ISSN: 2395 - 0471

International Journal of Clinical and Biomedical Research
Case Report

CHOKING IN A PSYCHIATRIC PATIENT - A CASE REPORT

***GURURAJ BIRADAR[1], VINAYAKA PRASANNA[1], SHANKAR M BAKKANNAVAR[2], PAVANCHAND SHETTY[3], G PRADEEP KUMAR[4]**

[1]Assistant Professor, Department of Forensic Medicine and Toxicology, Vijayanagara Institute of Medical Sceinces, Ballari

[2,3]Associate Professor, [4]Professor, Department of Forensic Medicine and Toxicology, Kasturba Medical College, Manipal University, Manipal.

*Corresponding author email: rockguru18@gmail.com

Received: 15th July 2015, Accepted: 05th Sept 2015.

ABSTRACT

Choking is one of the important types of asphyxia deaths. The incidences of which are not uncommon. The choking in children could be due toys, coins, marbles, nuts and any other small hard object or even sometimes due to stuffed in plastic bags whereas in adults most of the times food bolus or hard parts of food like bone pieces are responsible. It is mostly accidental in nature. It can cause coughing or sometimes airway obstruction leading to death. We present a case wherein a mentally ill person accidentally choked to death after consumption of food.

KEYWORDS: Choking, Asphyxial deaths, Food bolus, Airway obstruction.

INTRODUCTION

Choking is a form of asphyxia caused by an obstruction within the airways. Commonly observed in children, elderly and Psychiatric patients. Persons with mental illness are 3 – 5 fold higher risk of sudden death due to choking compared to normal persons. Recent studies have also proved that the mental illness is a significant risk factor for the choking[1]. Causes for choking include risk factors like medications especially antipsychotics and anticholinergics, seizures and tachyphagia[2 - 6]. Along with these risk factors, even the circumstantial factors play a role in fatalities due to choking[4, 5]. It is one of the common symptoms of dysphagia among patients suffering from mental disorders[7].

CASE REPORT

A 52 year old male was a resident of 'Asare' - a home care for mentally ill patients. 'Asare' is a trusted helping hand for the mentally challenged citizens set up jointly by Manipal University and Archana Trust, Manipal. On fatal day, the victim had his lunch and drank water. Suddenly he collapsed and was brought to the Kasturba hospital, Manipal for treatment, where he was declared dead. He had a history of mental illness and was on antipsychotic drug, Chlorpromazine.

At autopsy, on external examination; bilateral conjunctivae were congested with bluish discoloration of finger nails (Figure 1).

Internal Findings:

Trachea contained yellowish coloured identifiable food particles (Pumpkin skin and puri) at the inlet and along the whole length of the trachea (Figure 2 & 3). Mucosa was congested. Oesophagus and stomach contained the similar material as that of trachea. All other organs were congested on cut section.

Figure 1. Bluish discoloration of finger nails

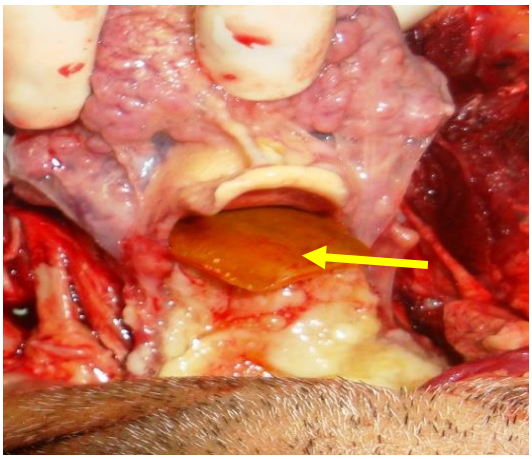

Figure 2. Food particles at the inlet of trachea

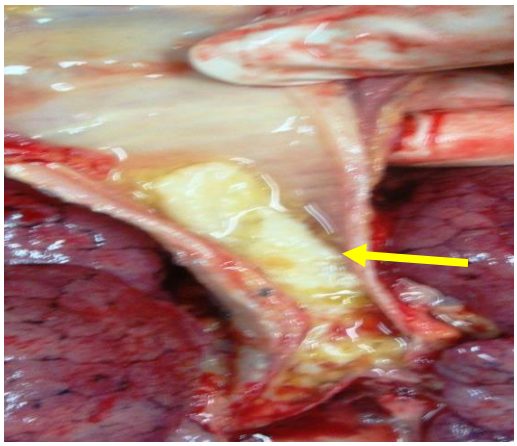

Figure 3. Food particles along the length of trachea

Cause of death: It was opined that the deceased died due to choking secondary to the obstruction

DISCUSSION

The present case represents an attempt to delineate the problem of choking incidents in psychiatric patients. In the past the studies done on deaths of psychiatric patients have shown choking as one of the factors for sudden deaths in these patients. Ruschena et al. (2003) survey in Australia conducted between 1989 and 1995 to find out the incidence of accidental death among psychiatric patients showed that 70 fatal cases of choking[8]. Nagamine study (2011) conducted in Japan between 2005 and 2011, all the eight victims of choking were on antipsychotics died while eating bread[9]. But Hwang et al. (2010) had different opinion in terms of higher dosage of hypnotics use being the reason for choking rather than antipsychotics[10]. Based on above researches it can be postulated that there is a relationship between the choking and the use of antipsychotic drugs.

Antipsychotics and anticholinergics are the two most commonly prescribed types of drugs to the patients who suffered choking. Antipsychotics affect swallowing mechanisms by dopamine blockade and / or anticholinergic effects, leading to laryngospasm, dyskinesia of the tongue and oropharynx. It results in dysphagia, decreased esophageal motility and impairment of gag reflex. Overeating and tachyphagia is common in psychiatric patients. Psychotropic medications increase appetite or food craving through an effect on hypothalamus, via leptin and ghrelin metabolism[2,11]. In psychiatric patients, choking has been linked to the dosages of neuroleptics and anticholinergics[12]. Choking is a relatively uncommon but preventable cause of death as stated by American Heart Association in 2001[13]. In our case, postmortem examination showed food bolus in trachea which could explain such effects.

CONCLUSION

Prevention of choking is of prime important in psychiatric patients. Health professionals should have awareness of the increased risk from choking in such patients. It is necessary to screen these patients at risk of choking by identifying the following risk factors; being elderly, having a neurological disturbance or a psychiatric disorder. Patients and their caretakers should be asked about swallowing difficulty or choking. For high-risk patients, referral to a speech therapist, as well as appropriate diet and direct supervision, should be offered.

CONFLICT OF INTEREST

None declared.

REFERENCES

1) PHW Yim, CSY Chong. Choking in Psychiatric Patients: Associations and Outcomes. Hong Kong J Psychiatry 2009;19:145-9

2) Craig TJ. Medication use and deaths attributed to asphyxia among psychiatric patients. Am J Psychiatry 1980; 137: 1366-73.
3) Fiorriti A, Giaccotto L, Melega V. Choking incidents among psychiatric patients: retrospective analysis of thirty-one cases from the west Bologna psychiatric wards. Can J Psychiatry 1997; 42: 515-20.
4) Corcoran E, Walsh D. Obstructive asphyxia: a cause of excess mortality in psychiatric patients. Ir J Psychol Med 2003; 20: 88-90.
5) Warner J. Risk of choking in mental illness. Lancet 2004; 363: 674.
6) Ruschena D, Mullen PE, Palmer S, Burgess P, Cordner SM, Drummer OH, et al. Choking deaths: the role of antipsychotic medication. Br J Psychiatry 2003; 183: 446-50.
7) Regan J, Sowman R, Walsh I. Prevalence of dysphagia in acute and community mental health settings. Dysphagia. 2006; 21(2): 95 -101.
8) Ruschena D, Mullen PE, Palmer S, Burgess P, Cordner SM, Drummer OH, I Barry-Walsh J. Choking deaths: The role of antipsychotic medication. The British Journal of Psychiatry, 2003; 183(5): 446-450.
9) Nagamine, T. Choking risk among psychiatric inpatients. Neuropsychiatric Disease and Treatment. 2011; 7: 381-382.
10) Hwang SJ, Tsai SJ, Chen IJ, Hsu FC, Li C, Kao KP. Choking incidents among psychiatric inpatients: A retrospective study in Chutung Veterans General Hospital. Journal of the Chinese Medical Association. 2010; 73(8): 419-424.
11) Flaharty JA, Lahmeyer HW, Laryengeal – Pharyngeal Dystonia as a possible cause of asphyxia with haloperidol treatment. Am J Psychiatry 1978; 135: 1414-5.
12) Hsieh HH, Bhatia SC, Andersen JM, Cheng SC. Psychotropic medication and nonfatal cafe coronary. J Clin Psychopharmacol 1986; 6: 101-2.
13) Stapleton ER, Aufderheide TP, Hazinski MF, Cummins RO. BLS for healthcare providers. American Heart Association, 2001.