

AN OVERLOOKED BRONCHIAL FOREIGN BODY IN ADULT

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ABSTRACT: *A long-standing undiagnosed foreign body in bronchus in adult is very rare case. A 42 years old man with complain of chronic cough with expectoration and fever since 3 years was treated medically including a complete course of AKT for 6 months without improvement in the patient's condition. On taking detailed history, it was revealed that patient had swallowed or aspirated a denture before 3 years, which was overlooked by the treating clinicians. As denture is radiolucent foreign body it remained undiagnosed in X-ray chest for 3 years. It was visualized on flexible bronchoscopy and removed with rigid bronchoscopy. The patient got relieved from symptoms within a week. So presence of chronic cough, wheezing and fever without reduced air entry and without obstructive finding in X-ray chest, should indicate the need for diagnostic bronchoscopy. Also adult patients of recurrent lower respiratory symptoms in spite of satisfactory medical treatment must be submitted for diagnostic bronchoscopy.*

Key Words: *Adult age group; an overlooked bronchial foreign body*

Long standing retained and neglected foreign bodies in the bronchial tree are uncommon and in the vast majority of cases in young children where an adequate history is often nonobtained,^[1] but very rarely in adult and older age groups. Here, presenting the case of an overlooked foreign body in bronchus in 42 years old male to emphasize the need for the physician or surgeon to remain constantly alert of such a possibility in the adult and older age group. A high index of suspicion on the part of the doctor is essential for early diagnosis and curative treatment.

CASE REPORT

A 42 years old male was admitted to the hospital on 21 March 2003 with a history of chronic cough with expectoration associated with fever and headache on and off since 3 years. In June 2000, he had attack of cough, which was treated as 'bronchitis' by medical practitioner. He was relieved from symptoms for sometime but repeated attacks of cough and fever occurred, which subsided after taking medical treatment. X-ray chest at that time was done which was reported clear. During those 3 years, he had also completed a course of AKT for 6 months on empirical basis but still the symptoms were not resolved.

After 3 years he attended this hospital in medical department where on examination fine crepitations with increased tactile vocal fremitus and vocal resonance on the right side base of lung were found.

X-ray chest showed consolidation of right middle lobe and patchy consolidation of right lower lobe with shifting of trachea to right side [Figure 1].

So, the provisional diagnosis of pneumonia was made and treated accordingly with antibiotics, still he did not improve. Then patient was transferred to ENT department. On taking detailed history, the history of aspiration or swallowing of the part of denture was obtained. Before 3 years patient had history of accidental fall and at that time denture was broken in mouth and part of it was swallowed/aspirated. Bouts of coughing occurred but settled down itself and it was assumed that it was swallowed. Repeated attacks of bronchitis occurred subsequently and did not respond completely to medical treatment.

So, flexible fiber-optic bronchoscopy was done as a routine investigation in case of unresolved chronic cough on 13 March 2003.

In flexible bronchoscopy artificial denture with mucopurulent discharge in right main bronchus was found which could not be removed with flexible bronchoscope [Figure 2].

So, elective rigid bronchoscopy was performed on the following day.

The foreign body (artificial single tooth with half plastic plate) from right main bronchus was removed, granulation was

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found at the site of impacted foreign body. Mucopurulent discharge distal to it was found which was cleared by suction [Figure 3].

The immediate postoperative period was uneventful and later on X-ray chest after 1 week showed considerable re-expansion with complete clearing of affected lung. Patient when reviewed after 1 month was free from all symptoms [Figure 4].

DISCUSSION

Long standing retained and neglected foreign bodies in bronchial tree are uncommon. Reports in the literature indicate that foreign bodies in respiratory passage have been retrieved after very long period-even after 55 years.^[2]

In this case as a denture is a nonopaque foreign body, it remained undiagnosed for 3 years in X-ray chest.

The patient did not have respiratory distress or decreased air entry as classical symptom of foreign body in bronchus, because the foreign body did not block lumen of bronchus

completely. But due to granulation formation and mucopurulent discharge around it caused repeated attacks of chronic cough and fever, which subsided on taking medical treatment.

Asymptomatic periods in between gave false belief to medical practitioner and patient of cure from disease and thus it took 3 years to diagnosis a denture in bronchus.

In such cases one has to be careful because long standing neglected foreign body leads to complications like pulmonary infection, lung collapse, lung abscess and malignant transformation.^[3]

Hence the presence of triad of chronic cough, wheezing and fever even in presence of normal X-ray chest or without decrease air entry and un-responding pneumonia indicate for early bronchoscopy.^[4]

So, flexible fiber-optic bronchoscopy is recent and important tool to diagnose neglected foreign bodies in cases of medically nonresponding chronic cough as it is noninvasive and office procedure.

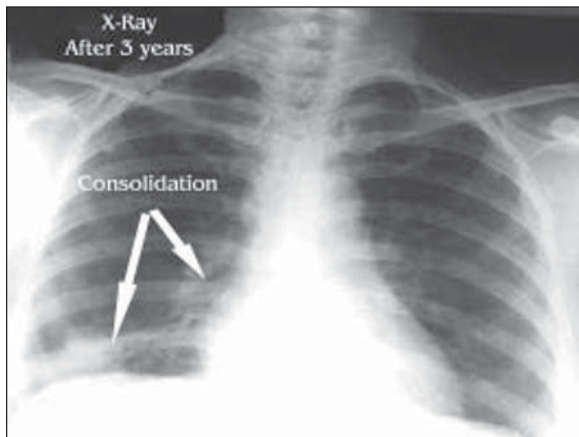


Figure 1: Xray chest showing consolidation of right middle lobe and partially also in right lower lobe



Figure 3: The foreign body

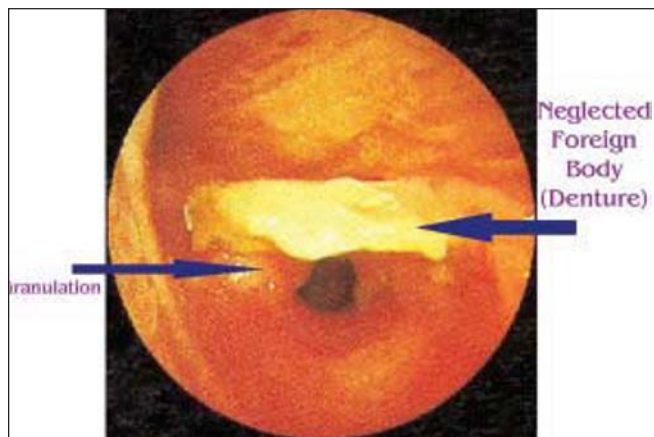


Figure 2: View through flexible bronchoscope showing the foreign body.



Figure 4: X-ray chest one month after the removal of the denture

In such a large foreign body, it was possible to remove it only by rigid bronchoscopy, thus flexible and rigid bronchoscopy have its own role in removal of long standing neglected foreign body.

SUMMARY

A case of long-standing undiagnosed nonopaque foreign body (denture) which was removed from the right main bronchus of a 42 years old man is reported. The importance of early diagnosis is stressed by careful history taking and in the patient with recurrent episodes of lower respiratory symptoms (cough with expectoration, wheezing, fever) diagnostic fiber-optic flexible bronchoscopy is indicated.

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