

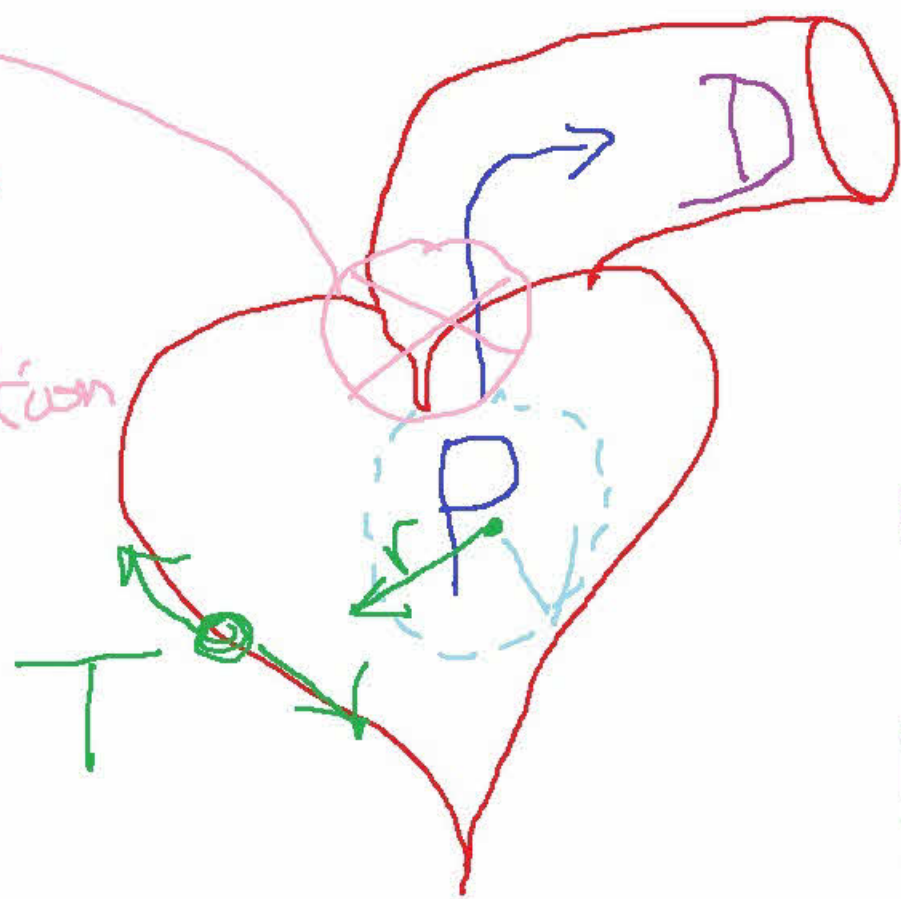
I - Paramètres de l'hémodynamique

Valves

- insuff. $\rightarrow$ reflux
 $\downarrow$
 $\downarrow V \uparrow E \downarrow$
- Sténose $\rightarrow$ rétention

Loi de Pascal

$$T = P \times r$$



$$D = \frac{P}{R}$$

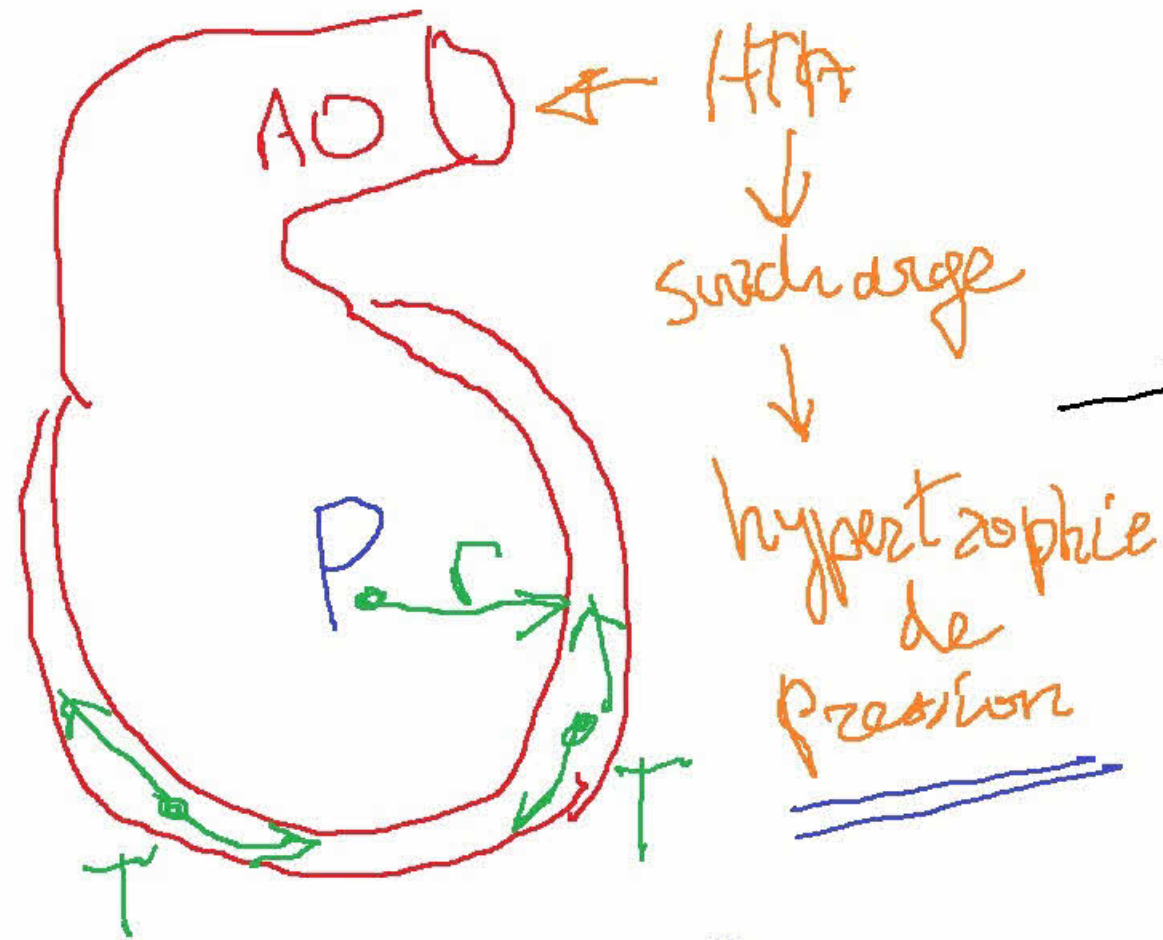
$$D = V_{ej} \times F_c$$

$\leftarrow R$

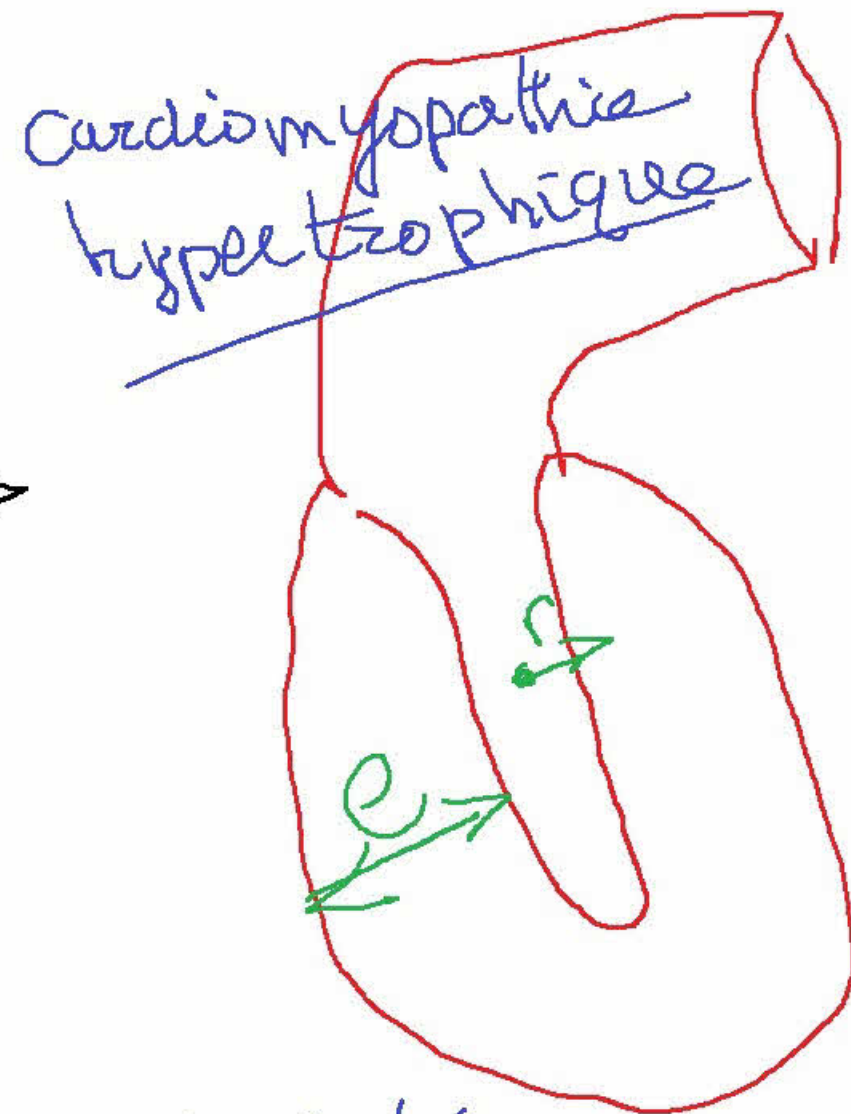
- l
- ϕ
- Viscosité (GR)

(P: pression. D: débit. R: résistance. T: tension. l: longueur. ϕ : diamètre)

II - Insuff. Card. (IC) & HTA



$$P \uparrow \Rightarrow r \uparrow$$



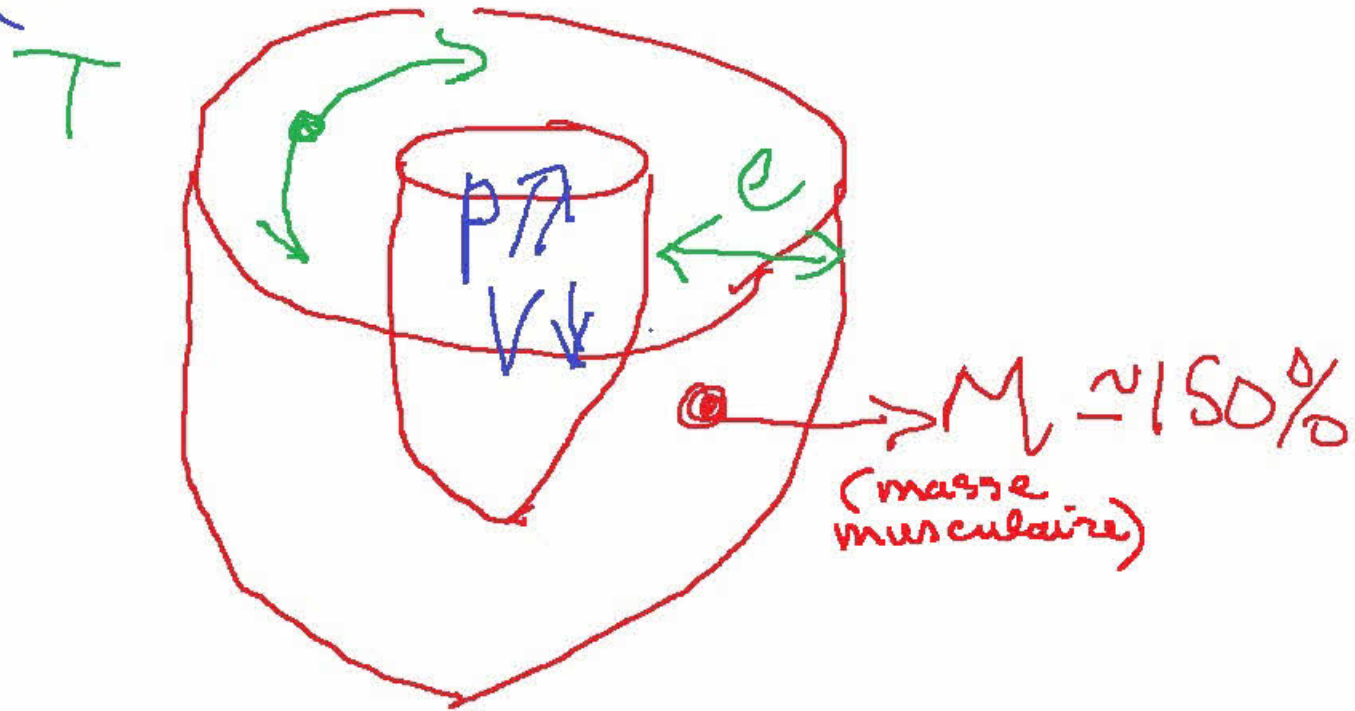
$$\downarrow V_{ej} \Rightarrow \text{insuff.}$$

$\hookrightarrow F_c \uparrow$

(r : rayon. e : épaisseur. F_c : fréquence cardiaque)

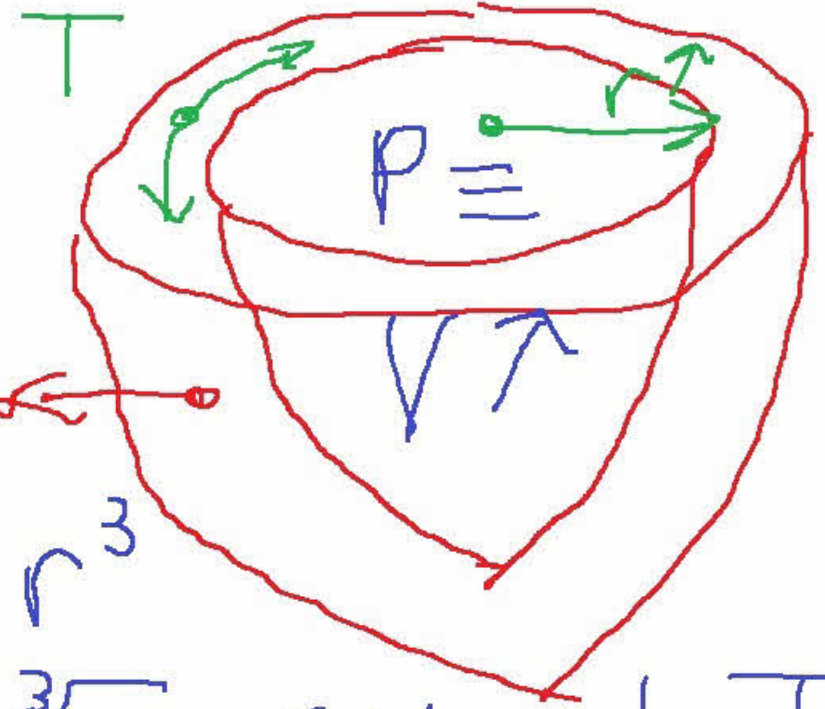
III - Types d'hyperlophies

H. de Pression
(restriptive = concentrique)



$100\% P \Rightarrow 100\% T$
 $\downarrow V \downarrow \Rightarrow \uparrow F_c$

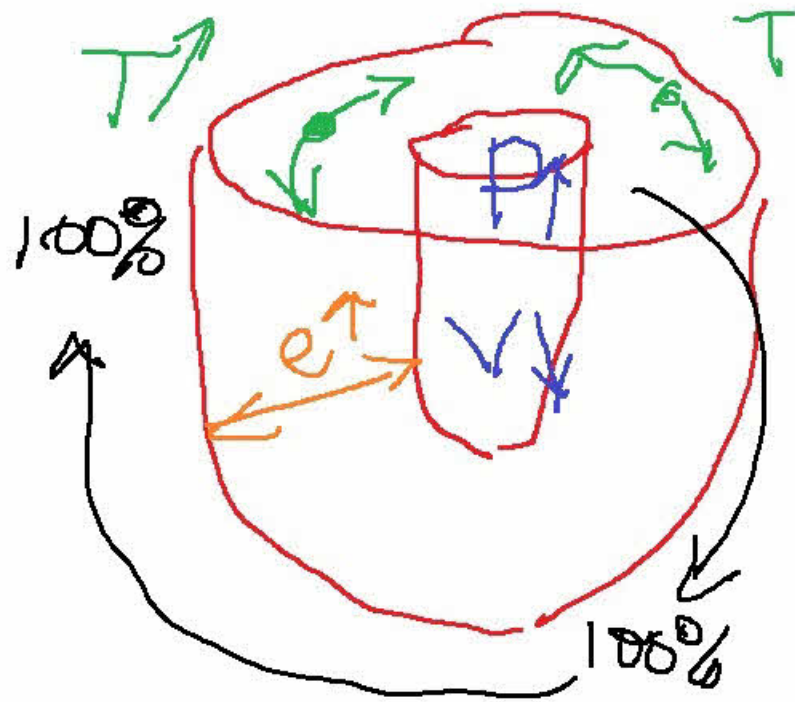
H. de Volume
(expansive)



$V = r^3$
 $r = \sqrt[3]{V} : \uparrow V \Rightarrow \frac{1}{3} T$
 $+ V \uparrow \Rightarrow F_c \downarrow$

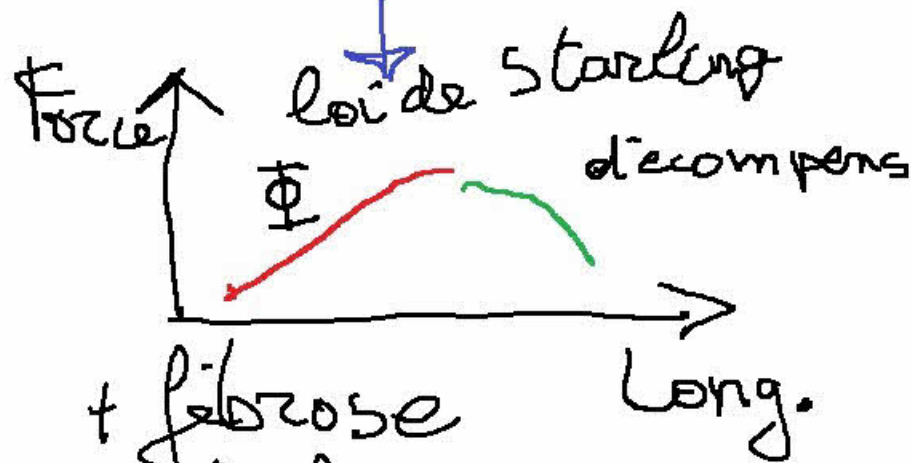
IV - Evolution de l'hypertrophie

① Hypertrophie restic.

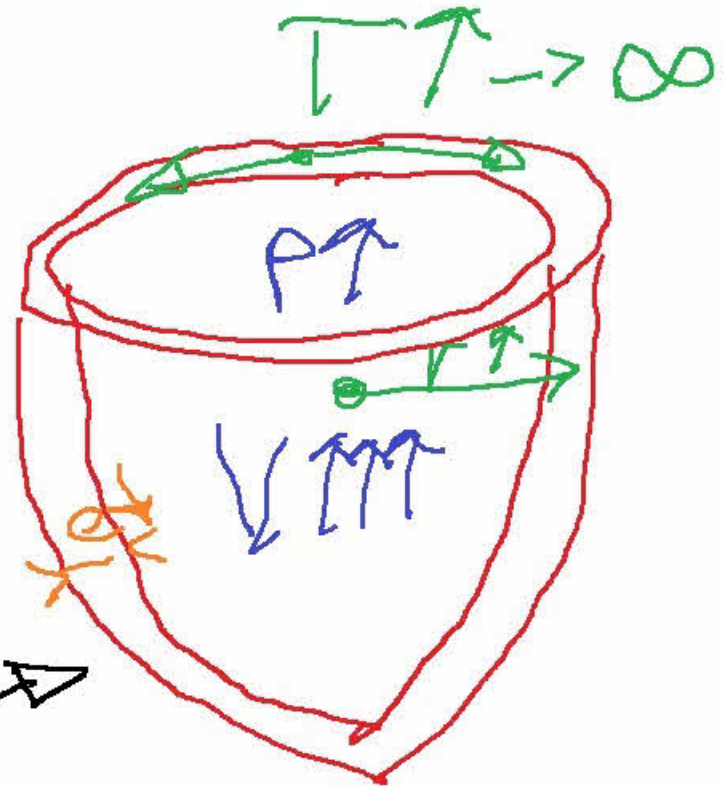


surcharge

$V_{ej} \downarrow \Rightarrow V_{résiduel} \uparrow$

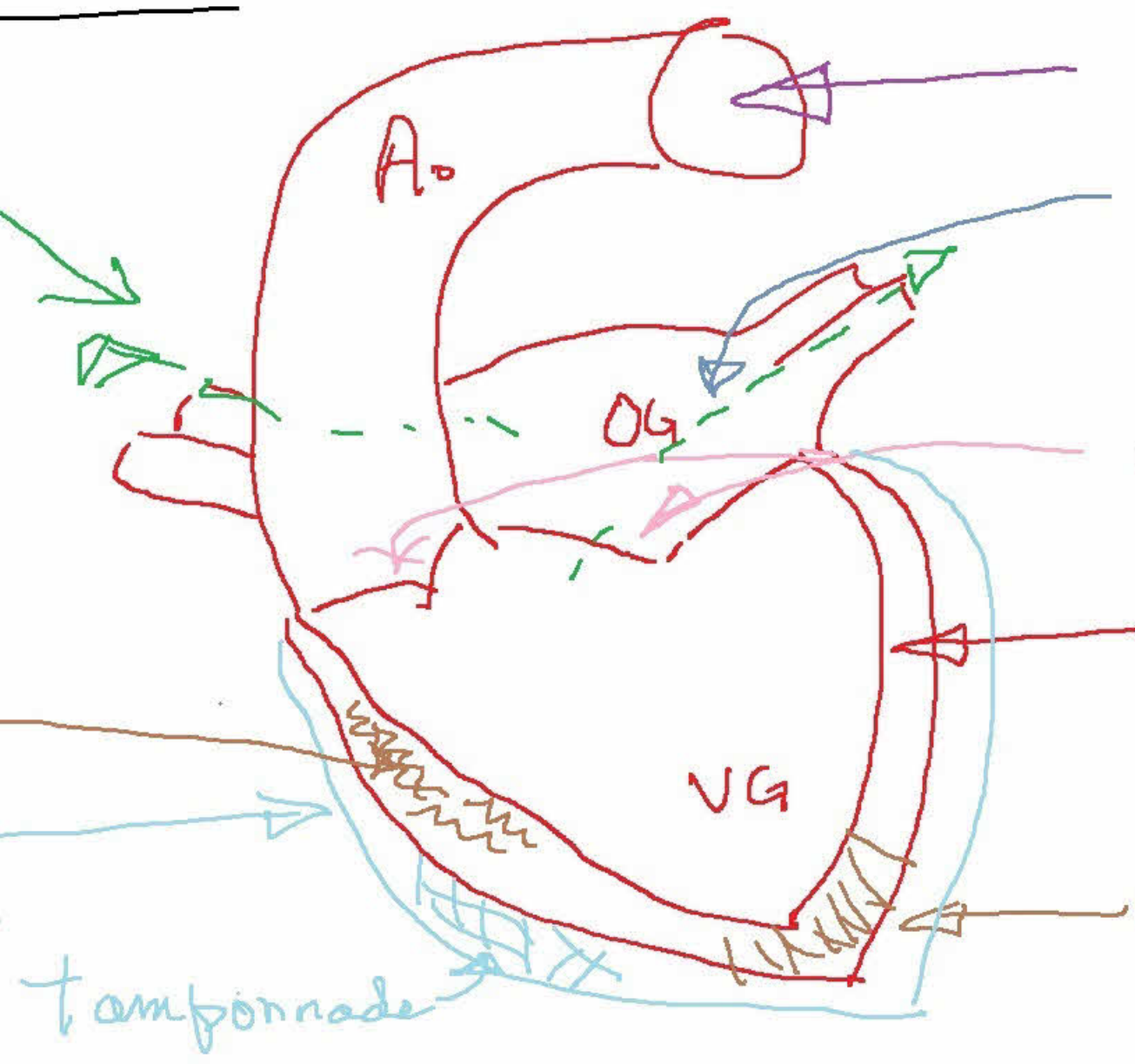


② Hypertroph. Dilatée



V. Causes de l'IC.

- HT Pulm.
- ↓
 - Coeur droit
 - I.C. droite
- insuff. Ventil.
- ↑ GR
- ⇒ viscosité
- amylose (amyloïde)
- pericardite



- HTA
- Fibrillation auriculaire
- Valves (sténose, insuff.)
- myocardites (virus, bact.)
- Maladies dégénératives myopathies (40-60%)
- infarctus

GR: globules rouges

III - Conséquences de l'IC.

i.c. congestive

(3) œdème pulm.

(4) HT Pulm.

(5) i.c. droite

(6) œdème périph.

