

Coal Workers Pneumoconiosis



PLAY PICMONIC

Risk Factor

Prolonged Coal Exposure

[Prolonged Coal](#)

Coal worker pneumoconiosis occurs due to prolonged coal exposure.

Characteristics

Black Lung Disease

[Black Lung](#)

This disorder is also known as black lung disease.

Upper Lobes

[Upper Lobes](#)

The upper lobes of the lungs are the common site for coal worker pneumoconiosis, similar to the site of berylliosis and silicosis.

Pathophysiology

Restrictive Lung Disease

[Restrictive-belt on Lungs](#)

Coal workers' pneumoconiosis is a restrictive lung disease characterized by decreased lung volume and trouble expanding the lung maximally. Pulmonary function tests can be undiagnostic because the disorder can be seen as obstructive, restrictive, and mixed as well.

Dust-Laden Macrophages

[Dust Mac-man](#)

The prolonged coal exposure will trigger the presence of dust-laden macrophages. These occur due to the deposition of dust.

Inflammation and Fibrosis

[In-flames and Fibrous-sacks](#)

The dust-laden macrophages will trigger inflammation and fibrosis in the lung.

Imaging

Small, Rounded Nodular Opacities

[Small Rounded Nodular-knobs](#)

Patients can be seen with small, rounded nodular opacities in imaging.

Consideration

Caplan Syndrome

Cap-lane

Coal workers' pneumoconiosis increases the risk of Caplan syndrome, a syndrome consisting of rheumatoid arthritis and pneumoconioses with intrapulmonary nodules. It's a syndrome that belongs to rheumatoid arthritis patients.

Anthracosis

Amtrak-circus

Anthracosis is an asymptomatic condition found in many urban residents exposed to dirty air. It's a mild type of pneumoconiosis due to carbon accumulation in the lungs caused by prolonged exposure to air pollution or inhalation of smoke or coal dust particles.