

00. ACUTE PULMONARY HEART

Acute cor pulmonale (ACP) can be defined as a clinical situation in which the right ventricle (RV) is suddenly subjected to an excessive afterload. ACP is essentially seen during massive pulmonary embolism (PE), or in the setting of acute respiratory distress syndrome (ARDS). In these two situations, the right ventricular outflow impedance is suddenly increased, which reduces the ejection volume, producing right ventricular dilatation by augmentation of the end-systolic volume. Thus, ACP combines systolic and diastolic overload of the RV. This is taken into account in the echocardiographic definition, which combines paradoxical septal motion (linked to systolic overload) and right ventricular dilatation (linked to diastolic overload) (1). These two signs are always accompanied by abnormal left ventricular relaxation, revealed by the Doppler pattern of mitral flow (1).