

Shock in the ICU

Traditional Categories

Distributive
Hypovolaemic
Cardiogenic
Obstructive

Mechanisms of HYPOTENSION not SHOCK

Simpler Model?

Tank

Pipes

Pump

Both?

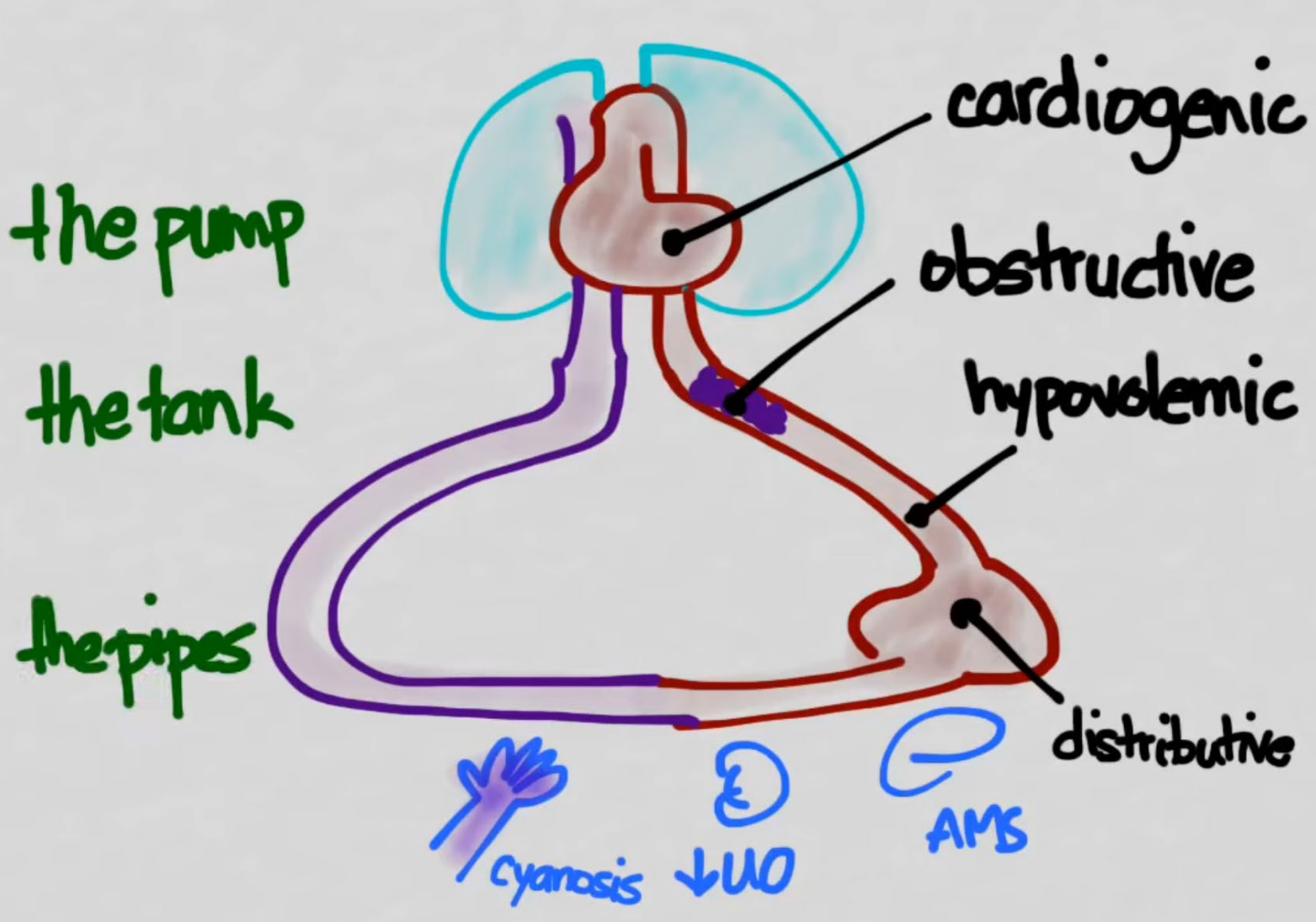


Image: Rahul Patwari

Our Patient?

Sepsis

- Vasodilation
- Capillary leak
- Myocardial dysfunction
- Fever > Increased fluid loss

Pneumonia

- Increase pulmonary vascular resistance

Poor Oral Intake

- Hypovolaemia

Positive Pressure Ventilation

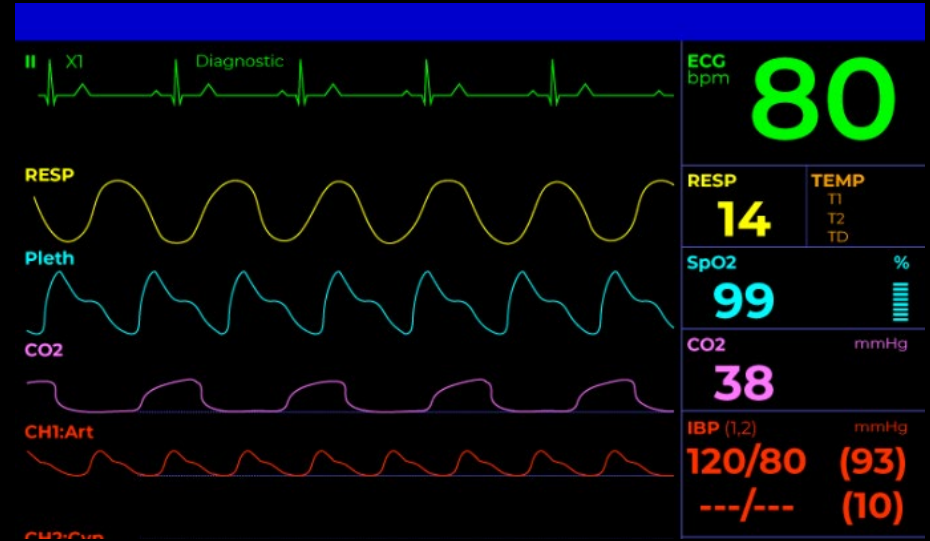
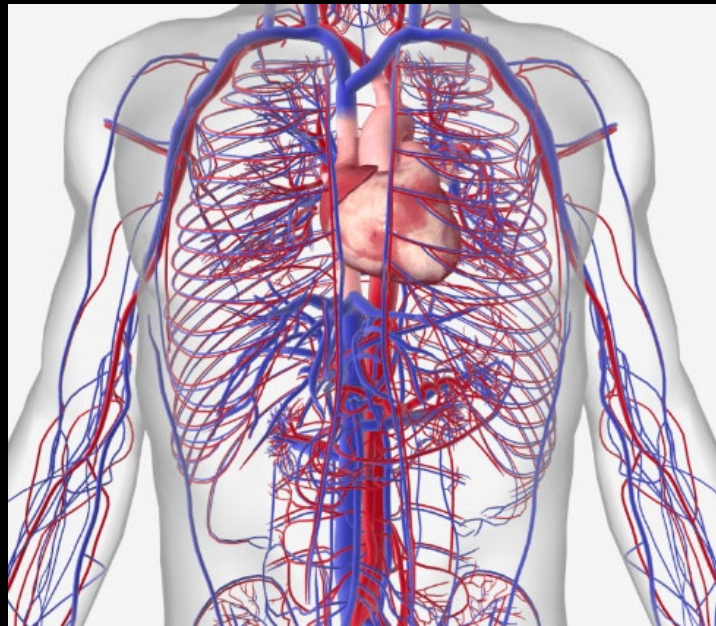
- Increased intra-thoracic pressure

Fluid Therapy

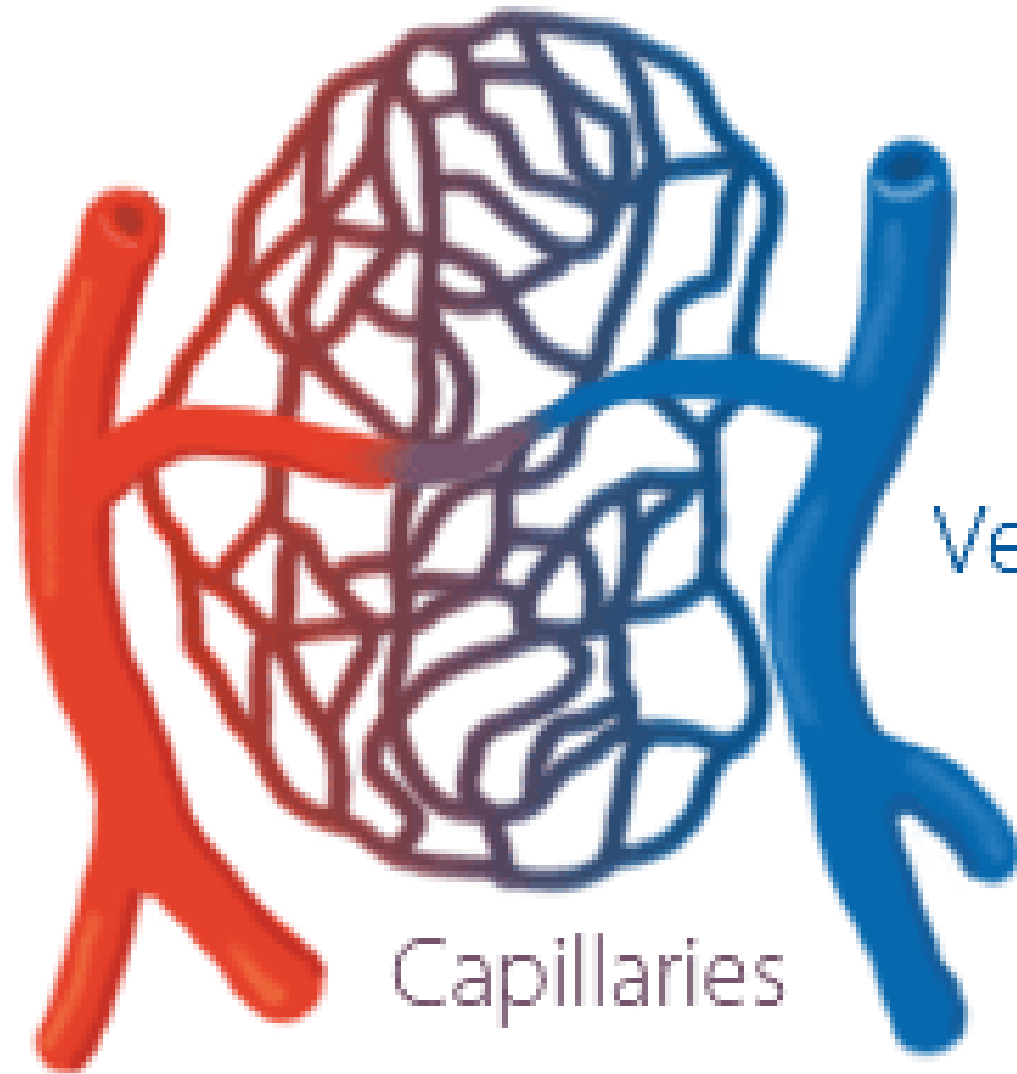
- Increased CVP
- Increased capillary leak

Renal Failure

- Vasodilation (maybe)
- Myocardial dysfunction (maybe)
- Hypervolaemia / fluid retention



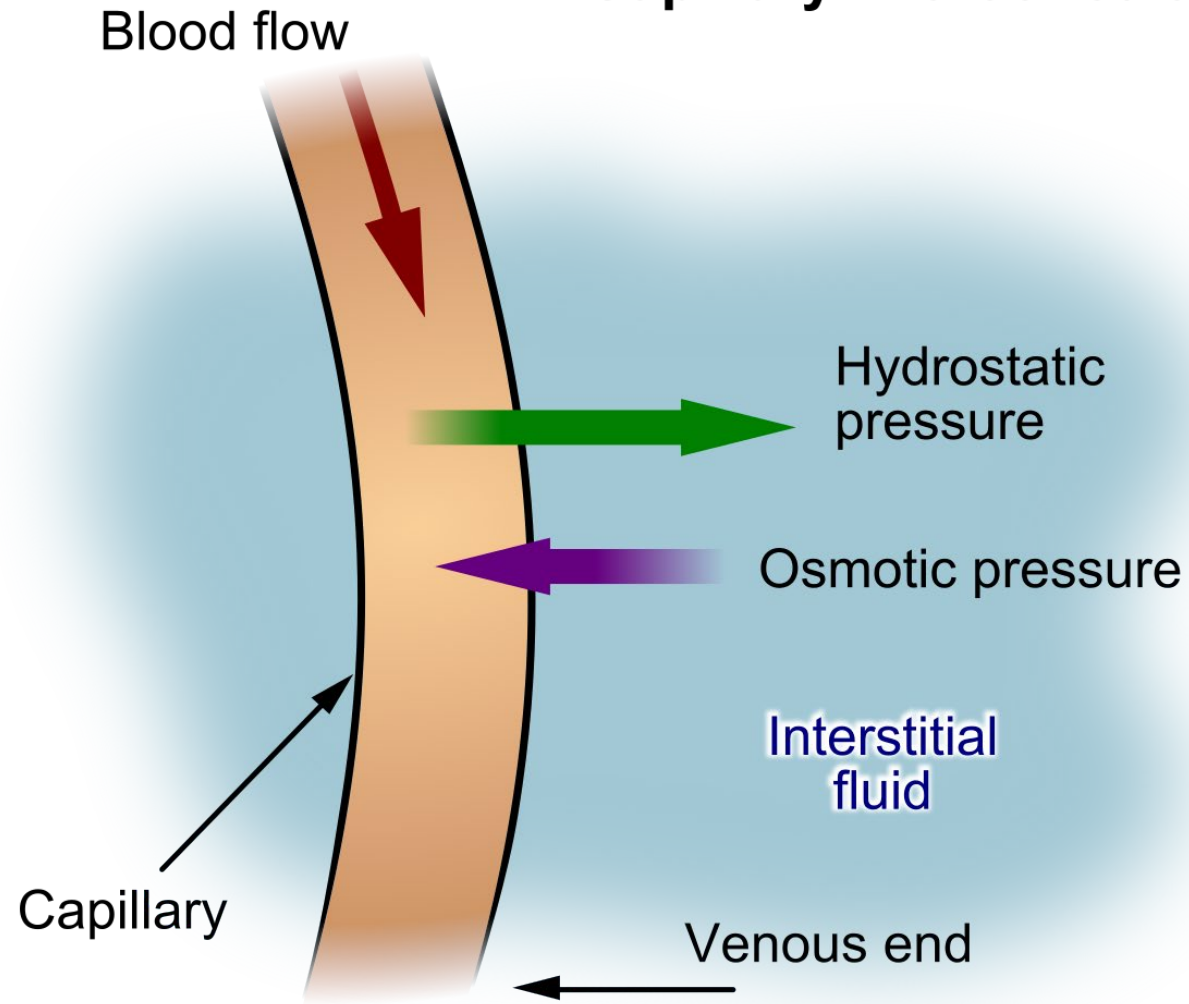
Arteriole

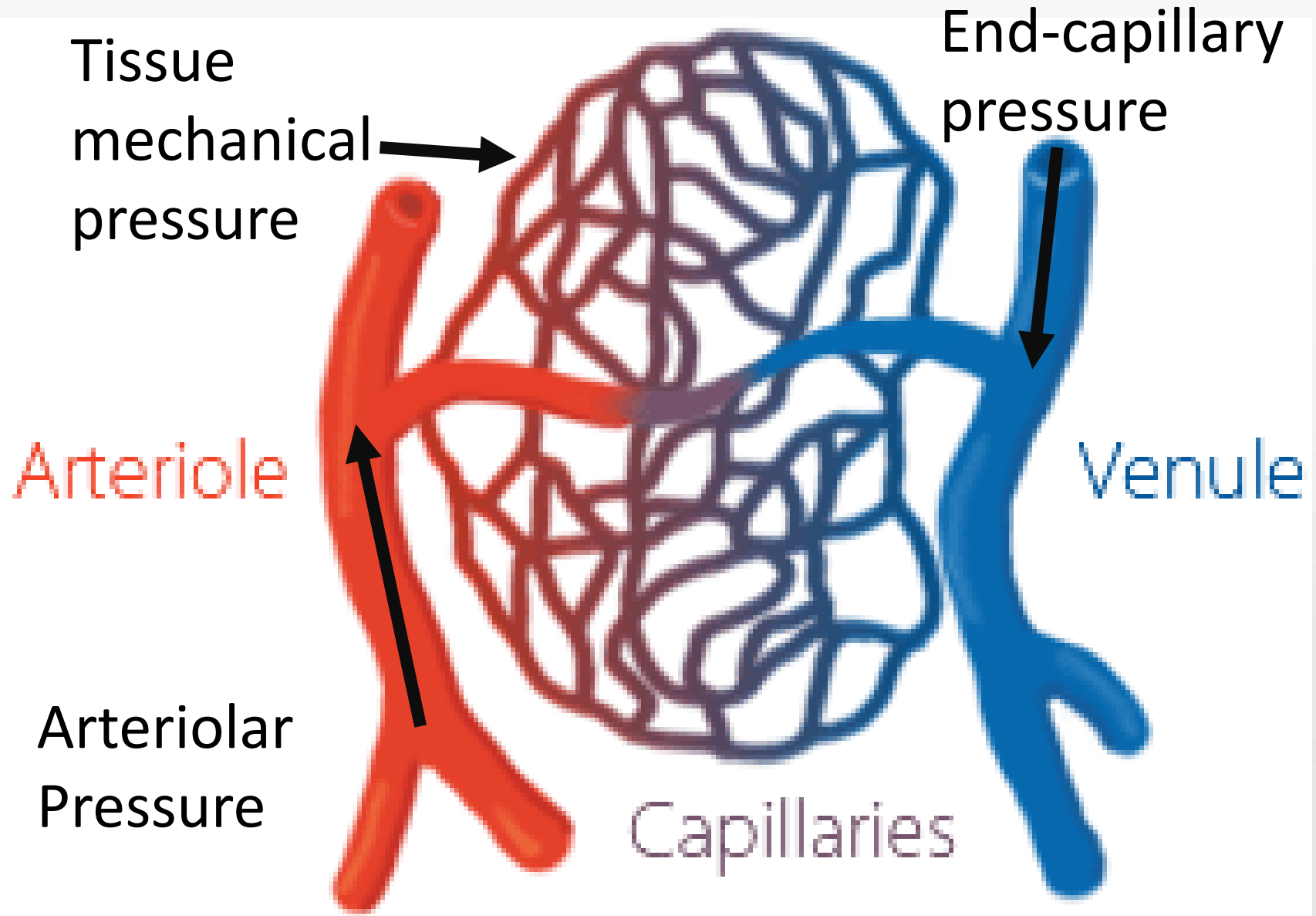


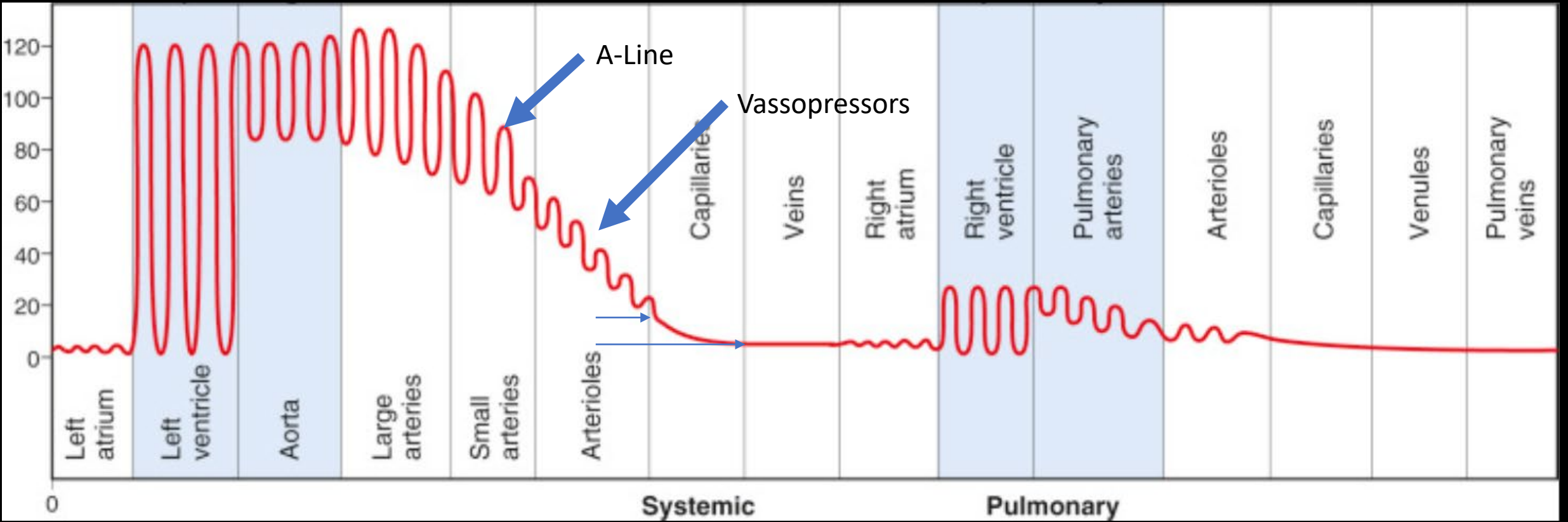
Venule

Capillaries

Capillary Microcirculation





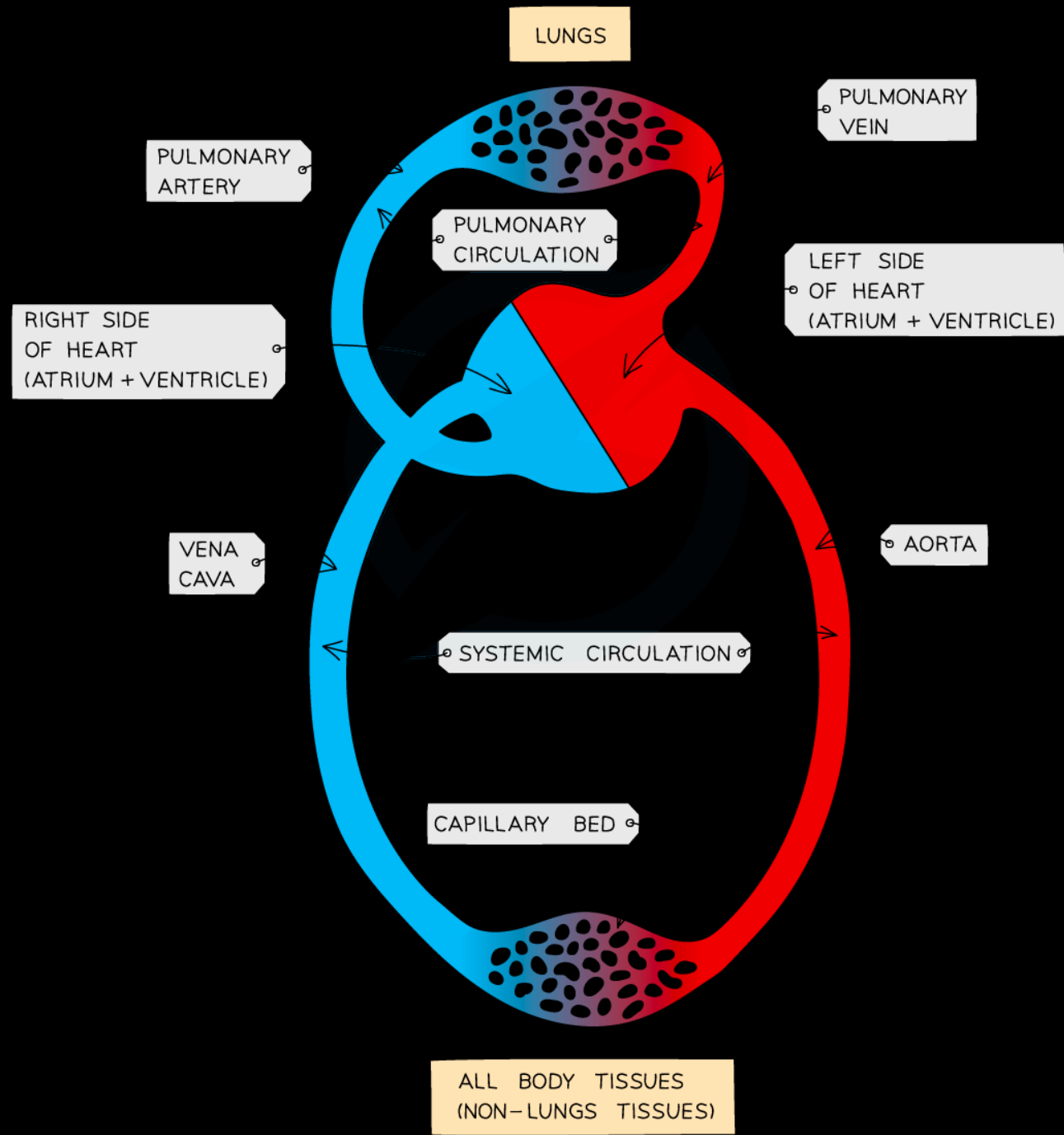


Pressure

=

Flow

Sometimes...



Don't need 4 categories

Or 3

Or a different 3

Sara Crager - Re-Imagining The Approach to Patients in Shock

<https://youtu.be/pzgvfpzs-n8>