INTRODUCTION TO HEMODYNAMICS II

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Venous pressure is a term that represents the average blood pressure within the venous compartment. The term "central venous pressure" (CVP) describes the pressure in the thoracic vena cava near the right atrium (therefore CVP and right atrial pressure are essentially the same). CVP is an important concept in clinical cardiology because it is a major determinant of the filling pressure and therefore the preload of the right ventricle, which regulates stroke volume through the Frank-Starling mechanism.
Right atrium

ECG

Pressure mmHg

a = atrial contraction
b = tricuspid valve closure
c = passive atrial filling (ventricular contraction)
x = atrial diastole
y = atrial emptying
Right ventricle

ECG

Pressure mmHg

RF = Rapid filling
SF = Slow filling
a = Atrial contraction
ed = End-diastole
Sys = Systole
Pulmonary artery wedge

ECG

Pressure mmHg

a = Atrial contraction
v = Passive atrial filling (ventricular contraction)
x = Atrial diastole
y = Atrial emptying