**PA catheter - PAWP and the pulmonary artery diastolic pressure**

Pulmonary artery wedge pressure and pulmonary artery diastolic pressure

Pulmonary artery diastolic pressure is a reasonable surrogate for PAOP when you don't want to wedge for whatever reason:

- PADP is usually within about 5mmHg of PAOP
- PADP will be more than 5mmHg different if the patient is tachycardic or there is a condition which increases pulmonary vascular resistance
- The relationship between PAOP and PADP is stable:
  - If the PAOP is 5mmHg below the PADP, you can expect that to stay that way for at least a few hours; so you don't need to keep wedging

**The PADP is usually higher than the PAWP.**

- The diastolic pressure in the pulmonary arteries is higher because of the resistance to flow in the pulmonary arterial network;
- Thus if the flow is abolished (by occluding the artery) the pressure drops.

If the PADP is LOWER than the PAWP, the PAWP measurement is probably wrong.
It may mean your catheter tip position needs to be changed.

PADP is a measure of pulmonary hypertension

- As said before, the diastolic pressure in the pulmonary arteries is higher because there is flow, and resistance to this flow.
- Once you abolish flow, you also abolish resistance, and the pressure drops.
- Thus, the difference between PADP and PAOP is a surrogate measure of pulmonary vascular resistance.
- Thus:

If the PADP is SIGNIFICANTLY HIGHER than the PAWP, there is probably pulmonary hypertension.
How much higher? 6mmHg is the usually quoted number.