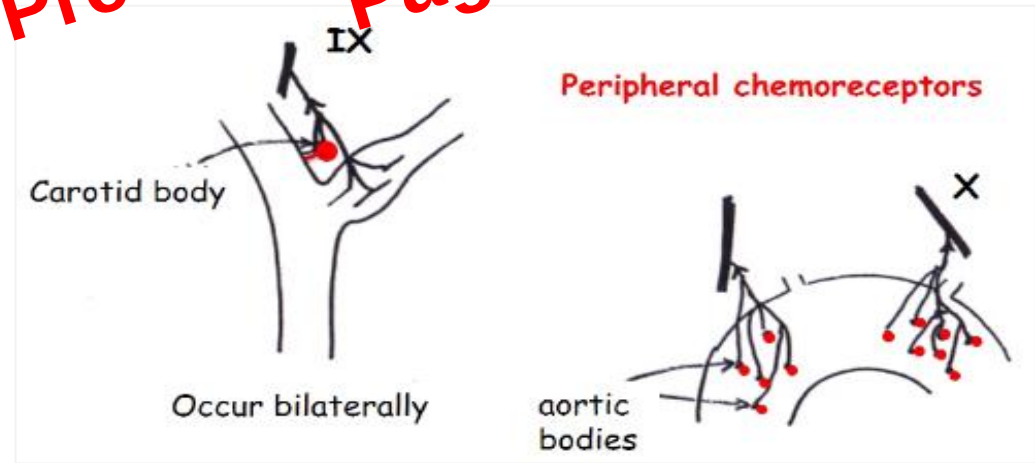
- Increasing vascular resistance also increases workload of right ventricle (RV)
  - Normally LV wall is thick bc systemic circ has high resistance; RV usually thin walled bc normally pumping against low resistance
  - So increasing RV work which not built for
    - Eventually leads to right ventricular heart failure
    - Long lasting vasoconstriction leads to heart failure
    - Acutely; hypoxic vasoconstriction in a patient isn't good bc increases likelihood of oedema forming;
      - If they already have any hypoxia & you give them GA, you risk hypoxia getting worse & sending them into RV heart failure.
- Happens if patient not well ventilated by artificial ventilator
  - Ventilator may be set too low for patient; lungs not being ventilated adequately with air
- Go up to high altitude
  - No choice but to breathe atmospheric air at low partial pressure

<u>Reflex effects of hypoxia:</u>

- Reflex mechanisms which help counteract effects of hypoxia
- Baroreceptors found in carotid sinus & in aortic arch
  - These regions also regions where peripheral chemoreceptors found
    - These are sensitive to levels of O_2 in blood



- Image: shows structure called carotid body; found in bifurcation of common carotid artery
  - Has afferent nerve fibres which join to sinus nerve & receives afferent information from baroreceptors & runs into CN IX again (glossopharyngeal)
    - 2 carotid bodies on either side of neck
  - Amongst aortic baroreceptors you find aortic bodies which are chemoreceptor tissue & nerve fibres from aortic bodies join into aortic nerve then into CN X on both sides of aortic arch then up to medulla.