

## A Case Report of Death Due To Choking Mimicking Café Coronary

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Received 6<sup>th</sup> March 2021 | Revised 30<sup>th</sup> March 2021 | Accepted 12<sup>th</sup> April 2021

### Abstract:

*Choking is defined as complete obstruction of the airway by a foreign body large enough to obstruct the lumen of the trachea beyond the carina-leading to Violent Mechanical Asphyxial Death. It mostly occurs accidentally, very rarely homicidal. A 23 year old, male subject, a habitual drunkard, was taken to R G Kar Medical College and Hospital where he was declared brought dead by the on-duty medical officer, the latter advised post-mortem examination to determine the actual cause and manner of death of death. The procedure followed to arrive at the conclusion included acquisition of meticulous history, perusal of all relevant documents including police inquest, postmortem examination findings, chemical and histo-pathological reports. Presence of the black seed like substance beyond the bifurcation of trachea led to the final opinion.*

**Keywords:** Choking, Cafe Coronary, Tracheaa, Asphyxia, Seed.

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## Introduction

Café Coronary (café means small restaurant, and coronary comes from the Latin word meaning corona or crown which defines the crown-like manner in which the coronary arteries encircle the heart; another word for coronary is heart attack). Café coronary is a condition in which a healthy but grossly intoxicated person, who begins a meal, suddenly turns blue, coughs violently, then collapses and dies, without much fuss. Death appears to be due to a heart attack (Reddy and Murty, 2017; Mukherjee, 2018). According to Haugen (1963), it is a condition in which a healthy person who begins a meal, suddenly collapses and dies without any further distress as a result of food obstruction of air passages (pharynx, larynx). The cause of death is reflex vagal inhibition of the heart. Usually, the common victims are the children, the elderly, the lunatics and those who have taken excessive alcohol before eating food (simulating cafe coronary, that is, heart attack in a small restaurant while having food in a drunken condition) (Mukherjee, 2018).

## Objectives

- To report a rare case of sudden death detected during autopsy.
- To ascertain the cause and manner of death
- To render justice by not punishing an innocent person when the cause of death is an accidental one

## Materials and Methods

Information furnished by the Police Inquest, history of the case obtained from the police requisition and the deceased party, MC, DC., Medico-legal autopsy and its report, reports of Viscerae from FSL (Chemical Examiner's Report) and histopathological report were utilized and ultimately the final opinion as to the cause of death was arrived at.

## Case History

A 23-year-old, male subject, a habitual drunkard, was taken to R G Kar Medical College and Hospital where he was declared brought dead by the on-duty medical officer, the latter advised post-mortem examination to determine the actual cause of death. He had H/o drinking alcohol before eating food in a restaurant, where he suddenly fell from his seat onto the ground, unconscious. The post-mortem examination was held

after going through the Police Inquest, other documents and history from the party of the dead person.

## Findings of Post-mortem Examination

### On External Examination

A medium built, moderately nourished, the medium complexioned body of a male subject of 5'7" in height, weighing 70 kg, rigor mortis present all over the body, presence of post-mortem staining over-dependent parts of the back except over the pressure points, subconjunctival haemorrhage revealed in both eyes, evidence of cyanosis over the nail beds of all the fingers and toes dark discolouration of face, petechial haemorrhages over face at places. There was no injury present over any part of the body. Non-specific physical signs were detected.

### On Internal Examination

All the organs including the lungs, which are oedematous, and heart which was normal in size, were congested, petechial haemorrhages were present over visceral surfaces of the pleurae and pericardium with evidence of congestion and a thin lining of mucus over the walls of the tracheal and laryngeal lumen (Figure No.1) and a small oval black seed-like structure of size 1.5 cm x 1 cm found in the tracheal lumen beyond the tracheal bifurcation (Figure No. 2).

Usual Viscera in a saturated solution of common salt and Blood without preservative preserved and sent to FSL for Chemical Examinations. The report of the chemical examiner after analysing the viscera showed the opinion as "Alcohol detected in the stomach sample."



Figure No. 1: Tracheal Lumen



Figure No. 2: Tracheal Lumen with Foreign Body



Figure No. 3: Foreign Body – The Seed

### Result & Discussion

In this case report, there were signs of asphyxia at autopsy like cyanosis present over the nail beds of all the fingers and toes, a dark discolouration of the face, petechial haemorrhages over the face at places and over the visceral surfaces of the pleurae and pericardium, which projects anesthetization of the gag reflex, thereby leading to clinical signs of choking. Evidence of congestion and a lining of thin mucus over the walls of the tracheal and laryngeal lumen, and detection of a small oval black seed-like structure of size 1.5 cm x 1 cm in the tracheal lumen beyond the tracheal bifurcation, resembling a seed of the fruit “Litchi” (Figure No. 3) along-with alcohol in the stomach content were present. These all point out to the fact that the subject while having food preceded by alcohol consumption, the recurrent laryngeal nerve, a branch of vagus nerve got stimulated, obstructing the airway, thereby inhibiting the gag reflex and causing reflex inhibition of heart. It simulates acute massive or global heart attack by the suddenness of its onset and fatality and hence the nomenclature café coronary, a form of choking, which is one of the types of violent mechanical asphyxia death, coined.

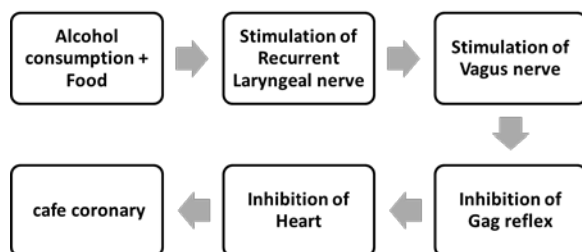


Figure No. 4: Pathophysiology of Café Coronary

Taking into consideration of all the internal and external findings following an autopsy, the autopsy surgeon arrived at the opinion that “Death was due to the effects of asphyxia following obstruction of the upper respiratory tract by the foreign body-antemortem in nature”.

### Conclusion

Death due to café coronary is sudden in onset giving very little time to treat, most common in extremes of age, dental status, and especially alcohol consumption. Parkinsonism, long term hospitalisation resulting in muscular dystrophy or atrophy diminishing their functions and reflexes, are some of the other factors responsible for café coronary syndrome and its fatal results ( Jameson *et al.*, 2018 ).

This type of sudden death can be highly prevented if awareness is developed regarding proper eating habits, that of eating slowly, taking small food bolus each time, proper grinding, chewing, swallowing, avoiding talking and laughing while having meals, especially when the subject belongs to the extremes of age, avoidance of excessive alcohol before food, having edentulous dentition, or suffering from a psychiatric or neurologic illness (Jameson *et al.*, 2018; Mukherjee, 2018; Reddy and Murty, 2017). On spot Heimlich manoeuvre, if diagnosed early, can definitely save one’s life. Proper care of the children to see that they are not eating the unwanted foreign body, proper care after breastfeeding etc. can prevent such unwanted sudden death.

Due to the modernisation of the present era of life, which though a boon to the present lifestyle poses also as a bane for survival. Meticulous history taking, careful dissection and examination during the autopsy, detailed examination by chemical and histopathological examiner, and ultimate the skill and analysing capacity of the medico-legal expert can definitely lead to the correct opinion as to the cause and manner of death, thereby rendering proper justice to the innocent.

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