

01.3 IMPACT OF RESPIRATORY VARIATIONS

Variations in pleural pressure are fully transmitted to the pericardial chamber. The negative inspiratory pressure accordingly reduces the external pressure on the chambers. Positive pressure would increase the external pressure.

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).

Media

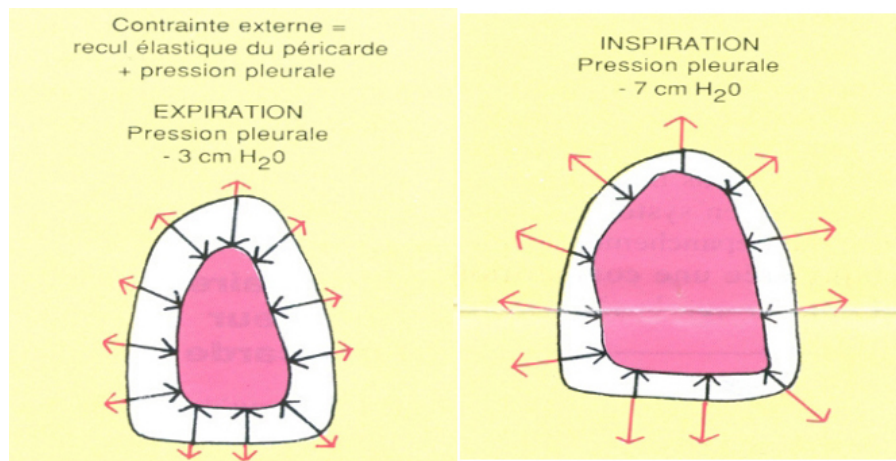


Figure 5 : The external pressure exerted on the ventricular chamber is the sum of the pleural (negative) and pericardial (positive, produced by the elastic recoil of the pericardium) pressures. This external pressure is diminished by inspiration, which lowers the pleural pressure.