

because it may lead to cardiac tamponade (see below). Differentiation from cardiac enlargement on physical examination may be difficult, but heart sounds may be fainter with large pericardial effusion. The friction rub and the apex impulse may disappear. The base of the left lung may be compressed by pericardial fluid, producing *Ewart's sign*, a patch of dullness, increased fremitus, and egophany beneath the angle of the left scapula. The chest roentgenogram may show enlargement of the cardiac silhouette, with a "water bottle" configuration, but may be normal in patients with small effusions.

Diagnosis *Echocardiography* ([Chap. 241](#)) is the most widely used imaging technique. It is sensitive, specific, simple, and noninvasive; may be performed at the bedside; and allows localization and estimation of the quantity of pericardial fluid. The presence of pericardial fluid is recorded by two-dimensional transthoracic echocardiography as a relatively echo-free space between the posterior pericardium and left ventricular epicardium and/or as a space between the anterior right ventricle and the parietal pericardium just beneath the anterior chest wall ([Fig. 270-2](#)).