

CASE REPORT

Root Canal Instrument Retrieved from Subglottic Region: Critical Case Report

¹Priyesh .N. Kesharwani, ²Rahul Tiwari, ³Heena Tiwari, ⁴Kaushal Charanpahari, ⁵Subhash .C. Bhojar, ⁶Amol Sulakhe

¹MDS, OMFS, Private Practitioner & Consultant, Thane, Mumbai, Maharashtra, India

²FOGS, MDS, OMFS & Dentistry, JMMCH & RI, Thrissur, Kerala, India

³BDS, PGDHHM, Government Dental Surgeon, CHC Makdi, Kondagaon, C.G, India

⁴PG Student, OMFS, Surendra Dental College & RI, Sriganganagar, Rajasthan, India

⁵B.D.S., M.D.S. OMFS, Dean, CSMSS Dental College & Hospital, Aurangabad, Maharashtra, India

⁶M.B.B.S., D.L.O.M.S., DNB. ENT Surgeon, Aurangabad, Maharashtra, India

ABSTRACT:

The aspiration of foreign bodies into the bronchus frequently occurs in children as well as in elderly people. Foreign bodies in the airway not only cause chronic cough and pneumonia, but also result in life-threatening conditions, such as dyspnoea, cyanosis and death. This report presents the clinical characteristics of 9-year-old patient with sub-glottis in the foreign body. The foreign body was dental root canal instrument (reamer).

Key words: Foreign body, Aspiration, Emergency, Fatal.

Received: 2 May 2018

Revised: 16 May 2018

Accepted: 25 June 2018

Corresponding Author: Dr. Rahul VC Tiwari, FOGS, MDS, OMFS & Dentistry, JMMCH & RI, Thrissur, Kerala, India

This article may be cited as: Kesharwani PN, Tiwari R, Tiwari H, Charanpahari K, Bhojar SC, Sulakhe A. Root Canal Instrument Retrieved from Subglottic Region: Critical Case Report. J Adv Med Dent Scie Res 2018;6(9):19-20.

INTRODUCTION:

Bronchial foreign bodies present a large range of symptoms, from trivial symptoms to irreversible damage to the bronchus and the lung, which can be life threatening. Nonspecific respiratory symptoms may be mistakenly attributed to other medical diagnosis unless there is a clear history of aspiration. However, an early diagnosis is very important, because inflammatory granulation due to long-term impaction of foreign bodies makes its removal difficult.

CASE REPORT:

A 9-year-old boy taking root canal treatment under a dental surgeon, accidentally root canal instrument in the oral cavity was ingested by a patient then the patient was referred to our institute with a history of cough and dyspnoea. History suggests foreign body aspiration. Chest X-ray (Fig 1,2,3) revealed foreign body i.e. root canal instrument in subglottis. Under General anaesthesia, rigid bronchoscopy was done. Foreign body was partially impacted in subglottis region anteriorly to remove it was pushed downward and then removed. It was a root canal instrument i.e. reamer (Fig 4)



Figure 1: X- ray Neck showing foreign body in subglottis

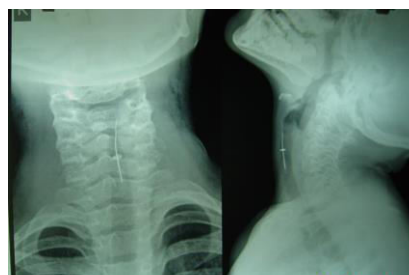


Figure 2: Chest X ray showing foreign body in subglottis



Figure 3: Chest X ray showing foreign body in subglottis

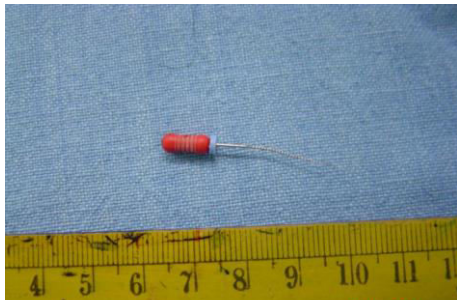


Figure 4: Foreign body removed i.e. Root canal instrument (Reamer)

DISCUSSION:

Foreign body ingestion in children leading to airway obstruction is common. Careless, hasty eating and drinking, without chewing properly contribute to these accidents³. Failure of the dentist to isolate the operative field from the rest of the oral cavity while performing dental treatment increases the risk of aspiration of dental instruments, filling materials, tooth fragments, denture and prosthetic materials. Thus in adults teeth or dental instruments are the commonest foreign bodies to lodge in the oesophagus or bronchi⁴. Tooth aspiration is one of the rare sequelae of maxillofacial trauma.

CONCLUSION:

Symptoms of foreign body aspiration may be immediate and continuous; The most constant and characteristic immediate symptoms are cough, dyspnea, wheezy respiration, and pain in the chest, lobar shrinkage distal to the foreign body rarely occurs. Radio-opaque foreign bodies can be easily diagnosed by plain chest x-rays. Complications of dental origin foreign body in lungs are abscess formation, bronchiectasis, atelectasis, pneumonia.

REFERENCES:

1. McGuirt WF, Holmes KD, Feehs R, et al. Tracheobronchial foreign bodies. *Laryngoscope* 1988; 98:615-18
2. Delap TG, Dowling PA, McGilligan T, Vijaya-Sekaran S. Bilateral pulmonary aspiration of intact teeth following maxillofacial trauma. *Dental Traumatology*, 1999; 15, 190-192.
3. Anyanwu CH. Foreign body airway obstruction in nigerian children. *J Trop Paediatr*, 1985; 31:70-73.
4. Nandi PL, Suen WS. Inhaled intrapulmonary foreign body. *Asian J Surg* (in press).
5. Hedblom CA. Foreign bodies of dental origin in the bronchus: pulmonary complications. Section on Surgery, Mayo Clinic, Rochester, Minnesota
6. Pyman C. Inhaled foreign bodies in children. A review of 230 cases. *Med J Aust*, 1972; 1:62
7. Leonidas JC, Stuber JL, Rudavsky AZ, Abramson AL. Radionuclide lung scanning in the diagnosis of endobronchial foreign bodies in children. *J Pediatr*, 1973; 83:628-630.
8. Mizuno M, Miyakawa K, Miyakawa M. The diagnostic use of pulmonary scintigraphy for endobronchial foreign bodies in children. *Jpn Bronchoesophagol Soc*, 1979; 30:252-259.

Source of support: Nil

Conflict of interest: None declared

This work is licensed under CC BY: **Creative Commons Attribution 3.0 License.**