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Pleural Effusion Causes, Signs & Treatment

Pleural Effusion Causes, Signs & Treatment Menu

What is pleural effusion?

Pleural effusion, sometimes referred to as “water on the lungs,” is the build-up of excess fluid between the layers of the pleura outside the lungs. The pleura are thin membranes that line the lungs and the inside of the chest cavity and act to lubricate and facilitate breathing. Normally, a small amount of fluid is present in the pleura.

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Is pleural effusion serious?

The seriousness of the condition depends on the primary cause of pleural effusion, whether breathing is affected, and whether it can be treated effectively. Causes of pleural effusion that can be effectively treated or controlled include an infection due to a virus, pneumonia or heart failure.

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Two factors that must be considered are treatment for associated mechanical problems as well as treatment of the underlying cause of the pleural effusion.

What are the symptoms of pleural effusion?

Some patients with pleural effusion have no symptoms, with the condition discovered on a chest x-ray that is performed for another reason. The patient may have unrelated symptoms due to the disease or condition that has caused the effusion. Symptoms of pleural effusion include:

- Chest pain
- Dry, nonproductive cough
- Dyspnea (shortness of breath, or difficult, labored breathing)
- Orthopnea (the inability to breathe easily unless the person is sitting up straight or standing erect)

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What causes pleural effusion?

Pleural effusions are very common, with approximately 100,000 cases diagnosed in the United States each year, according to the National Cancer Institute.

Depending on the cause, the excess fluid may be either protein-poor (transudative) or protein-rich (exudative). These two categories help physicians determine the cause of the pleural effusion.

The most common causes of transudative (watery fluid) pleural effusions include:

- Heart failure
- Pulmonary embolism
- Cirrhosis
- Post open heart surgery

Exudative (protein-rich fluid) pleural effusions are most commonly caused by:

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- Cancer
- Pulmonary embolism
- Kidney disease
- Inflammatory disease

Other less common causes of pleural effusion include:

- Tuberculosis
- Autoimmune disease
- Bleeding (due to chest trauma)
- Chylothorax (due to trauma)
- Rare chest and abdominal infections
- Asbestos pleural effusion (due to exposure to asbestos)
- Meig's syndrome (due to a benign ovarian tumor)
- Ovarian hyperstimulation syndrome

Certain medications, abdominal surgery and radiation therapy may also cause pleural effusions. Pleural effusion may occur with several types of cancer including lung cancer, breast cancer and lymphoma. In some cases, the fluid itself may be malignant (cancerous), or may be a direct result of chemotherapy.

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References:

- "Pleural effusion." Gale Encyclopedia of Cancer. The Gale Group, Inc, 2002. *Answers.com*.
- "Malignant pleural effusion." National Cancer Institute. Accessed Oct. 26, 2006.
- "Pleural effusion." MedLine Plus Medical Encyclopedia. Accessed Oct. 26, 2006.
- Colice G L, Curtis A, Deslauriers J, Heffner J, Light R, Littenberg B, Sahn S, Weinstein R A, Yusem R D. "Medical and Surgical Treatment of Parapneumonic Effusions: An Evidence-Based Guideline." *Chest*, 2000; 118;1158-1171.
- Rubins J. "Pleural effusion." 2005. eMedicine. Accessed Oct. 26, 2006.
- Interact CardioVasc Thorac Surg 2006;5:307-310. doi:10.1510/icvts.2005.118018 © 2006 European Association of Cardio-Thoracic Surgery

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