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Coal worker's pneumoconiosis

Coal worker's pneumoconiosis (CWP) is a lung disease that results from breathing in dust from coal, graphite, or man-made carbon over a long time.

CWP is also known as black lung disease.

Causes

CWP occurs in two forms: simple and complicated (also called progressive massive fibrosis, or PMF).

Your risk for developing CWP depends on how long you have been around coal dust. Most people with this disease are older than 50. Smoking does not increase your risk for developing this disease, but it may have an added harmful effect on the lungs.

If CWP occurs with rheumatoid arthritis, it is called Caplan syndrome.

Symptoms

Symptoms of CWP include:

- Cough
- Shortness of breath
- Coughing up of black sputum

Exams and Tests

Your health care provider will perform a physical examination and ask about your symptoms.

Tests that may be done include:

- Chest x-ray
- Chest CT scan
- Lung function tests

Treatment

Treatment may include any of the following, depending on how severe your symptoms are:

- Medicines to keep the airways open and reduce mucus
- Pulmonary rehabilitation to help you learn ways to breathe better
- Oxygen therapy

You should also avoid further exposure to coal dust.

Support Groups

Ask your provider about treating and managing coal worker's pneumoconiosis. Information can be found at the American Lung Association: Treating and Managing Coal Worker's Pneumoconiosis website: www.lung.org/lung-health-diseases/lung-disease-lookup/black-lung/treating-and-managing [<https://www.lung.org/lung-health-diseases/lung-disease-lookup/black-lung/treating-and-managing>] .

Outlook (Prognosis)

Outcome for the simple form is usually good. It rarely causes disability or death. The complicated form may cause shortness of breath that worsens over time.

Possible Complications

Complications may include:

- Chronic bronchitis
- Chronic obstructive pulmonary disease (COPD)
- Cor pulmonale (failure of the right side of the heart)
- Respiratory failure

When to Contact a Medical Professional

Call your provider right away if you develop a cough, shortness of breath, fever, or other signs of a lung infection, especially if you think you have the flu. Since your lungs are already damaged, it's very important to have the infection treated right away. This will prevent breathing problems from becoming severe, as well as further damage to your lungs.

Prevention

Wear a protective mask when working around coal, graphite, or man-made carbon. Follow directions to prevent high-level exposure. Companies should enforce the maximum permitted dust levels. Avoid smoking.

Alternative Names

Black lung disease; Pneumoconiosis; Anthracosilicosis

References

Go LHT, Cohen RA. Pneumoconioses. In: Broaddus VC, King TE, Ernst JD, et al, eds. *Murray and Nadel's Textbook of Respiratory Medicine*. 7th ed. Philadelphia, PA: Elsevier; 2022:chap 101.

Tarlo SM. Occupational lung disease. In: Goldman L, Schafer AI, eds. *Goldman-Cecil Medicine*. 26th ed. Philadelphia, PA: Elsevier; 2020:chap 87.

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