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Review Article

**BRONCHOGENIC CYST-A REVIEW**Razieh Behzadmehr <sup>1</sup>, Morteza Salarzai <sup>2</sup>, Mahmood Anbari \*<sup>3</sup>

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**Abstract:**

**Introduction:** An infected lung may be obstructed by obstructive emphysema, which causes severe mediastinal deviation, compression atelectasis, and lung infection. Generally, the common symptoms of this disease are: frequent upper respiratory tract infection, vague feelings of sadness and back pain, respiratory problems (cough, vowel breath, stridor, dyspnea and cyanosis), dysphagia, hemoptysis, fever, abnormalities in swallowing, and vomiting due to tightness and irritation of the esophagus.

**Methods:** In this review article, the databases Medline, Cochrane, Science Direct, and Google Scholar were thoroughly searched to identify the studies Bronchogenic cyst. In this review, the papers published until early January 2017 that was conducted to study the Bronchogenic cyst were selected.

**Results:** They mostly emerge near the main chest or bronchus, especially clinging to the posterior carina and posterior or medial mediastinum. These lesions are usually isolated and are found on the right near the middle line, but some other areas, like the left part, are also prone to this disorder. **Conclusion:** Although lung parenchyma is not a common place in the development of Bronchogenic cyst, it is particularly important due to severe complications that can be associated with it. Since it is rarely possible to accurately diagnose preoperative conditions, it is necessary to perform resection of the lesion med in all suspected cases of bronchogenic cysts.

**Keywords:** Bronchogenic, cyst

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**INTRODUCTION:**

An infected lung may be obstructed by obstructive emphysema, which causes severe mediastinal deviation, compression atelectasis, and lung infection (1). Generally, the common symptoms of this disease are: frequent upper respiratory tract infection, vague feelings of sadness and back pain, respiratory problems (cough, vowel breath, stridor, dyspnea and cyanosis), dysphagia, hemoptysis, fever, abnormalities in swallowing, and vomiting due to tightness and irritation of the esophagus (2). Diagnosis: Because of the possibility of rupture of bronchogenic cysts in the bronchus or pleura, large bleeding, infections and sudden death, early diagnosis is very necessary (3). However, most reported cases of bronchogenic cysts have been accidentally detected. Simple chest radiography may cause a diagnostic suspicion of bronchogenic cysts (4). Although it may not show a single solid mass, it is possible to see severe emphysema or obstructive atelectasis accompanied by mediastinal disturbance to trigger diagnostic suspicion (5). If a cyst is associated with bronchus, a certain level of liquid is possible to be seen in it. The CT scan of the lung can clearly indicate the cyst and its relationship with other mediastinal structures. Contrast CT scan of the lung is very useful in representing the mass with the aforementioned characteristics (6).

**METHODS:**

In this review article, the databases Medline, Cochrane, Science Direct, and Google Scholar were thoroughly searched to identify the studies Bronchogenic cyst. In this review, the papers published until early January 2017 that were conducted to study the Bronchogenic cyst were selected.

**RESULTS:**

Bronchogenic cysts are benign and rare congenital lesions that develop from the inferior anterior intestinal tract that forms the respiratory system (7). These lesions occur in the fifth week or before the eighteenth day in the embryo (8). They mostly emerge near the main chest or bronchus, especially clinging to the posterior carina and posterior or medial mediastinum (9). These lesions are usually isolated and are found on the right near the middle line, but some other areas, like the left part, are also prone to this disorder (10). The bronchogenic cyst was categorized based on the location of the incidence by Maier in 1948, and they include carina, chest, esophagus, long neoplasm, miscellaneous organs (11). These cysts account for 10% of the mediastinum masses in children. Bronchogenic cysts can also cause a lot of complications, the most common being upper respiratory tract infection. Cysts may have broken into the bronchi or trachea, and cause Hemoptysis

(12). Photometric is also a non-edema disease that is usually accompanied by pleural inflammation and is often caused by the tearing of cysts into the pleural space (13). Although patients visit hospital, they do not respond to the usual treatment because they might be mistakenly diagnosed with pneumothorax. In addition, cysts may rarely develop malignant changes and produce bronchogenic carcinoma (14). Chest X-ray scan is a valuable method for diagnosing bronchogenic cysts. Cysts in spherical or elliptical masses are seen in flat and uniform dense walls, leading to lung abscesses in the graft. If a cyst is associated with bronchus, a level of air fluid is seen in it (15). The CT scan shows the size, shape, and position of the cysts more closely in comparison to adjacent textures and tissues.

**DISCUSSION AND CONCLUSION:**

Bronchogenic cysts are congenital lesions that range from 2 to 10 cm in size and are often round and multi-hole. In microscopic bronchoscopy, each of the chest and bronchial tissues, such as fibro bone tissue, mucosal secretion ganglia, cartilage Smooth muscle and ciliated epithelium of the lacrimal mucous membrane secrete or precipitate pithy epithelium (16). The fluid inside the cyst might have a dilator like water or gelatin; thus, these cysts have uniform density, a smooth and uniform edge and are round, like tear drops (17). If they develop during the first week of embryos, they are mediastinal and have nothing to do with the pulmonary system; if they develop later, they might involve airways and lung, but usually there is no (18). The disease occurs at any age, from infancy to the seventh year of life, and in tends to be symptomatic in all children cases and 70% of adult cases. These cysts are rarely identified at the beginning of the birth, and the diagnosis is usually delayed until the cysts are large or infected (19). It often causes severe dyspnea, cyanosis, whiz, and stridor with airway pressure in infants, babies, and children. Although lung parenchyma is not a common place in the development of Bronchogenic cyst, it is particularly important due to severe complications that can be associated with it (20). Since it is rarely possible to accurately diagnose preoperative conditions, it is necessary to perform resection of the lesion med in all suspected cases of bronchogenic cysts.

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