

Aspiration of a large piece of spoon: An interesting suicide attempt

Büyük bir kaşık parçası aspirasyonu: İlginç bir intihar girişimi

Sekib UMIHANIC¹, Sefika UMIHANIC², Nedzad SALKIC¹, Nusret RAMIC³

ABSTRACT

Suicide is one of the significant problem seen in schizophrenia. In our case of placing a large piece of a spoon through the mouth and throat into trachea and right main bronchus is, as a modality and means of committing suicide is unique in literature so far, and that no similar case has been described. We report a very rare case of a large-sized metal foreign body (FB) aspiration. Our patient tried to commit suicide by placing a piece of spoon into the respiratory tract. When hospitalized, the patient was in good general condition. The chest X-ray revealed an 11-cm-long metal FB in the distal part of trachea and right main bronchus, representing the handle of the metal spoon. After rigid bronchoscopy, and successful extraction of the FB, the control check of the bronchial tree was performed, and the findings were normal. Every suicide is a tragedy and major public health problem. Suicides are preventable and should be given high priority with regard to prevention and research. Removal through the rigid endoscope is the recommended and safe method in FB aspiration cases.

Key words: Suicide, spoon, aspirations

ÖZ

İntihar şizofrenide gözlenen önemli sorunlardan biridir. Bizim vakamızdaki ağızdan büyük bir kaşık parçasını trakea ve sağ ana bronşa sokarak yapılan intihar, yöntem olarak benzersiz bir intihar teşebbüsüdür ve benzer bir vaka literatürde bildirilmemiştir. Büyük boyutlu metal yabancı cisim aspirasyonunu çok seyrek bir vaka olarak raporluyoruz. Hastamız bir kaşık parçasını solunum yoluna sokarak intihar etmeye çalışmıştır. Hastaneye geldiğinde genel durumu iyiydi. Göğüs x ray ile trakea ve sağ ana bronşta 11 cm'lik metal yabancı cisim görülmüş ve kaşık sapıyla uyumlu bulunmuştur. Rigid bronkoskopi ile yabancı cismin başarıyla çıkarılması sonrası bronşial alanın kontrolü yapılmış ve bulgular normal görülmüştür. Tüm intiharlar bir trajedi ve majör halk sağlığı sorunudur. İntiharlar engellenebilir ve bu konuya öncelik verilmelidir. Rigid bronkoskopi ile çıkarılan yabancı cisim aspirasyonlarında tavsiye edilen güvenilir bir yöntemdir.

Anahtar kelimeler: İntihar, kaşık, aspirasyonlar

INTRODUCTION

There are different kinds of foreign bodies that people aspirate. It depends on diet and the customs of the community. Almost the largest percent of accidental deaths in children under the age of 5 goes consists of Foreign Body Aspiration (FBA)¹. However, a number of adults live with FBA, and foreign body can remain undetected for a long period of time². A spoon in the bronchus has rarely been described as a FB, and never as a weapon of suicide so far. As an FB, spoon is always taken through oral route, and located in different parts of the digestive tract.

When a large foreign body is aspirated, the result can be acute respiratory distress and, sometimes, even death. Also, foreign body aspiration can mimic other illnesses, causing some difficulties in diagnosis, e.g. asthma³. The mortality can be reduced if a foreign body is diagnosed and removed early. Otherwise, the complications are serious and sometimes fatal⁴.

According to WHO, every 40 seconds a person commits a suicide - 800 000 people a year (taken from WHO's First Global Report on Suicide Prevention). People commit suicides all over the world, regardless of their sex and age. Statistically, the most common

Received: 18.01.2017

Accepted: 28.01.2017

¹Ent Clinic, Ucc Tuzla, Bosnia and Herzegovina

²Clinic For Lung Disease, Ucc Tuzla, Bosnia and Herzegovina

³Clinic for surgery, Ucc Tuzla, Bosnia and Herzegovina

Yazışma adresi: Sekib Umihanic, Ent Clinic, Ucc Tuzla, Bosnia and Herzegovina

e-mail: sekib.umihanic@gmail.com

group of people committing suicides are those aged 70 years and older. On the other hand, suicide is immediately behind the first place among causes of death in 15-29 year-age group, and in some countries the highest rates of suicide are found among young people⁵. In this case report we presented a patient who aspirated a large piece of spoon, with an intention to commit suicide.

CASE REPORT

A 41-year-old male patient was transferred to our hospital. The patient had a history of schizophrenia. With an intention to commit suicide, the patient aspirated a large piece of spoon.

Vital signs were normal. The chest X-ray revealed a metal 11-cm-long foreign object in the distal part of trachea and right main bronchus (Figure 1). The patient was scheduled promptly for rigid bronchoscopy under general anaesthesia, without endotracheal intubation. In case of failed endoscopy, as a backup plan tracheotomy and the extraction of the FB through

tracheostoma were decided upon. Laryngeal findings were not remarkable. A metal FB extending into the right main bronchus was present in the distal parts of trachea. Its curved tip was facing anteriorly. Removal of the spoon with a bronchoscope no. 9 failed, because the diameter of the FB was larger than the caliber of the bronchoscope. Then the trachea was entered with pincers and bronchoscope no. 7. The FB was grabbed with the pincers and the bronchus was dilated with the bronchoscope. The distal, curved end of the spoon was freed, and the whole FB was removed with one move. The dimensions of the FB were 11 cm x 1 cm (curved end) representing the handle of the metal spoon (Figure 2). After the successful extraction of the FB, the control check of the bronchial tree was performed, and the findings were normal. After the procedure, the patient was in a good condition and the next day he was discharged from the hospital.

DISCUSSION

Some risk factors for suicide attempts include depression, substance misuse, suicidal ideation, and hopelessness⁶. In various countries of the world different techniques have been used for suicide. Ajdacic-Gross et al.⁷ described a while hanging is the most common method of suicide mainly in the Eastern European countries such as Latvia, Poland, Romania, and Lithuania. They also reported firearm suicide as the predominant method in the Argentina, Uruguay, United States, and Switzerland. As a different suicide method, jumping, is mostly seen in Malta, Hong Kong, and Luxembourg. As highly lethal and violent methods, hanging and firearm suicide are mainly seen in men, while such a less lethal and violent methods, drowning and poisoning are mainly selected by women.

We have described a very rare case of a large-sized metal foreign body aspiration. Our patient tried to commit suicide by placing a piece of spoon into the respiratory tract. When hospitalized, the patient was in good general condition, and it is well known that an aspirated foreign body can be tolerated by healthy

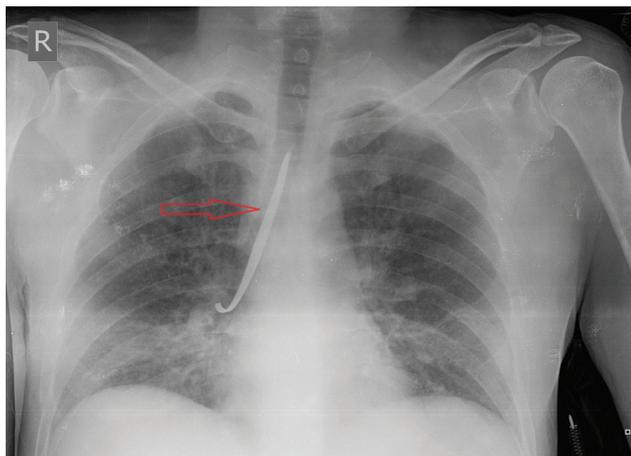


Figure 1. Foreign body in the trachea and the right bronchus detected with X-ray.

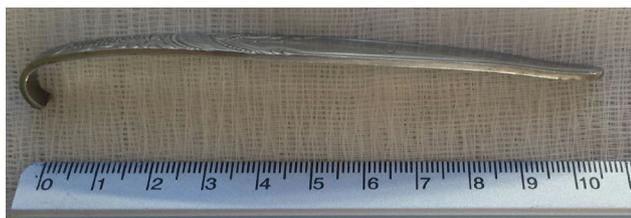


Figure 2. Piece of spoon removed from the trachea.

adults for a long period of time, with no acute life threats.

When adult population is concerned, aspirations of that kind are frequently associated with general anaesthesia, sedation, seizures of neurologic disorders affecting the oropharynx, and intoxication as well⁸.

Two cases of a spoon part aspiration have been published so far. Once et al.⁹ described a case of a 76-year-old male patient who aspirated a teaspoon through the tracheostomy cannula. Sazak et al.¹⁰ described a case of a male patient who was 14 years old and had a history of mental retardation and epilepsy as well. The patient inhaled a piece of wooden spoon handle, while having a generalized tonic-clonic seizure. In mental illnesses and epilepsy, suicide and accidents can intermingle. Especially if the patient has epilepsy, foreign body aspiration can cause death. Considering the fact that in the first case the FB was inhaled through tracheostoma, and that in the second case the foreign body was a wooden, smaller FB, our opinion is that our case of placing a large piece of a spoon through the mouth and throat into trachea and right main bronchus is, as a modality and means of committing suicide is unique in the literature, and any similar case has not been described so far. The important reason for describing such a case is its successful extraction of the FB with an endoscope, using a particular manoeuvre.

Rigid bronchoscopes are usually selected as the instrument for foreign body extraction, particularly with the paediatric airway¹¹. Generally, it is a difficult task to remove large objects because it is an uneasy job to grasp a large solid object firmly. Such an attempt usually causes local trauma rather than providing therapeutic benefit².

CONCLUSION

Every suicide is a tragedy and a major public health problem. Suicides are preventable and should be given high priority with regard to prevention and research. Removal of the foreign body with the aid of a rigid endoscope is the most reliable method recommended in cases of FB aspiration.

REFERENCES

1. Abhishek J, Utpal J, Pradip KM. Tracheo-Bronchial Foreign Bodies: A Retrospective Study and Review of Literature. *Indian J Otolaryngol Head Neck Surg* 2014;66(Suppl 1):156-160. <https://doi.org/10.1007/s12070-011-0386-4>
2. Qureshi A, Behzadi A. Foreign-body aspiration in an adult. *Can J Surg* 2008;51(3):E69-E70.
3. Chavoshzadeh Z, Golnabi A, Rezei N, Mehdizadeh M. Laryngeal foreign body aspiration misdiagnosed as asthma: two case reports and a review of the literature. *B-ENT* 2011;7(2):137-140.
4. Willett LL, Barney J, Saylor G et al. An unusual cause of chronic cough. Foreign body aspiration. *J Gen Intern Med* 2006;21:C1-3. https://doi.org/10.1111/j.1525-1497.2006.02102001_1.x
5. World Health Organization. First WHO report on suicide prevention.: WHO; 2014. Available from: <http://www.who.int/mediacentre/news/releases/2014/suicide-prevention-report/en/#>.
6. Mork E, Walby FA, Harkavy-Friedman JM, Barrett EA, Steen NE, Lorentzen S, Andreassen OA, Melle I, Mehlum L. Clinical characteristics in schizophrenia patients with or without suicide attempts and non-suicidal self-harm--a cross-sectional study. *BMC Psychiatry* 2013;13:255. <https://doi.org/10.1186/1471-244X-13-255>
7. Ajdacic-Gross V, Weiss MG, Ring M, Hepp U, Bopp M, Gutzwiller F et al. Methods of suicide: international suicide patterns derived from the WHO mortality database. *Bull World Health Organ* 2008;86(9):726-732. <https://doi.org/10.2471/BLT.07.043489>
8. Baharloo F, Veyckemans F, Francis C et al. Tracheobronchial foreign bodies: presentation and management in children and adults. *Chest* 1999;115:1357-1362. <https://doi.org/10.1378/chest.115.5.1357>
9. Oncel M, Sunam GS, Ozbek S. Two interesting cases of tracheobronchial foreign bodies. *BMJ Case Rep* 2013; 1-2. <https://doi.org/10.1136/bcr-2013-201170>
10. Sazak H, Yazici U, Gülgösteren M, Topçuoğlu G, Özkan S, Şavkilioğlu E. Iatrogenic aspiration of a large piece of a wooden spoon in a 14-year-old epilepsy patient. *Ulus Travma Acil Cerrahi Derg* 2011;17(4):359-362. <https://doi.org/10.5505/tjtes.2011.04378>
11. Eroglu A, Kurkcuoglu IC, Karaoglanoglu N. Tracheobronchial foreign bodies: A 10-year experience. *Ulus Travma Acil Cerrahi Derg* 2003;9(4):262-266.