DEFINITION

1. **Bronchiectasis** is a permanent dilatation of one or more proximal and medium-sized bronchi due to destruction of the elastic and muscular components of the bronchial wall. The condition, which is usually accompanied by suppurative infection, is the end result of a variety of pathologies. Bronchiectasis is not now included in the diagnosis chronic obstructive pulmonary disease.

CLINICAL MANIFESTATIONS

2. The symptoms and signs of bronchiectasis are variable and depend on the nature and site of the basic pathology. In some cases there are no symptoms or signs. There is no correlation between the anatomical extent of the disease and clinical severity. Dilatation of the bronchi can impair drainage from the lungs, leading to retention of secretions. This may cause a chronic cough with production of sputum, this being the classic symptom of bronchiectasis.

3. Haemoptysis is not infrequent and may occur alone. It usually takes the form of blood-streaking of the sputum. Severe haemorrhage can occur even when the bronchiectasis is limited and the other symptoms are mild.

4. There is a tendency to recurrent respiratory infections, including sinusitis and bronchitis. Pneumonia on its own, or accompanied by pleurisy, may occur.

5. Metastatic spread of infection via the pulmonary veins may cause cerebral abscess. Bronchiectasis was formerly a not uncommon cause of amyloidosis. Antibiotic treatment has greatly modified the clinical picture of the disease and has resulted in these complications now being rare.

AETIOLOGY

6. Bronchiectasis may be congenital but is more commonly acquired.

7. The **congenital** causes include primary hypogammaglobulinaemia, cystic fibrosis and ciliary dysfunction syndrome. The latter is most commonly seen in Kartagener's syndrome, which consists of bronchiectasis, sinusitis and transposition of the viscera.

8. The **acquired** causes may become manifest in childhood or may have their origin in adult life. Acquired bronchiectasis may result from infection alone through direct weakening of the bronchial wall. More commonly however both infection and obstruction are required to produce the condition.

9. In the smaller bronchi, mucus is aspirated during acute pulmonary infections, especially childhood pneumonia, and the resultant blockage causes collapse of lung tissue with dilatation of the bronchi. This is particularly liable to occur in pneumonia associated with measles and whooping cough.

10. In the larger bronchi, obstruction is usually due to inhalation of a foreign body or by a neoplasm. In the collapsed area of lung produced by the obstruction, infection may supervene and the bronchi become dilated. This process may be rapid and the dilatation gross.

11. Pulmonary tuberculosis in children or adults, or any process resulting in pulmonary fibrosis, may lead to bronchiectasis. The condition may complicate asthma or pulmonary eosinophilia.

12. Exposure to a dust-laden atmosphere or tobacco smoking may accelerate the progress of the condition by promoting intercurrent infection of the lungs or upper respiratory passages.

CONCLUSION

13. **Bronchiectasis** is a condition in which there is permanent dilatation of the bronchi. The classical symptoms are chronic cough and sputum production.

14. The condition may be congenital or acquired and it is the end result of a variety of pathologies. Once present, the condition may be aggravated by environmental factors including air pollution and respiratory infection.

REFERENCES

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