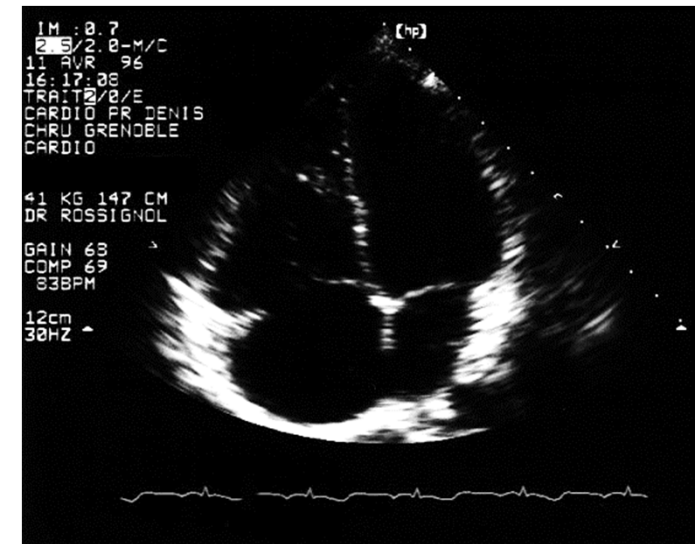
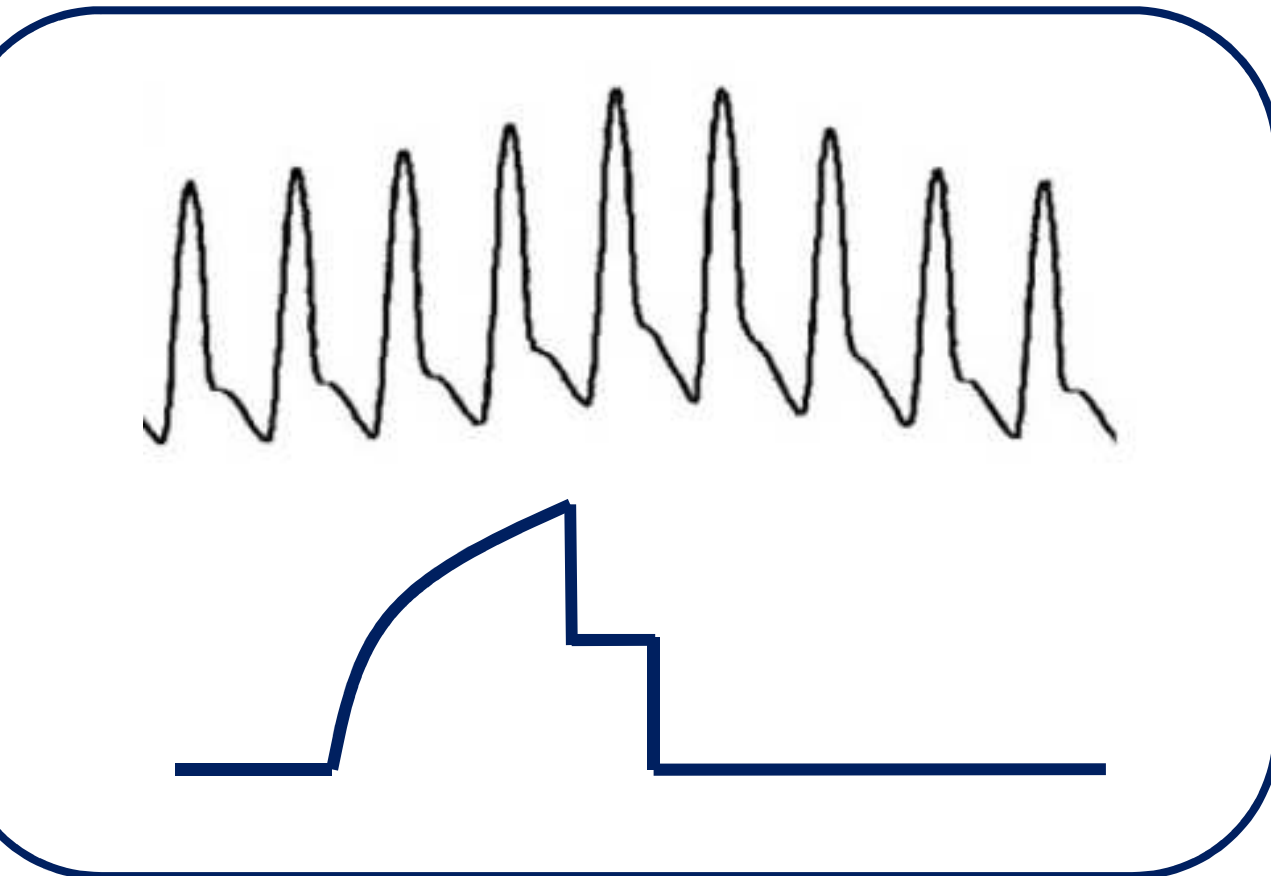
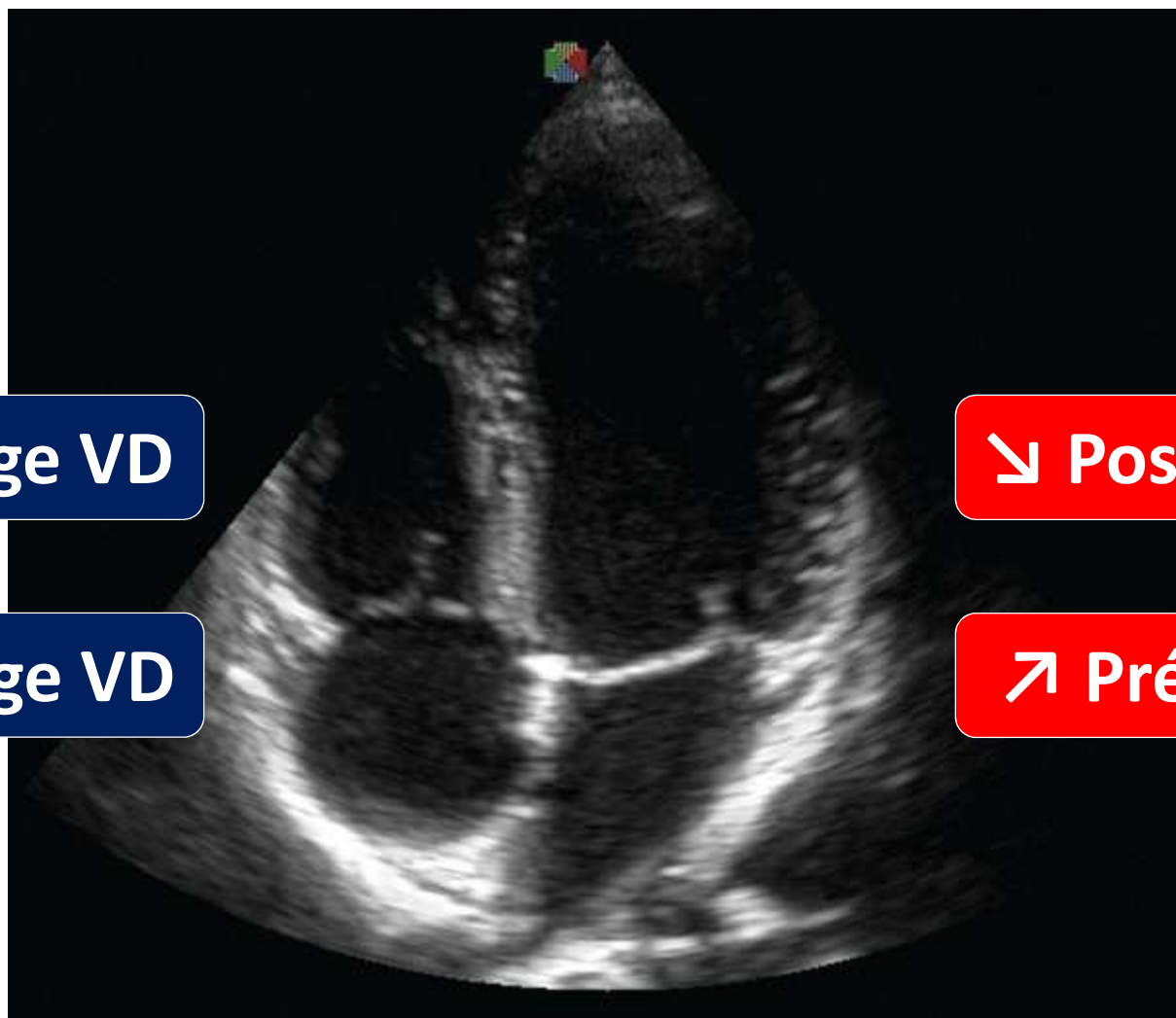


# Quelle pression des voies aériennes considérer pour analyser l'influence hémodynamique (de la VC) ?



*Effets hémodynamiques de la ventilation mécanique (pression positive)*



↗ Postcharge VD

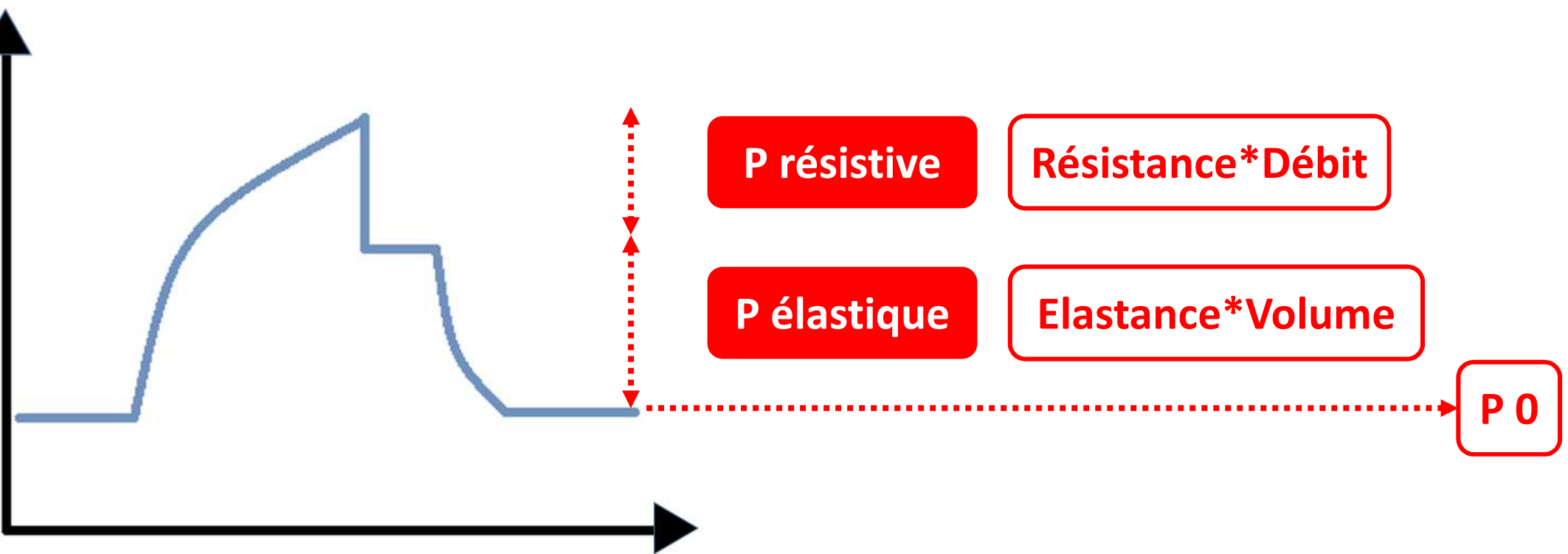
↘ Précharge VD

↘ Postcharge VG

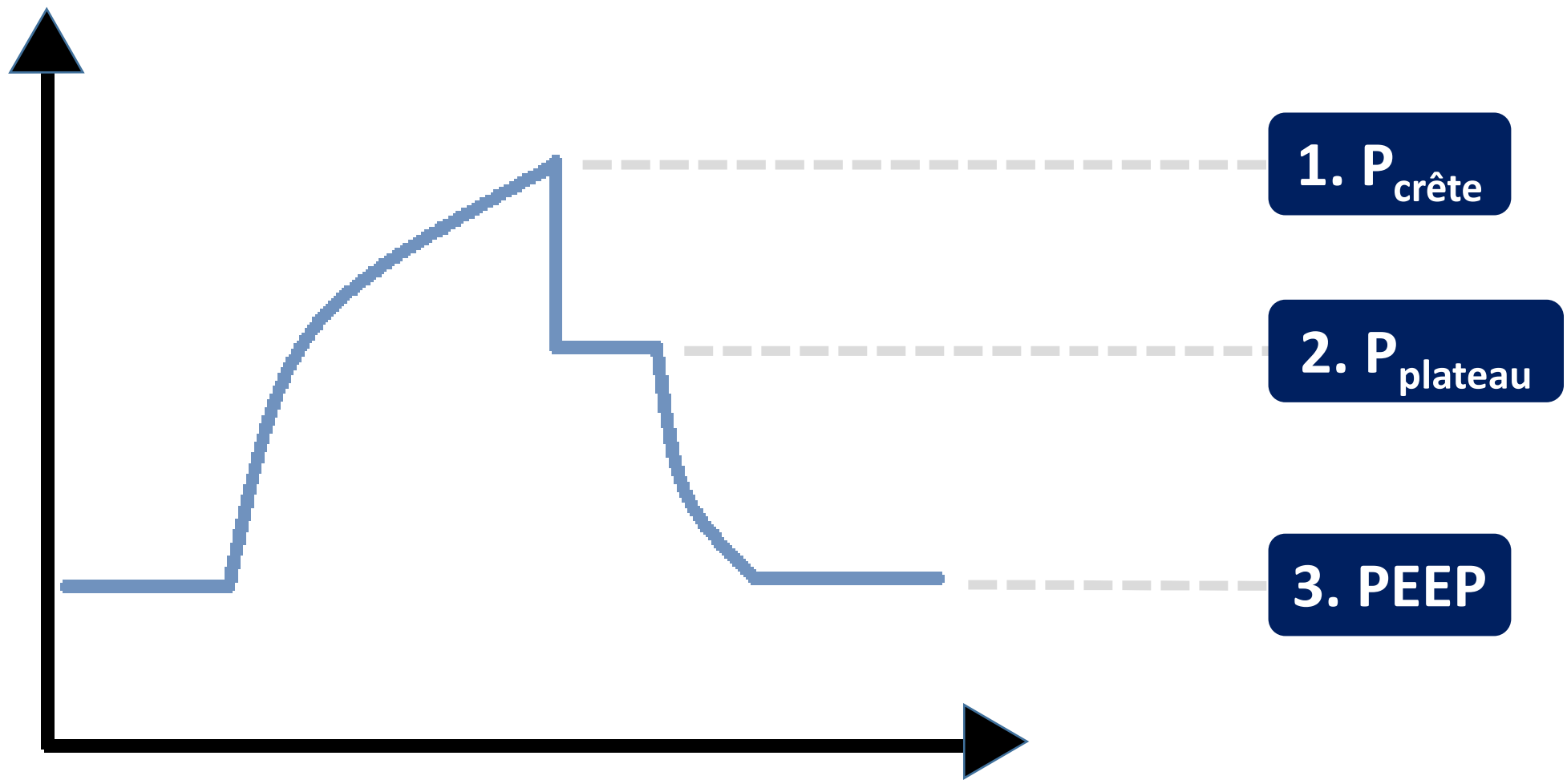
↗ Précharge VG

## Pressions des voies aériennes en ventilation contrôlée

$$P_{aw} = (P_0) + (P \text{ résistive}) + (P \text{ élastique})$$

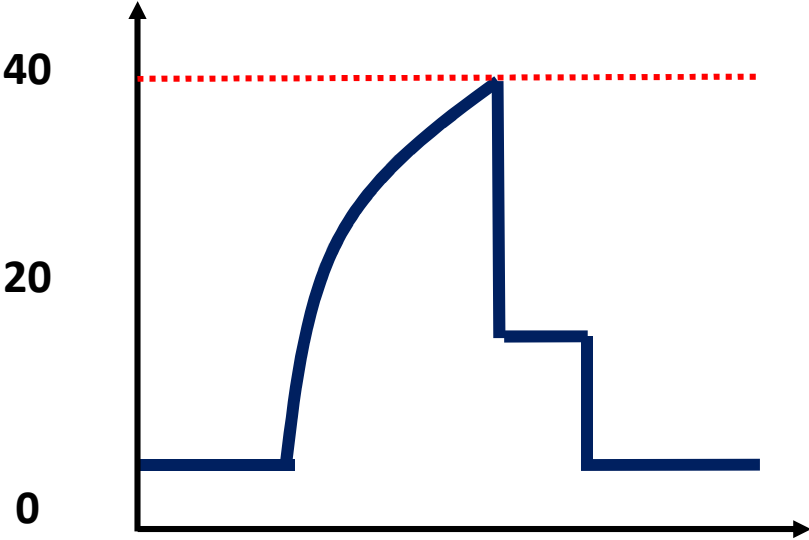
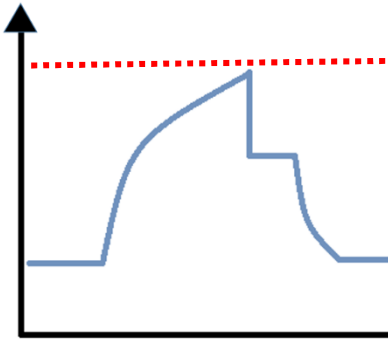


# Pressions des voies aériennes en ventilation contrôlée

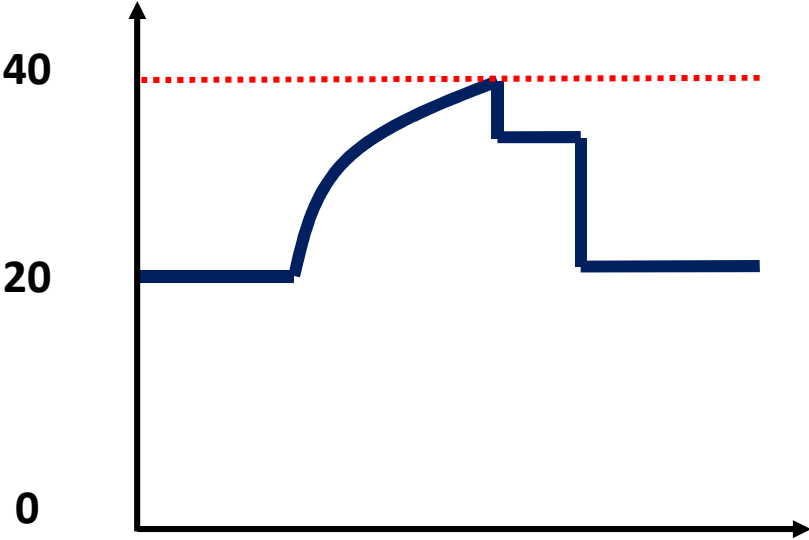


*1. Pression de crête*

**Peu informative**



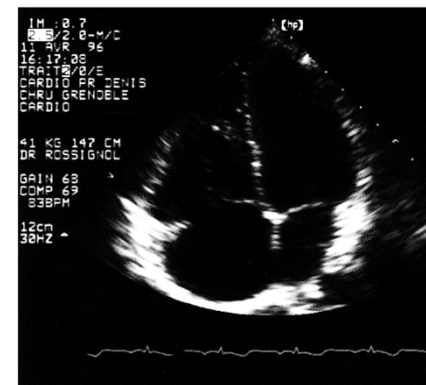
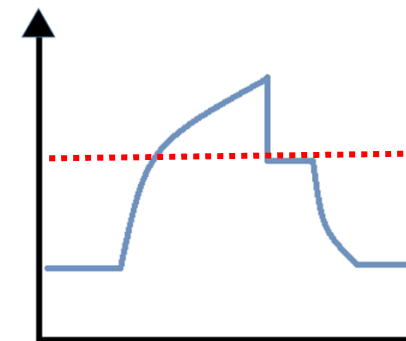
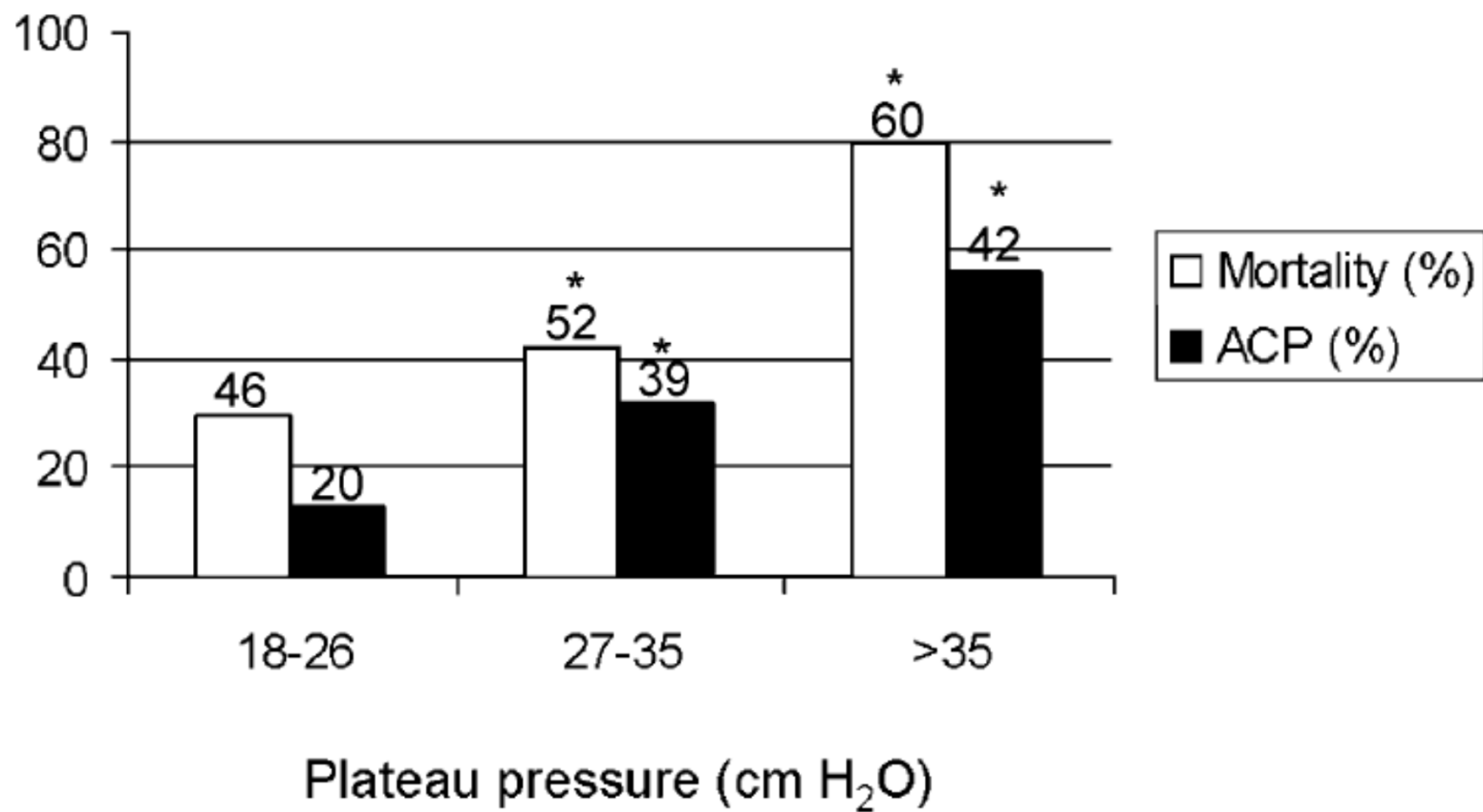
Sonde d'IOT n°6



SDRA

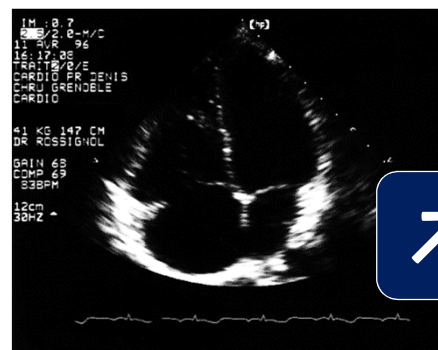
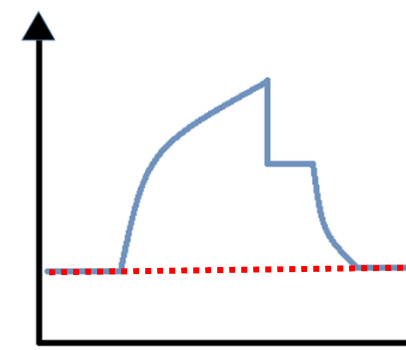
## 2. Pression de plateau

352 patients en SDRA  
Incidence du CPA

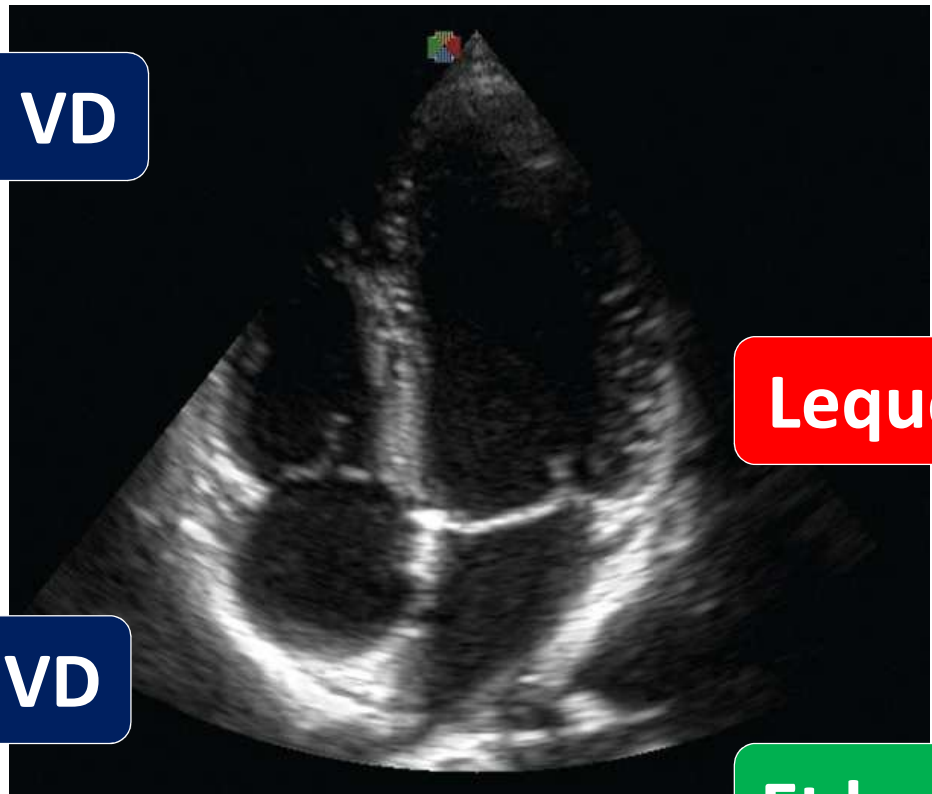


Jardin, *Intensive Care Med* 2000

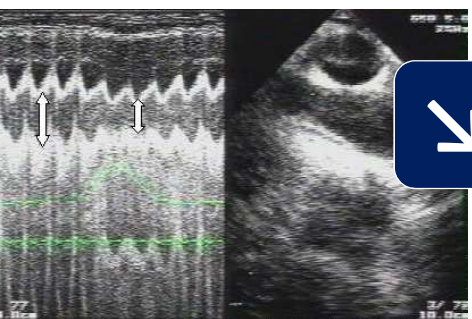
### 3. PEEP



↗ Postcharge VD



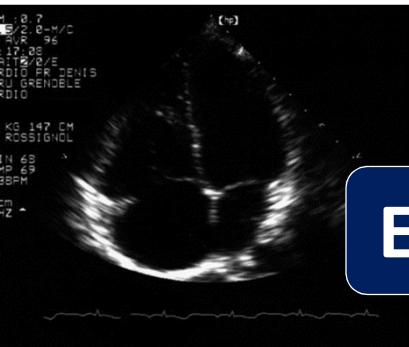
Lequel prédomine



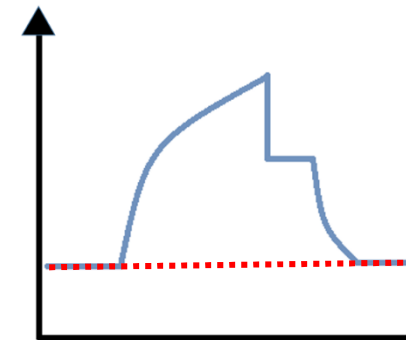
↘ Précharge VD

Et le  $\Delta PP$  ...

### 3. PEEP



Effet ↗ postcharge VD prédominant



$P_{\text{alvéolaire}} > P_{\text{VD}} > P_{\text{OG}}$

→ Zones 1 de WEST

$C_{\text{pulm}} \searrow$

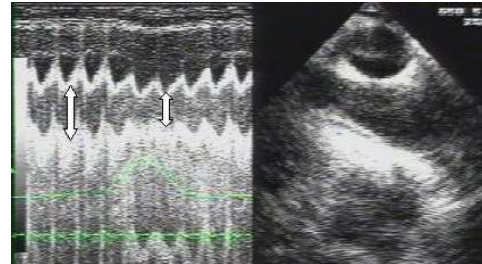


### 3. PEEP

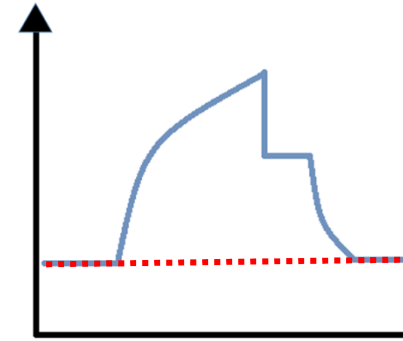
**$C_{pulm}$  normale**

Transmission  $P_{alvéolaire} \rightarrow P_{pleurale}$

**$P_{pleurale} > P_{SM} > P_{OD}$**



**Effet  $\searrow$  précharge VD prédominant**

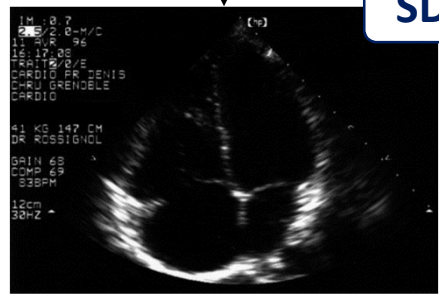
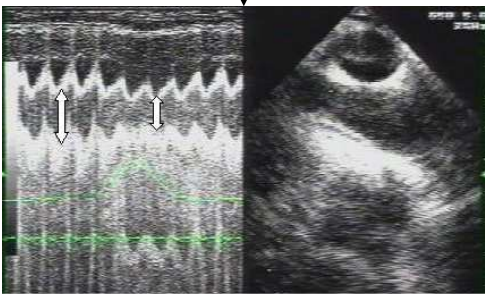


# 3. PEEP

Transmission  $P_{\text{alvéolaire}} \rightarrow P_{\text{pleurale}}$

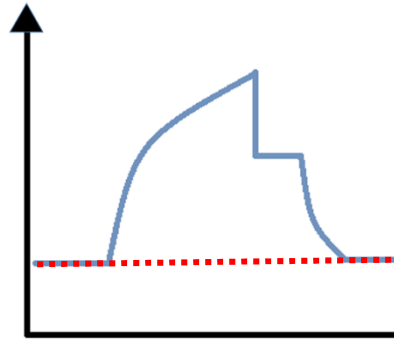
$C_{\text{pulm}}$  normale

$C_{\text{pulm}} \downarrow$



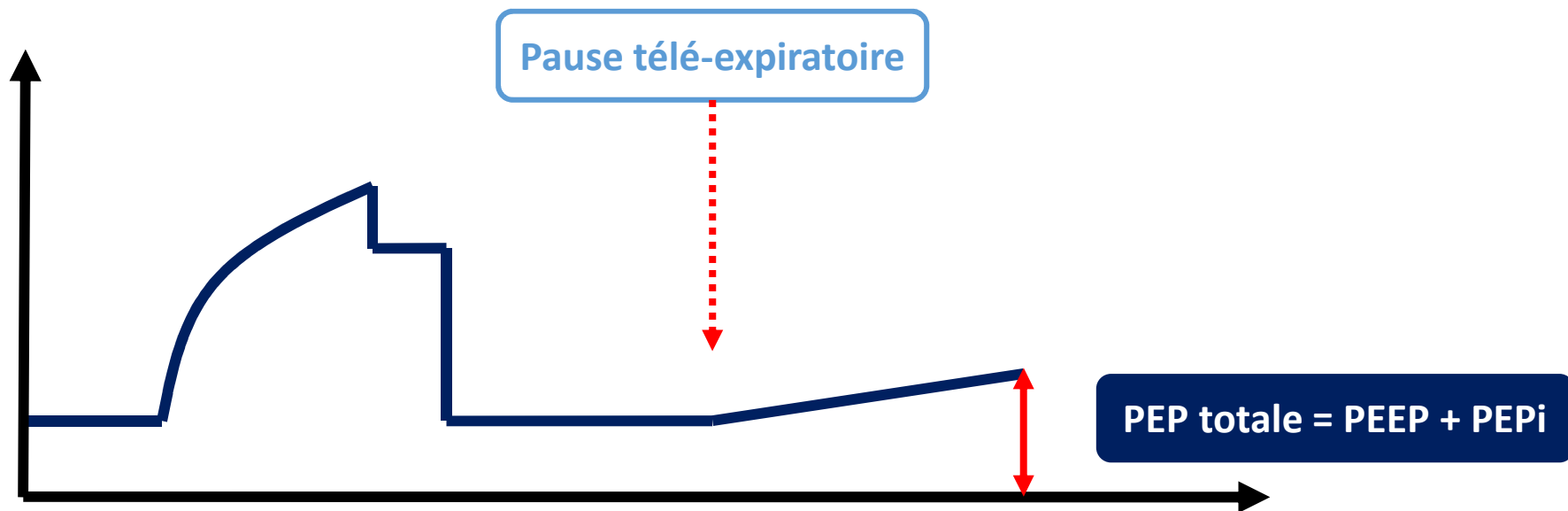
Effet Précharge VD dominant

Effet Postcharge VD dominant

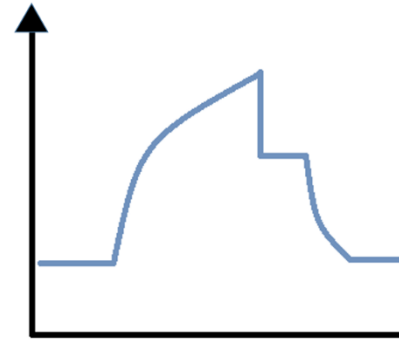


#### 4. Et la PEP intrinsèque

Les effets hémodynamiques de la PEPI s'ajoutent à ceux de la PEEP



*Au total, quelle(s) pression(s) des voies aériennes considérer ?*



**$P_{\text{plateau}}$  et PEEP**

**Principaux déterminants de l'impact hémodynamique de la VC**

**PEP intrinsèque**

**Ne pas la méconnaître**