

Acute Onset Dyspnea Due To Foreign Body (Pill) Aspiration In Left Main Bronchus

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Abstracts: Aspiration of tracheobronchial foreign commonly affects young children and it is uncommon in adults. Bronchoscopy both flexible and rigid is recommended to reveal the aetiology and therapeutic removal of foreign body aspiration. Here we report a case of pill aspiration presenting with acute onset breathlessness in emergency. Investigation of a case revealed left lung atelectasis on chest X-ray. Further workup by bronchoscopy showed an endobronchial mass lesion in left main bronchus causing left lung atelectasis. The obstruction was removed and patient improved promptly. [Khan H NJIRM 2015; 6(5):112-114]

Key Words: Fiberoptic video bronchoscopy, Endobronchial mass, Pill Aspiration, atelectasis, left main bronchus.

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Introduction: Pill aspiration represents a unique type of foreign body aspiration requiring a distinct diagnostic and therapeutic approach. In many cases, the foreign body-pill etc itself may no longer be present, whereas the airway manifestations may persist for months to years. Scanty data exist to guide management decisions and predict outcome. Little is known about the effects of the vast majority of both prescription and non prescription pills when aspirated into the tracheobronchial tree¹. Aspiration of tracheobronchial foreign commonly affects young children and it is uncommon in adults. The symptomatic presentation following pill aspiration varies widely and is likely dependent on both pill- and patient-related factors. Cough, occasionally with hemoptysis, dyspnea, wheezing, and chest pain, appears to be common. One patient presented with frank pneumonia and a parapneumonic pleural effusion². In general, CXRs appear to be of limited diagnostic value in the diagnosis of pill aspiration. In the setting of foreign body aspiration, CXRs have a reported sensitivity of 70% to 82%^{3,4}. Few pills are radiopaque, and, due to rapid dissolution of many tablets, pills may not result in air trapping. CT scanning of the chest is likely more sensitive in suggesting airway injury. But in our case HRCT thorax was of not much help in acute settings.

Case Report: A 30yrs female non diabetic non hypertensive housewife presented to emergency with chief complains of acute onset breathlessness (even at rest) for 1day. Also with complain of

Cough (dry) for 1day and chest pain for 1day. She developed complain after ingestion of a pill for her headache 1day ago. She even coughed out a portion of the pill but symptoms persisted and worsened with time. No history of fever, expectoration or hemoptysis. On general survey- no cyanosis, pulse 88/min regular, BP 120/80mmHg, RR 24/min & SpO2 88% room air. On Respiratory examination- Inspection revealed decreased movement of left side, Palpation of trachea shifted to left and VF decreased, Percussion dull along left mid clavicular line in 2nd, 3rd Intercostal spaces. Auscultation decreased breath sound in left infraclavicular region with decreased VR, no added sound present. Other system examination was normal. Hence she was admitted with suspicion of a collapsed lung segment on left. Chest X-ray PA view showing homogenous opacity in the left mid zone with trachea pulled to the left, hence consistent with our suspicion. HRCT was however not very conclusive. So she was admitted for a planned FOB and removal of foreign body. FOB was done in order to elucidate the etiology of atelectasis and a white colored bright surfaced endobronchial lesion was seen obstructing the left main bronchus. The lesion was decomposed and the airway was opened by suction. Immediate resolution was evident in follow up- Chest X-ray PA view showing clearing of the opacity in the left midzone and symptoms with saturation improvement.

Discussion: Foreign body aspiration is rare in adults but common in children. In a report describing

foreign bodies commonly seen in children aged 1-2 years, the patients commonly presented with cough and/or breathlessness following choking episodes⁵. In adults, foreign body aspiration is more common in the setting of advanced age, underlying neurological disorders, poor dentition, alcohol consumption and sedative use⁶. In the absence of these risk factors, a high degree of suspicion is needed for diagnosing tracheo-bronchial foreign body especially in cases of radiolucent foreign body and negative history of aspiration⁷. Type of foreign body depends upon eating habits, cultural and social factors. Most of the foreign bodies can be successfully extracted by both rigid as well as flexible bronchoscope depending upon the size and location.⁵

Figure 1: Ingested Pill (Decomposed fragments)



At bronchoscopy, foreign body aspiration commonly favors the right lower lobe bronchus than left but involvement of other sites are also being reported. However acute obstruction of LEFT main bronchus and patient getting symptomatic progressively has not been reported earlier (To the best of our knowledge). Though the reason of such presentation can be speculated- mean diameter of right main bronchus 13mm and that of Lt main bronchus 11mm and glottis being 6 to 9mm. So a foreign body need to be smaller in diameter to pass these diameters and then block the tracheobronchial tree. Hence to block Lt main bronchus the size of the pill (in our case) needed to be atleast 11mm to block and cause atelectasis. Thus we present this case of a pill of adequate size to block the uncommon bronchial airway (Lt main

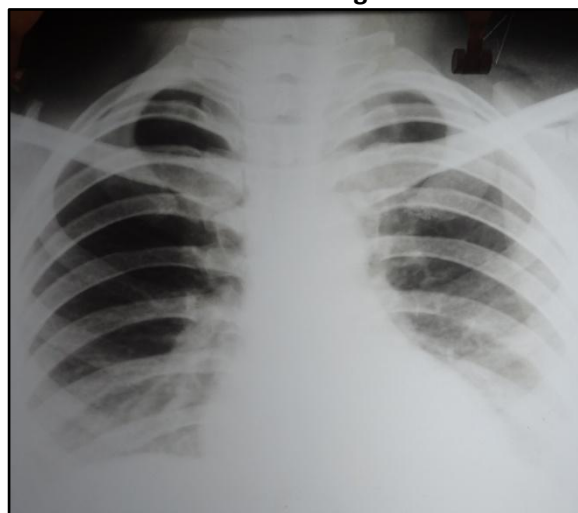
bronchus) causing acute onset dyspnea in emergency that gets relieved after intervention . We approached the site of obstruction through flexible bronchoscope and decomposed the tablet into fragments and then removed by bronchoalveolar lavage and suction.

Conclusion: Though aspiration of foreign body is common to occur in the right bronchus due to anatomical advantage it is possible to occlude the left main bronchus too. Clinical evidence of atelectasis and emergency bronchoscopy eventually resolved the case and gave relief to the patient. So rare possibilities don't occur every day but occur someday too.

Figure 2: Left sided collapse lung with pulled trachea.



Figure 3: Post bronchoscopy Chest X-ray PA view with cleared lung field.



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