Iatrogenic causes are penetration during percutaneous or surgical cardiac procedures. Also, patients with Takotsubo cardiomyopathy have been reported to have a myocardial rupture.³

2. Case Report

A 30-year old married female was living in a joint family. It is alleged that owing to family conflicts, this lady's husband

and his brother were in a quarrel and this lady went in between to sort things. In the course of quarrel she was pushed aside and the lady fell down unconscious and the family members took her to a nearby private hospital, where she was pronounced dead on arrival to their casualty. The dead body of the deceased was brought to the mortuary of Government Medical College and Hospital Thiruvallur for Medico-Legal Autopsy. This case was booked under S. 302 IPC in view of murder. After obtaining the requisition from the inquiring officer autopsy was conducted.

2.1. Postmortem was conducted and findings noted

External findings include well-nourished and well-built female body with pale oral mucosa, conjunctiva of eyes and nail beds of all fingers and toes of both the hands and both the feet. Post mortem hypostasis fixed on the back with areas of contact pallor. Cornea – hazy; pupils dilated and fixed. There were no external injuries anywhere on the body.

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2.2. Internal findings of the organs were noted

Scalp: Dark red scalp deep contusion on the 3 x 2 cm on the right side of the frontal region and 7 x 3 cm right side of the occipital region of the scalp; Vault and Duramater found intact; Brain: Patchy areas of dark red subarachnoid haemorrhage on the surface of parietal lobe and frontal lobe of the right cerebral hemisphere and parietal lobe of the left cerebral hemisphere of the brain; cut section: Normal; Base of Skull: Intact.

Pericardium found intact. On dissection: Pericardial cavity contained 450 grams of dark red clotted blood moulding the heart. (Figure 1)

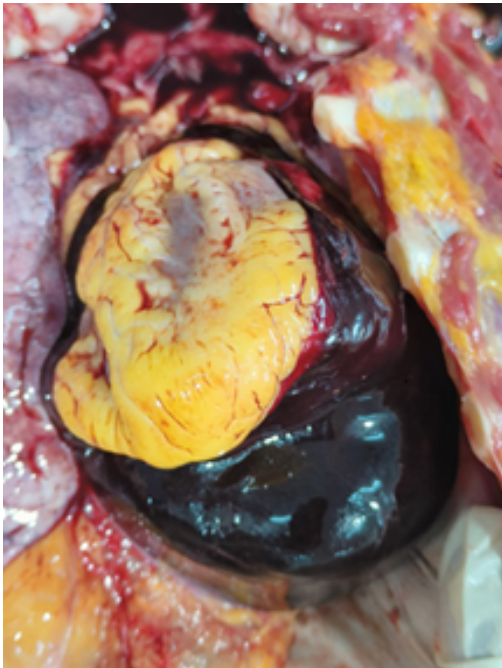


Figure 1: Clotted blood in the pericardial cavity

Heart: Normal in size; 1.2 cm full thickness rupture with surrounding zone of hyperaemia of 5 x 4 cm on the anterior wall of the left ventricle close to the interventricular septum. Cut section: All chambers contained clotted blood; Valves: Normal; Coronaries: Patent; Great vessels: Intact and normal; (Figure 3)

Lungs: Normal in size; cut section: Frothy fluid oozed out from the congested cut surface.

Larynx and trachea: Empty and intact; Hyoid bone and other laryngeal cartilages: Intact.

On opening the abdominal cavity: Peritoneal cavity contained 150 ml of yellowish – brown fluid with feculent odour.

Stomach: Contained 50 grams of brown colour partly digested food particles with no definite smell; mucosa: Patchy areas of congestion.

Pancreas, Liver, Spleen and both the Kidneys: Normal in size; cut section: Pale.



Figure 2: The massive clot



Figure 3: Ventricular wall rupture

Intestines: Multiple dark red full thickness contusion of varying dimensions on the sero-muscular layer of the small bowel; full thickness traumatic perforation of the ileum 1 x 0.5 cm, 20 cm from the ileocecal junction on the ante-mesenteric border of the ileum with bruised margins and yellow brown chyme oozing out from the perforation. (Figure 4)

Bladder: Intact and empty;

Uterus: Normal in size; weighed 130 grams; cut section: Cavity empty.

Ribs, Pelvis and Spinal column: Intact;

Multiple muscle deep parallel incisions made all over the body; no other injuries were noted anywhere on the body including breasts, oral cavity, anal canal and vagina.



Figure 4: Small bowel contusion

Viscera includes portion of brain and liver, one half of each kidney, 30 cm of proximal small intestine, stomach and its contents and blood were preserved and sent for chemical analysis.

Tissue bits of brain, lungs, liver, kidney, spleen, heart and its blood vessels were preserved for histopathological examination.

2.3. Opinion as inferred from the post-mortem report

Reserved pending the reports of chemical analysis of viscera and histopathological analysis of tissue bits.

2.4. Histopathology examination was done and inference recorded

Section studied from brain shows features of cerebral oedema and hypoxic ischemic encephalopathy.

Section studied from brain stem shows features of hypoxic ischemic encephalopathy.

Section studied from portion of heart shows loss of striations and pyknosis of nuclei, myocardial fibres with intervening fibroblasts, histiocytes, lymphocytes and few neutrophils – suggestive of myocardial infarction. (Figure 5)

Section studied from Aorta, Liver, Kidney and Spleen shows normal morphology.

Section studied from one portion of small intestine shows foci of ulceration extending into the serosa with mixed inflammatory infiltrates in submucosal and muscularis layer along with areas of haemorrhage – features of intestinal

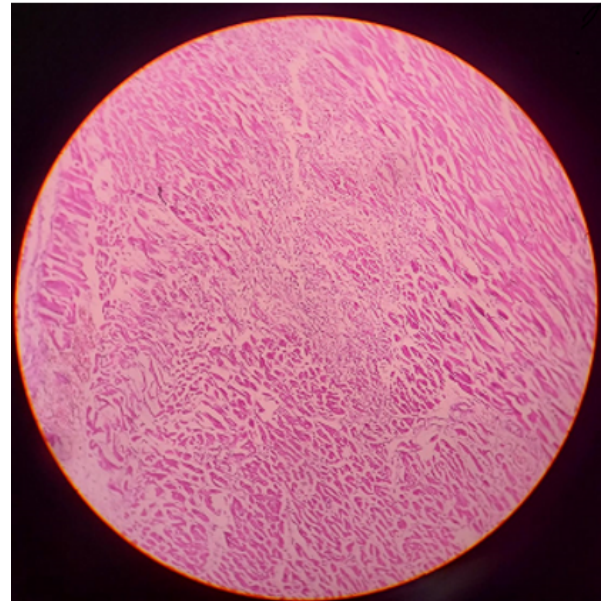


Figure 5: Histopathology slide of the heart showing old MI

perforation. (Figure 6)

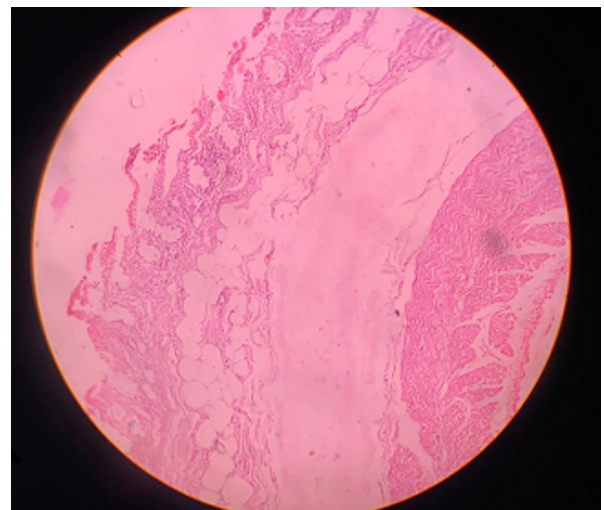


Figure 6: Intestinal erosion and perforation

Section from another portion of intestine shows normal morphology.

Chemical analysis report of viscera was also obtained and the inference was recorded.

Stomach and its contents, intestine and its contents, liver, kidney, brain and blood did not detect alcohol or other poisons.

Arriving at an opinion it was inferred from the above findings that the lady has died due to complications of myocardial infarction with blunt force injury to the abdomen and head.

3. Discussion

Trauma or stress of any kind can make the victim prone to any disease or may increase the impact of the existing natural disease.⁴ The connection between a trauma and any natural disease and that too specifically a heart condition is always a nightmare for the forensic pathologist. Any form of physical, mental, emotional or psychological trauma may bring about myocardial infarction or even an arrhythmia which may lead to death. A heart attack may happen during an argument either incidentally or as a development of a long standing disease process or may be an uncommon strain. Adrenaline plays a major role in this phenomenon.⁵

The other areas which need attention in this aspect are aneurysmal rupture leading to cerebral haemorrhage or subarachnoid haemorrhage. Death can occur even from a slightest injury on previous diseased or injured organ viz. miliary aneurysms, fatty degeneration of heart, duodenal ulcer, hydatid cyst of liver, splenomegaly in case of infection or neoplasm. Distant spread of any neoplasm is increased by a direct trauma.

In the court of justice, a relationship is established if that particular trauma aggravates, fastens or precipitate a disease of a person. It is not mandatory that the trauma be the etiology. In such type of cases, if injury accelerates the process of dying or precipitates death, the assailant is not guilty of culpable homicide, but can be charged for causing hurt if proven.^{4,5} It is also foreseeable that these people could have succumbed to his/her pre-existing conditions.⁶ If it can be proved from the post-mortem that death resulted from natural cause, and that the trauma happened did not operate in anyway sooner or later, the alleged accused will not hold responsible for the death of his victim. In these cases, death might have taken place about the same time and in the same circumstances whether there was a dissension or not.⁴

In forensic literature, the abrupt demise of an individual caused by the worsening of a pre-existing heart condition triggered by stress or criminal activity is occasionally termed as homicide by heart attack.⁷

Shajipaul RL et al. reported a case – 34 year old hockey player died on the field after an impact on his left mastoid region leading to traumatic rupture of left vertebral artery berry aneurysm. A massive subarachnoid haemorrhage in the posterior fossa and remnants of berry aneurysm in the left vertebral artery were found in autopsy.⁸ This is similar to the death of the Australian batsman Phil Hughes in 2014.

Anand P Rayamane et al. also published a case series with over 4 cases where the investigating officer registered the cases under IPC S.304 (A) or IPC S.302 but the death was due to natural disease such as CAD, CVD and rupture of enlarged spleen.⁹

4. Conclusion

In the court of law the defence counsel often takes the plea of natural disease as a cause of death or injury as a contributory factor or the injury factor aggravates the disease process causing death. In this case the alleged accused is not aware of his act that will lead to death. Of course, we have to distinguish between motive, intention and knowledge. Motive is something which prompts a person to form an intention and knowledge is an awareness of the consequences of the act. The demarcating line between knowledge and intention is very thin, but it is not difficult to perceive that they connote different things. So as an expert in the field of forensic medicine, one should be extra careful in giving such opinions and before the opining, the medical history, post-mortem findings, histopathology opinion and reports of chemical analysis of visceral organs must be evaluated in detail. It is a trite law that “culpable homicide” is a genus and “murder” is its species and all “murders” are “culpable homicides”, but all “culpable homicides” are not “murders”. A proper autopsy usually solves all the mystery and answers all the questions one had before autopsy.

5. Source of Funding

None.

6. Conflict of Interest

None.

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