

DEFINITION

1. Pulmonary Embolism is the term applied to blockage of any part of the pulmonary arterial system by
 - 1.1 thrombus of extra-pulmonary origin, this being by far the most common and arising from Phlebothrombosis or Thrombophelbitis.
 - 1.2 fat embolism following fracture of long bones.
 - 1.3 oil embolism and air embolism during certain operative procedures.
 - 1.4 gas emboli in deep sea divers.
 - 1.5 embolic fragments of tumours which have invaded large veins, schistosoma ova and such things as broken fragments of intravenous catheters.

CLINICAL MANIFESTATIONS

2. The manifestations depend upon the size of the pulmonary artery which is obstructed
 - 2.1 Massive pulmonary embolism results from obstruction of a main pulmonary artery and, if not immediately fatal, the patient becomes shocked and experiences central chest pain. Dyspnoea, faintness and acute apprehension immediately follow, associated with cyanosis, tachycardia, profuse sweating and collapse. Congestive cardiac failure may ensue.
 - 2.2 Pulmonary infarction occurs when a moderate-sized artery is obstructed and is characterized by pleuritic pain and, frequently, pleural effusion. Haemoptysis, low-grade pyrexia, tachycardia and a variable degree of dyspnoea are common and the symptoms are intensified if infection of the infarct occurs.
 - 2.3 Multiple small emboli obstructing the peripheral branches of the pulmonary arteries may give rise to dyspnoea, weakness on exertion, effort syncope and anginal pain. The blood flow may be sufficiently obstructed to cause pulmonary hypertension. Later features of the condition may be peripheral oedema or ascites, cyanosis and heart failure.

AETIOLOGY

3. The condition is always a secondary manifestation and the aetiology is that of the primary condition.

CONCLUSION

4. Pulmonary Embolism results from blockage of part of the pulmonary arterial tree, usually due to portions of thrombus which have become detached from areas of phlebothrombosis or thrombophlebitis. The latter two conditions have many causes or may arise on occasion without identifiable cause.

REFERENCES

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