01.2 VENTRICULAR-VENTRICULAR COMPETITION

Pericardial effusion limits the volume shared by the ventricles. The external pressure it exerts more readily affects the right ventricle whose muscle wall is less resistant. At the start of diastole, the sudden rise in pericardial pressure caused by the increase in ventricular volume presses against the free wall of the right ventricle, which may even cave in.

Film 3: Subcostal view of the right ventricle in two-dimensional M-mode. The right ventricle (VD) collapses on each expiration (E) and dilates at each inspiration (I).

Média

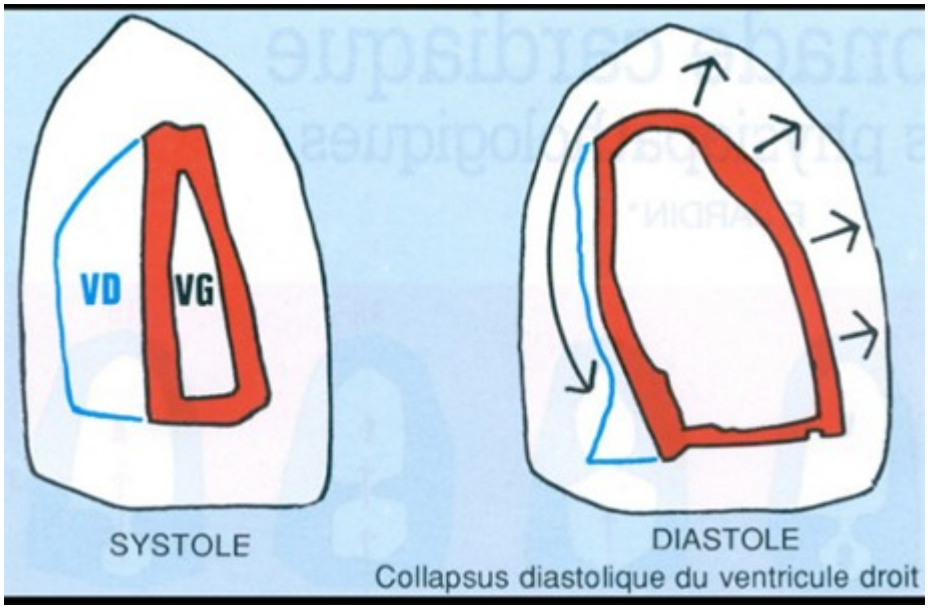

Figure 3

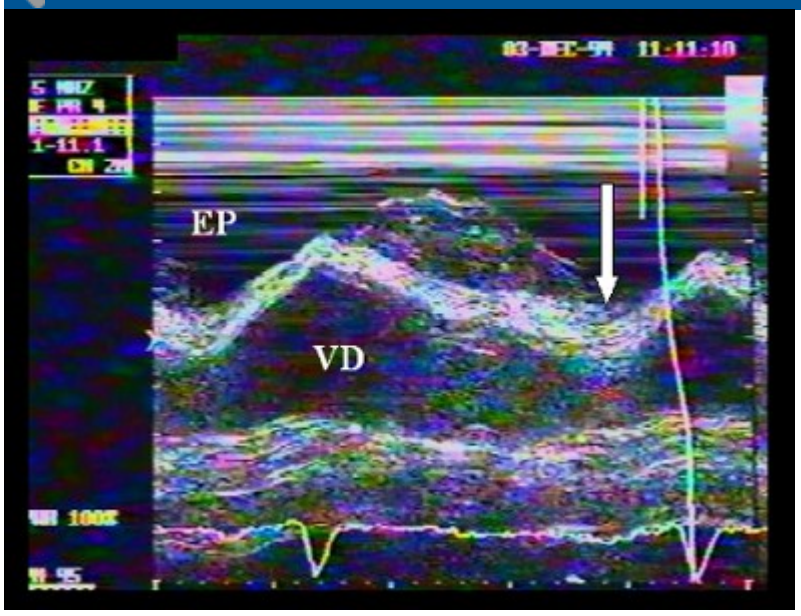

Figure 4

Figure 3 : The sudden rise in pericardial pressure during diastole preferentially compresses the right ventricle (VD) whose wall is easier to depress than that of the left ventricle (VG). The result is diastolic collapse of the right ventricle.

Figure 4 : On this motion mode recording, note how pericardial effusion (EP) pushes back (arrow) the free wall of the right ventricle (VD) leading to diastolic reduction of the right ventricular chamber.