

PULMONARY HYPERTENSION

ETIOLOGY

- Idiopathic.
- COPD.
- Mitral stenosis/regurgitation.
- Pulmonary embolism.
- Obesity (Pickwickian syndrome).

HINT

A huge, dilated PA, sev. TR and RV enlargement best describes?

- a) pulmonary emboli
- b) pulmonary hypertension
- c) myocardial infarction
- d) mitral regurgitation

b) pulmonary hypertension

PATHOPHYSIOLOGY

- Increase in pulmonary arterial pressure (>30mmHg).
 - a. resistance to venous drainage.
 - b. resistance to blood flow (COPD, primary PHTN).
 - c. resistance to PA flow (PPS, PE).
 - d. hypoventilation (obesity).
 - e. Eisenmenger Syndrome: reversal of a left-to-right shunt from PHTN.

HINT

Know Eisenmenger Syndrome.

PHYSICAL SIGNS

- Fatigue.
- Dyspnea.

HINT

What is represented with a decreased "a" wave and a flying W?

pulmonary hypertension by M-mode

ECHO

- M-mode may show decreased/absent "a" (atrial) wave and/or mid-systolic closure of the pulmonic valve (flying W).
- Flattening of the interventricular septum in SAX.
- Right ventricular hypertrophy.
- Right ventricular dilatation.
- Paradoxical LV septal motion.

HINT

SAX LV in PHTN stays flattened while RV volume overload rounds some in systole.