

Café coronary syndrome-fatal food asphyxiation: an autopsy case report

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Abstract

Café coronary is a condition in which a healthy person who begins a meal, suddenly collapse and dies without any further distress. Signs of choking are absent and the cause of death is reflex vagal inhibition of the heart. In such deaths, a detailed and meticulous autopsy is required to reach the diagnosis and give cause of death, although the scene visit and collection of samples have their own significance. Café coronary was the term coined by Haugen in 1963 for sudden and unexpected death occurring during a meal due to accidental occlusion of the airway by food. In the present case report the authors want to highlight the need of awareness towards the predisposing factors responsible for the café coronary syndrome or fatal food asphyxiation.

Keywords: Suffocation, Café coronary, Choking, Reflex vagal inhibition.

Introduction

Café coronary is a condition in which a healthy person who begins a meal, suddenly collapse and dies without any further distress. Signs of choking are absent and the cause of death is reflex vagal inhibition of the heart. Suddenness of the death is most marked. Generally in old age, gross inebriation and/or muscular incoordination causes malfunctioning of deglutition mechanism, food slips in to the larynx or bifurcation of trachea. Due to inhibited gag reflex, the food continues to remain in there and stimulates recurrent laryngeal nerve a branch of vagus nerve which in turn causes reflex inhibition of the heart.¹

The Case

An adult male of about 40 year old age was found dead on the floor in his room, in prone position. A Tiffin box with meat, rice along with half liquor bottle was also found beside him. No disturbance of any kind i.e. clothing, bedding, almirah or any articles was noticed on the spot by police. The man was living alone in his room and the neighbors confirmed the history of alcohol intake but in socially acceptable amount. The dead body brought to the causality of Lady Hardinge Medical College New Delhi first and then to the mortuary for the post mortem examination. On examination a large meat piece measuring 7x3x2cm was found in the lower larynx and not any features suggestive of asphyxia were found. The heart with coronaries was within normal limit. No external ante-mortem injuries were present over the body. The cause of death was given as the sudden death due to café coronary syndrome.



Fig: Arrow showing a large meat piece in the larynx

Discussion

In spite of advancement in medical facilities, the end of life is inevitable. Middle or elderly age, gross inebriation, use of sedative drugs, poor dental structure, natural disease i.e. Parkinsonism and long term hospitalization are well known factors responsible for café coronary syndrome.

In one earlier retrospective study done to analyze the factors expected to predispose fatal food asphyxiation (café coronary) found old age, poor dentition, and alcohol consumption as the most common factors while the long term hospitalization, drugs and natural disease like Parkinsonism were other factors. The study felt the need of more awareness for café coronary syndrome.²

A case report published earlier found an unwitnessed death of an old female caused by café coronary syndrome. During autopsy a large piece of banana weighing 18 grams was found firmly lodged in the laryngopharynx.³ In another case reported earlier a 70 year old man was found dead in his bed with some secretion from mouth and nose. During autopsy a large piece of banana weighing 21 grams was found to be impacted in the laryngopharynx occluding the airway. The predisposing factors were edentulous jaw and a history of psychiatric illness.⁴ In one case report the

author found a 70 year old male brought dead to the casualty and the diagnosis of food asphyxiation was made. On autopsy a piece of meat measuring 7x5cm was found lodged within the laryngopharynx.⁵ All the case reports strongly highlighted the requirement of awareness towards the deglutition problems and psychiatric illness especially in old people.

A retrospective study was conducted on 44 café coronary death cases out of which twenty three were females while twenty one males and fifty seven percent victims were more than seventy year old. Predisposing factors most commonly found were edentulous jaw or missing significant number of teeth along with psychiatric or neurologic illness.⁶

Conclusion

Deaths from café coronary syndrome can be prevented by being aware of the modifications in eating habits i.e. eating food in smaller pieces, avoiding swallowing quickly, prior munching and grinding of the food and by avoiding talking and laughing during meals especially in older people, with edentulous jaws and psychiatric or neurologic illness. Heimlich maneuver can save life if such situation arises.

Forensic pathologist can exclude the possibility of gastric aspiration by litmus test on the secretion found in the lower respiratory tract. Further the pathologist must attempt to search for the underlying predisposing factors such as old age, missing teeth, long term hospitalization and psychiatric or neurologic illness along with searching the foreign body or food bolus occluding the airway.

Conflict of Interest: There is no conflict of interest among the authors at any point.

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