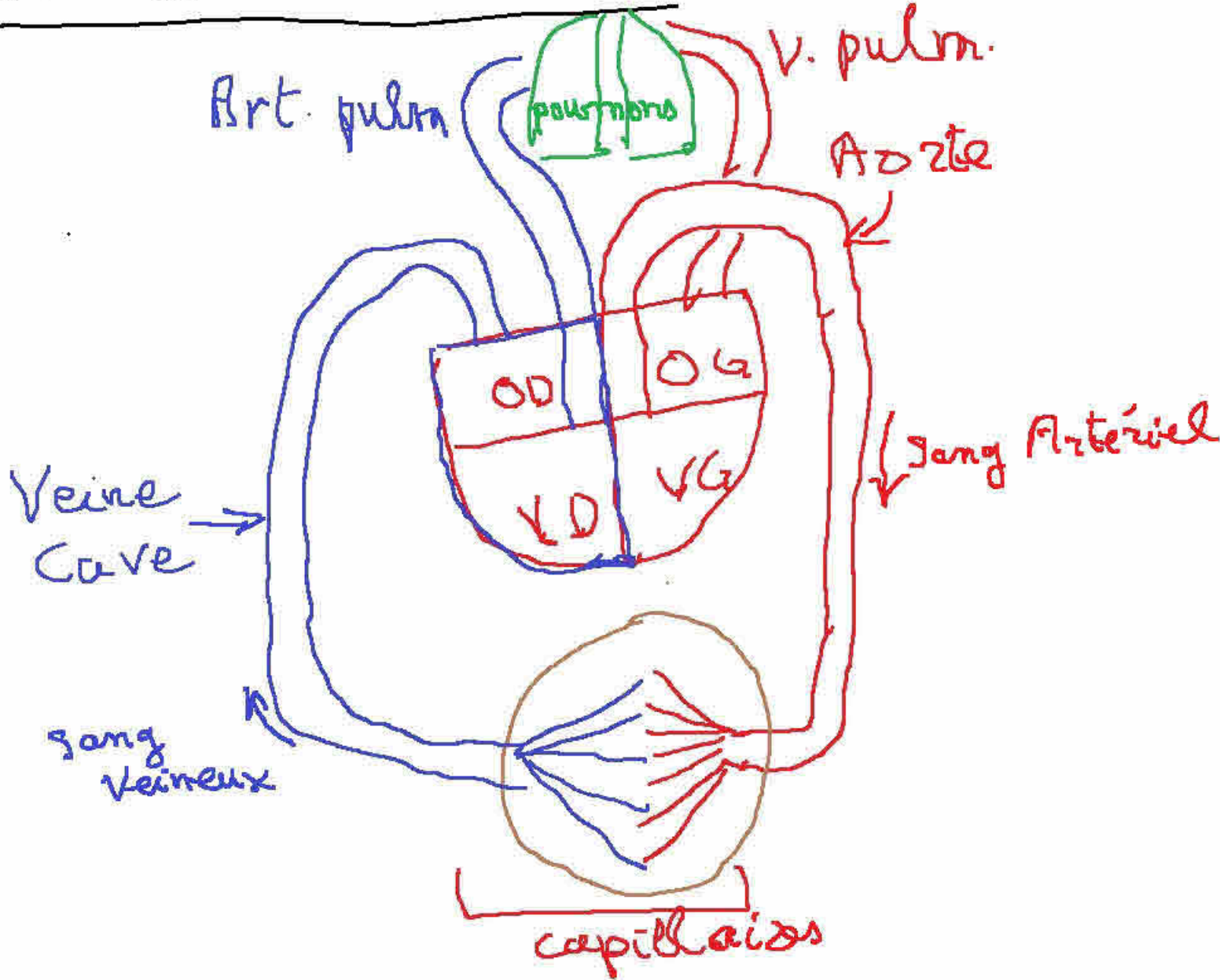
I - Organisation de la circulation

circulation pulmonaire ("petite")

circulation systémique ("grande")



II. Les Cellules musculaires

A- Coeur

100 - 200 µ

10-20 µ

actine / myosine

q striées

contraction

automatique

jonctions "gap"

q cellules !

B- Muscles

35 cm !

10-100µ

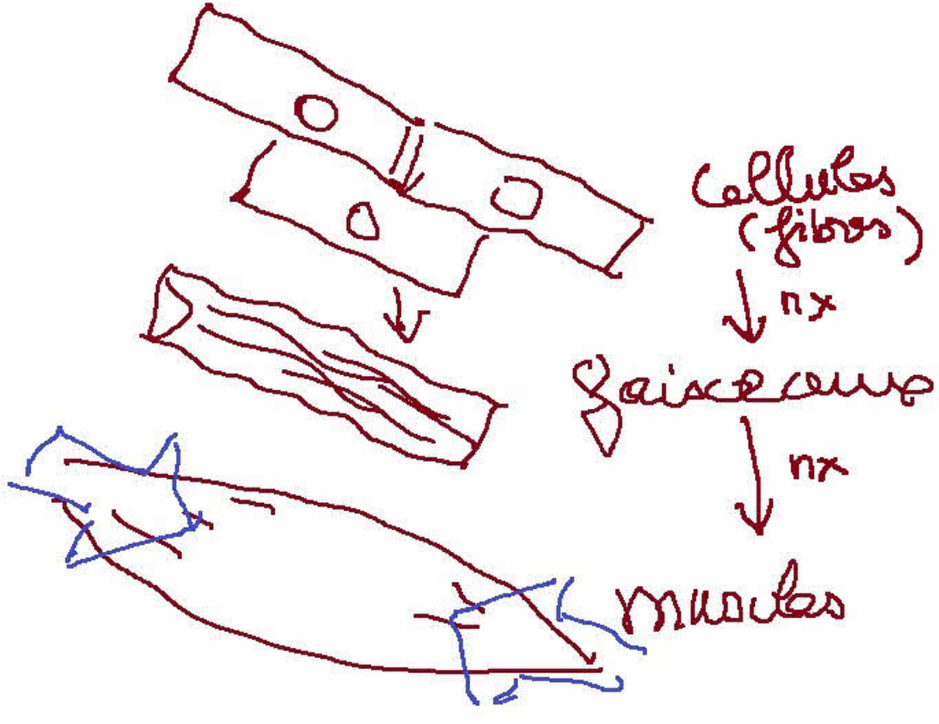
Ca^{2+}

contrôle nerveux

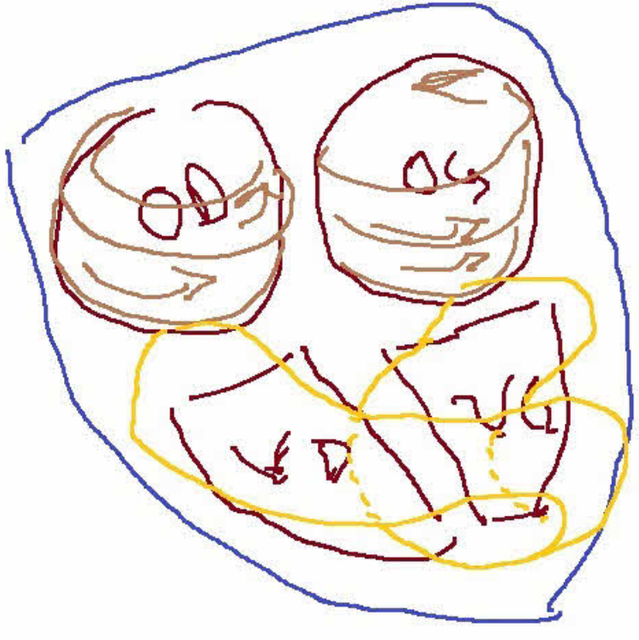
q satellites

III - Organisation des cellules musculaires

A - Muscle squ.

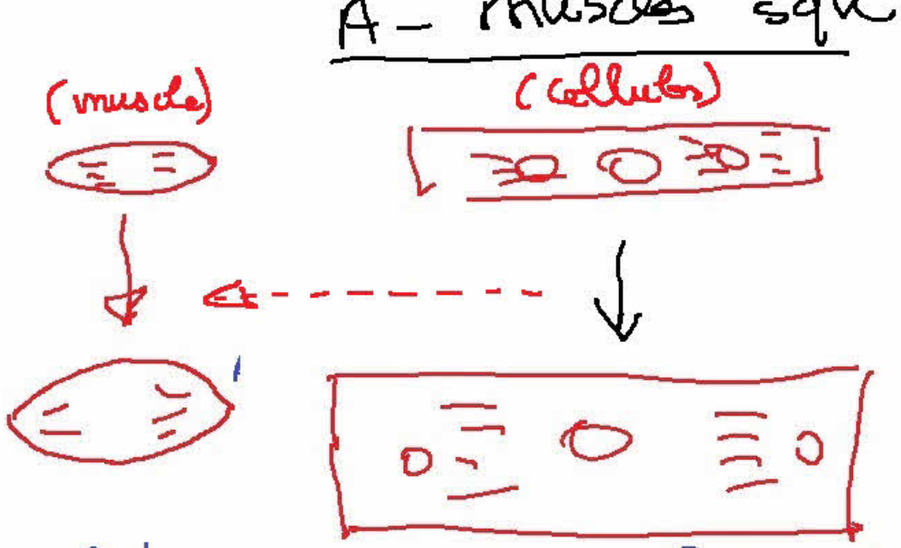


B - Coeur



II - mécanismes d'adaptation

A - muscles sqx



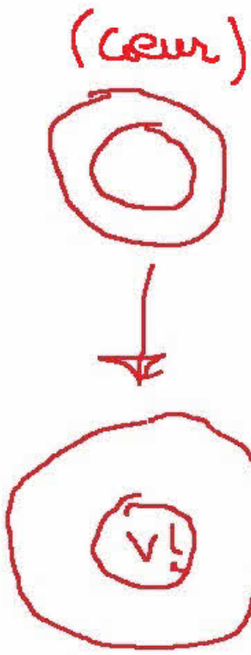
fibres blanches
- rapides
- brèves
- O_2

interconvers.

fibres rouges
- lentes
- prolongées
- O_2

B - cœur

fibres rouges uniquement

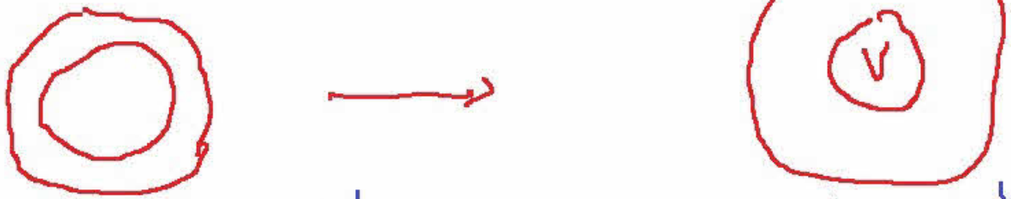


hypertrophie

O_2

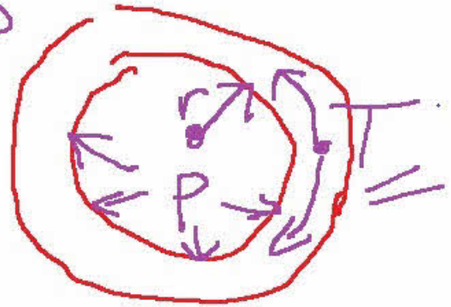
V- Conséquences de l'hypertrophie

(1) ydométrie :



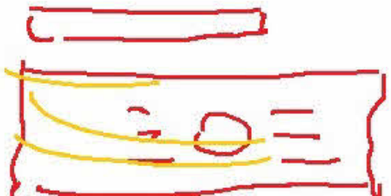
(2) fibrose → élasticité ↘ + conduction ↘ → troubles du rythme

(3) Loi de Laplace



$T = P \times r$

(4) perfusion



→ ischémie

VI - Facteurs de l'insuffisance cardiaque

1. **Contractilité** du muscle cardiaque
2. **Résistance** à l'écoulement (= pression sanguine)
3. **Valves** : - ouverture complète (anomalie = sténose)
   - fermeture étanche (anomalie = insuffisance)