

Retrival of Aspirated Instrument from Right Main Bronchus during Dental Procedure – Unusual Case Report

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Case Report

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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).

Keywords: Foreign body, Aspiration, Emergency, Fatal.

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 [1, 2]. Nonspecific respiratory symptoms may be mistakenly attributed to other medical diagnosis unless there is a clear history of aspiration [3, 4]. However, an early diagnosis is very important, because inflammatory granulation due to long-term impaction of foreign bodies makes its removal difficult [5].

CASE REPORT

A 45 year male patient was taking root canal treatment under dental surgeon, accidentally the irrigation needle was ingested by a patient, which lodged in his right main bronchus. Needle was bent to 90-degree angle. Fibre-optic Bronchoscopy was done and removal was tried during which they found that the needle is inserted in the lateral bronchial wall and is impacted. This patient was then referred for further management. Chest X-rays were taken (Fig: 1).

We performed Rigid Bronchoscopy by 8.00 mm adult bronchoscope (Fig:2) and manipulated needle which was angled by pulling it and pushing it downward so that the angle could be changed & were able to remove it bronchoscopically. Bleeding was

controlled with adrenaline and saline local irrigation. We were fortunate in this case that we were able to remove it via Rigid Bronchoscopy (Fig:3) and Bronchotomy was avoided.



Fig-1: Bronchoscopic view: Needle present in the right main bronchus



Fig-2: Chest X- ray showing the radiopaque needle in the right main Bronchus



Fig-3: Retrieved irrigation needle along with syringe from the right main bronchus

DISCUSSION

Tooth aspiration is one of the rare sequelae of maxillofacial trauma. Symptoms of foreign body aspiration may be immediate and continuous; The most constant and characteristic immediate symptoms are cough, dyspnoea, 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[6]. Complications of dental origin foreign body in lungs are abscess formation, bronchiectasis, atelectasis, pneumonia[7,8].

CONCLUSION

Foreign body ingestion in children leading to airway obstruction is common. Careless, hasty eating and drinking, without chewing properly contribute to these accidents. 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, adult teeth or dental instruments are the commonest foreign bodies to lodge in the oesophagus or bronchi.

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