

NR 507: Week 3: Alterations in Pulmonary Function

The NP is seeing a patient with chronic bronchitis that needs spirometry on today's visit. What pulmonary function test (PFT) findings are anticipated based on the diagnosis of chronic bronchitis?

- ☐ Decreased diffusing capacity.
- ☒ Decreased forced expiratory flow (FEV1).
- ☐ Decreased total lung capacity (TLC).

☐ Increased lung compliance.

Simple spirometry can be used to measure any of the following

- ☐ EXCEPT: Vital capacity.
- ☐ Tidal volume.
- ☐ Inspiratory reserve volume.
- ☒ Residual volume.

FEV1/FVC Ratio

The NP notes that a patient's FEV1/FVC ratio is severely reduced. Which of the following conditions is most likely the patient's pulmonary issue?

- ☒ Chronic asthma.
- ☐ Pulmonary hypertension.
- ☐ Pneumonia.
- ☐ Morbid obesity.

The NP reviews the results of a patient's pulmonary function tests and notes that the FEV1, FVC, and total lung capacity (TLC) are reduced. The FEV1/FVC ratio is normal. Based on interpretation, this reflects:

- ☐ Obstructive lung disease.
- ☐ The test is invalid.
- ☒ Restrictive lung disease.
- ☐ Combined obstructive-restrictive lung disease.

Forced Vital Capacity

A patient with normal lungs should be able to exhale of the forced vital capacity within the first second.

Which of the following would indicate obstructive lung disease?

- ☐ Chronic asthma.
- ☐ Pneumonia.
- ☐ Pulmonary hypertension.
- ☐ Pulmonary fibrosis.

FEV1/FVC Ratio

The NP notes that a patient's FEV1/FVC ratio is normal. Which of the following conditions is most likely the patient's pulmonary issue?

- ☐ Pneumonia.
- ☐ Chronic asthma.
- ☐ Emphysema.
- ☐ Pulmonary fibrosis.

Chronic bronchitis will decrease which of the following parameters?

- ☐ Decreased total lung capacity.
- ☐ Decreased forced expiratory flow (FEV1).
- ☐ Increased lung compliance.
- ☐ Decreased diffusing capacity.

Simple Spirometry

Simple spirometry includes a measure of residual capacity.

- ☐ True
- ☐ False

Restrictive Lung Disease

Which of the following spirometry results indicate restrictive lung disease?

- ☐ FEV1, FEV, and total lung capacity normal; FEV1/FVC ratio normal.
- ☐ FEV1 reduced, FVC normal, total lung capacity reduced; FEV1/FVC ratio normal.
- ☐ FEV1, FEV, and total lung capacity reduced; FEV1/FVC ratio reduced.
- ☐ FEV1, FVC, and total lung capacity reduced; FEV1/FVC ratio normal.

Which of the following is considered a late effect of emphysema?

- ☐ Hypercapnia.