

A Series of Fatal Choking Death in Elderly

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Abstract

Sudden death due to foreign body obstruction of upper airways often termed Cafe Coronary has received considerable attention in the last two decades. However, there are no previous reports of Electrocardiographic records of the Victims or survivors of the condition. Death due to accidental choking is observed in all age group but extremes of age are more vulnerable. It is usually due to a foreign body, but it can be caused by the products of the disease (or violence) or by anatomical changes due to disease. People experience choking by accidental slipping of food bolus in their respiratory tract in their daily lives. Most of the people recover from it but a few experience obstruction of the respiratory tract that cannot be cleared and may prove fatal. Accidental choking is the commonest manner of choking. In the present case report a case of death due to choking which was brought in the department of forensic medicine for post-mortem examination.

Keywords: Choking • Asphyxia • Aspiration • Autopsy.

Introduction

Sudden death due to obstruction of upper airways has been known popularly as Cafe Coronary; a term coined by Haugen in 1963 [1]. Cafe Coronary, as the name implies points to cardiovascular causes as the cause of death. However, a survey of literature shows except for the study of Bendkowaski [2], the cause of death as revealed by autopsy findings was obstruction of upper airways by food, there was no evidence of myocardial infarction and the cause of death was attributed to "choking and asphyxiation" [3,4].

Death due to choking is among the top five causes of accidental death in United States which comprises of approximately 2500 deaths per year [1]. Choking is a form of asphyxia which is caused by impaction of a foreign body in the respiratory passage usually between pharynx and bifurcation of trachea [2].

Choking from objects being lodged in the throat is 'commonly seen in the very young, elderly, psychiatric patients or in' the infirm, acute alcoholic intoxication, 'particularly where the ability to swallow or masticate, is severely impaired. Choking commonly occurs during a meal when food is accidentally inhaled especially,' When the victim is laughing or crying. Choking is mostly accidental [5].

Case Report 1

71 years old was found unconscious after having lunch at Palika Bazaar and brought dead in the casualty of Dr. RML Hospitals, New Delhi on 04-1-2018 at 3.00 pm. During autopsy examination, there were signs of asphyxia namely congestion of face and conjunctiva and bluish discoloration of nail beds. External injury in the form of reddish abrasion measuring 3 × 1 cm was seen on left eyebrow. On dissection a food bolus containing thick un-chewed

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piece of roti and dal admixed with mucus is present at the level of trachea completely obstructing it. On internal examination petechial hemorrhages were found on the surface of cerebrum. All the internal organs were congested. Opinion as to cause of death was opined as asphyxia consequent upon choking (Figures 1,2).

Case Report 2

An about 32 years, unknown person was found unconscious at outer circle Connaught place and brought dead in the casualty of LHMC and Associated Hospitals. During autopsy examination, there were signs of asphyxia namely congestion of face and conjunctiva.

On dissection bolus of rice admixed with mucus was present completely obstructing trachea.

All the internal organs were congested. Opinion as to cause of death was opined as asphyxia consequent upon choking.



Figure 1. Food bolus obstructing respiratory airway.



Figure 2. Food bolus obstructing respiratory airway.

Case Report 3

A about 25 years, unknown person was found unconscious at Hanuman Mandir, Connaught place and brought dead in the casualty of LHMC and Associated Hospitals. During autopsy examination, there were signs of asphyxia namely congestion of face and conjunctiva.

On dissection piece of chicken and rice admixed with mucus was present completely obstructing trachea.

All the internal organs were congested. Opinion as to cause of death was opined as asphyxia consequent upon choking.

Discussion

Choking or obstruction of upper air, i.e., between pharynx and bifurcation of trachea is a well-known phenomenon in forensic literature for many centuries and asphyxiation of food has been recognized as a cause of sudden accidental death [6].

Obstruction of the respiratory passage can be mechanical or anatomical in origin. Mechanical obstruction occurs due to foreign body like food particles, small toys, coins or lemon. Choking can also occur when vomited material is inhaled or when a large food bolus or a piece of meat is accidentally impacted in the glottis. Anatomical obstruction occurs due to anatomical structures such as tongue, swollen tissues of mouth and throat like inflamed epiglottis or results from injury to neck.

Café coronary syndrome or death due to acute obstruction of upper air way by impacted food while eating was first described in deaths at restaurant where the victim collapsed in front of others most of the time trying to swallow a piece of meat.

Choking is commonly seen in the very young, elderly, psychiatric patients or in a case where the ability to swallow or masticate is severely impaired like the infirm, acute alcohol intoxication [7].

This is an un-witnessed death of a café coronary syndrome, where a 70-year-old man after having dinner with his children previous night found dead next day morning in his bed. At autopsy a blob of mucoid secretions was found at right nostril and a piece of banana weighing 21 g was found impacted within the laryngopharynx, occluding the air way [8].

Choking can also occur at the time when the victim has been laughing or crying or someone out of fun had slapped him on his back, while the foreign body was in his mouth or during rape or violent sexual intercourse after a heavy meal. Aspiration of regurgitated vomitus in to the lungs is commonly seen in acute alcoholics or during operations under ether anaesthesia or in young infants. Choking may occur due to inhalation of blood from facial injuries, such as a broken nose, or dislodged teeth and laceration of the lips and gums inflicted during flight, if the victim becomes unconscious and lies on his back. A case of choking usually presents with vigorous coughing and respiratory distress, change in voice quality and swallowing problem, bluish discoloration of face, lips and nails and sudden loss of consciousness. Foreign body impaction in larynx mostly accidental in nature and requires urgent intervention to save the life of the patient.

To examine the characteristic features of fatal food asphyxia and to develop an autopsy approach to such cases a retrospective study of autopsy files was undertaken at Forensic Science SA (Adelaide, Australia) over a 10-year period from 1993 to 2002 for all cases of food asphyxia/café coronary syndrome. Forty-four cases were identified [9].

Dead body of a 26 years old male subject was brought for postmortem examination. On autopsy examination, along with the signs of asphyxial death both externally and internally, congestion and erosion was seen in the trachea. Some traces of puffed rice were also visible along the respiratory tract by naked eyes. History furnished by the police was also corroborative. While having puffed rice with milk in his house, he suddenly became restless and turned unconscious; when taken to hospital, he was declared brought dead.

This case reports about a fatal choking due to food bolus [10].

There is another term, 'Cafe Coronary' in which the victim may be observed slumping over the dining table or collapsing suddenly while walking across the room after having meals, with no signs of respiratory distress. The original series of deaths involved well-nourished businessmen dying suddenly and unexpectedly in restaurants and cafes, while sitting or shortly after sitting in their chairs, that was confused with heart attack. Hence the name, 'cafe coronary'. However, autopsy usually revealed a bolus of food in the pharynx or larynx. The suppression of gag-reflex due to alcohol or drugs makes the individual susceptible to Cafe Coronary [11].

Conclusion

Sudden collapse during or shortly after a meal should always raise the possibility of café coronary and the autopsy examination should not only attempt to demonstrate airway occlusion by a bolus of food, but also to identify or exclude underlying neurological disease. Such cases may raise issues concerning adequacy of care and appropriateness of medication. The diagnosis of café coronary syndrome can only be made with confidence after the clinical history and circumstances of death have been clearly established, impacted material has been demonstrated in the airway at autopsy (or recorded by those attempting resuscitation), risk factors have been identified and other possible causes of death have been excluded.

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