



Ventricular Septal Defect from A to Z

HCMC Pediatric Cardiology and Congenital Heart Disease Society

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Ho Chi Minh city, Vietnam

PULMONARY AV FISTULA CLOSURE: TIPS AND TRICKS



Disclosure Information



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As a faculty member for this program, I disclose the following relationships with industry:

**(GRS): Grant/Research Support (C): Consultant (SB): Speaker's Bureau
(MSH): Major Stock Holder (AB): Advisory Board (E): Employment
(O): Other Financial or Material Support**

St. Jude Medical: C, O.

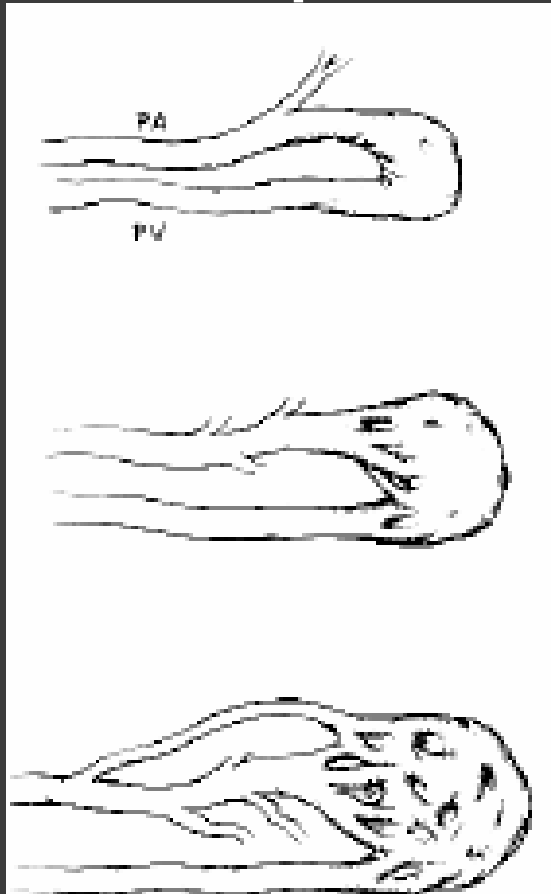


FACTS

- ⦿ Direct artery to vein connections in the lung.
- ⦿ Most often associated with hereditary hemorrhagic telangiectasia syndrome.
- ⦿ They can be single or multiple in one or both lungs.
- ⦿ 65% located in the lower lobes.
- ⦿ Produce desaturation and pradoxical emboli.

ANATOMY

Simple



Complex

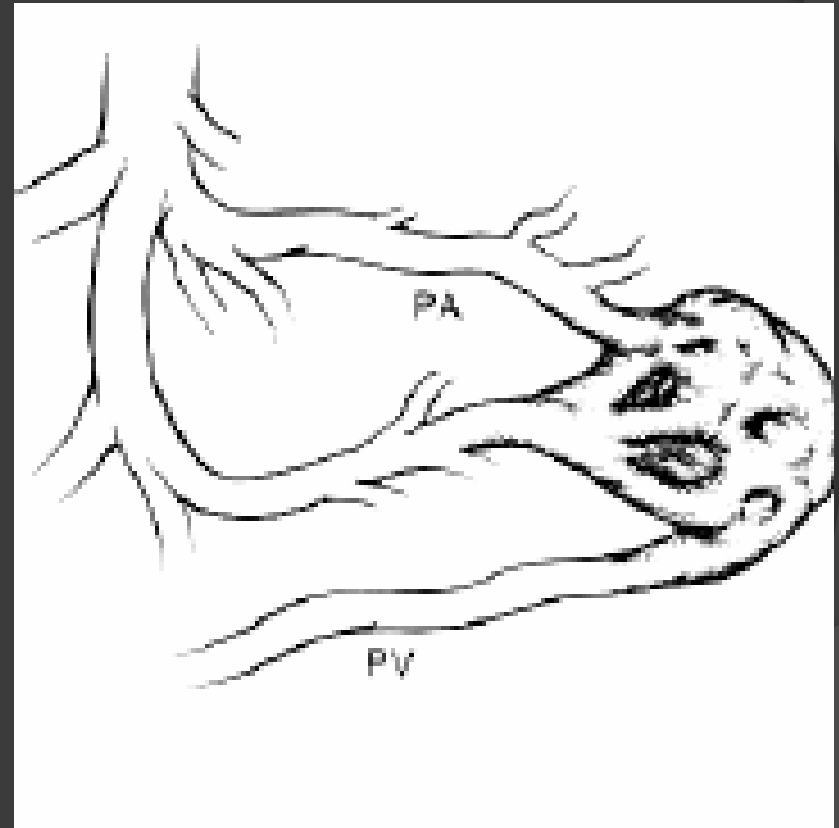


IMAGE DIAGNOSIS

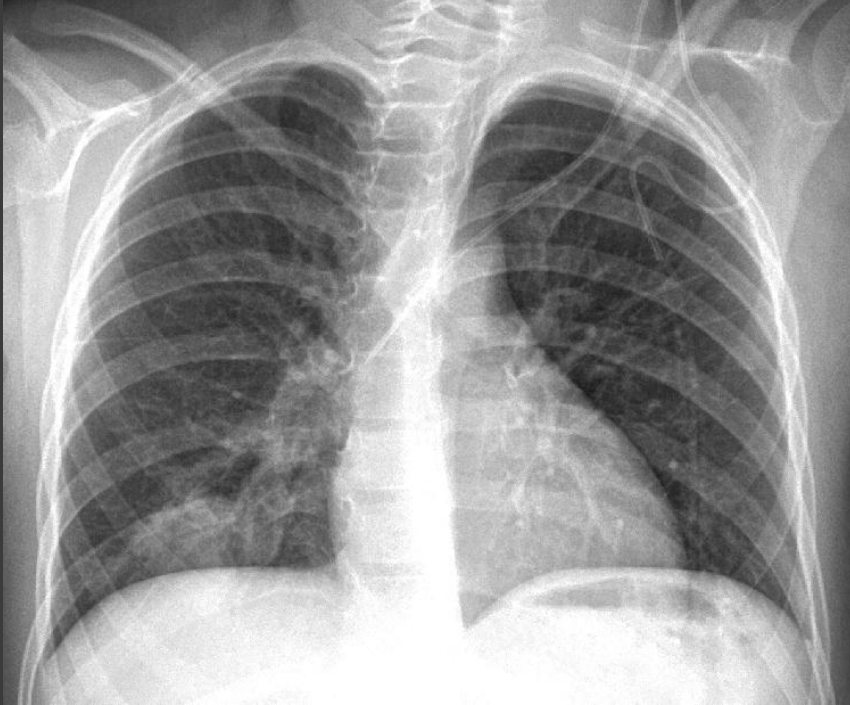
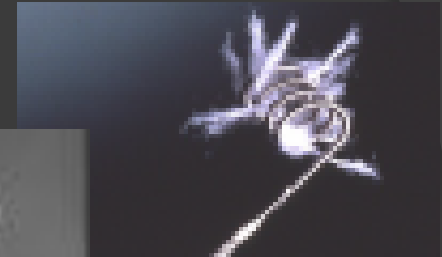


IMAGE DIAGNOSIS



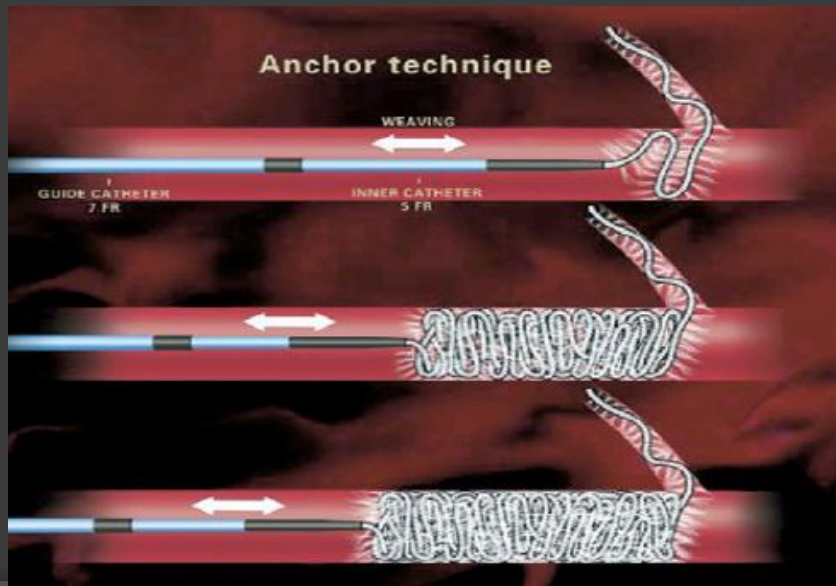
TREATMENT OPTIONS

- ⦿ Embolization.
 - Liquids and particles.
 - Detachable balloons.
 - Coils.
 - Occluders.
 - Plugs.
- ⦿ Exclusion.
 - Covered stents.
- ⦿ Surgery.



STRATEGIES

- Occlude all feeding vessels.
- If using coils, anchor a big one in an adjacent vessel, and then pack with smaller coils (anchor technique).

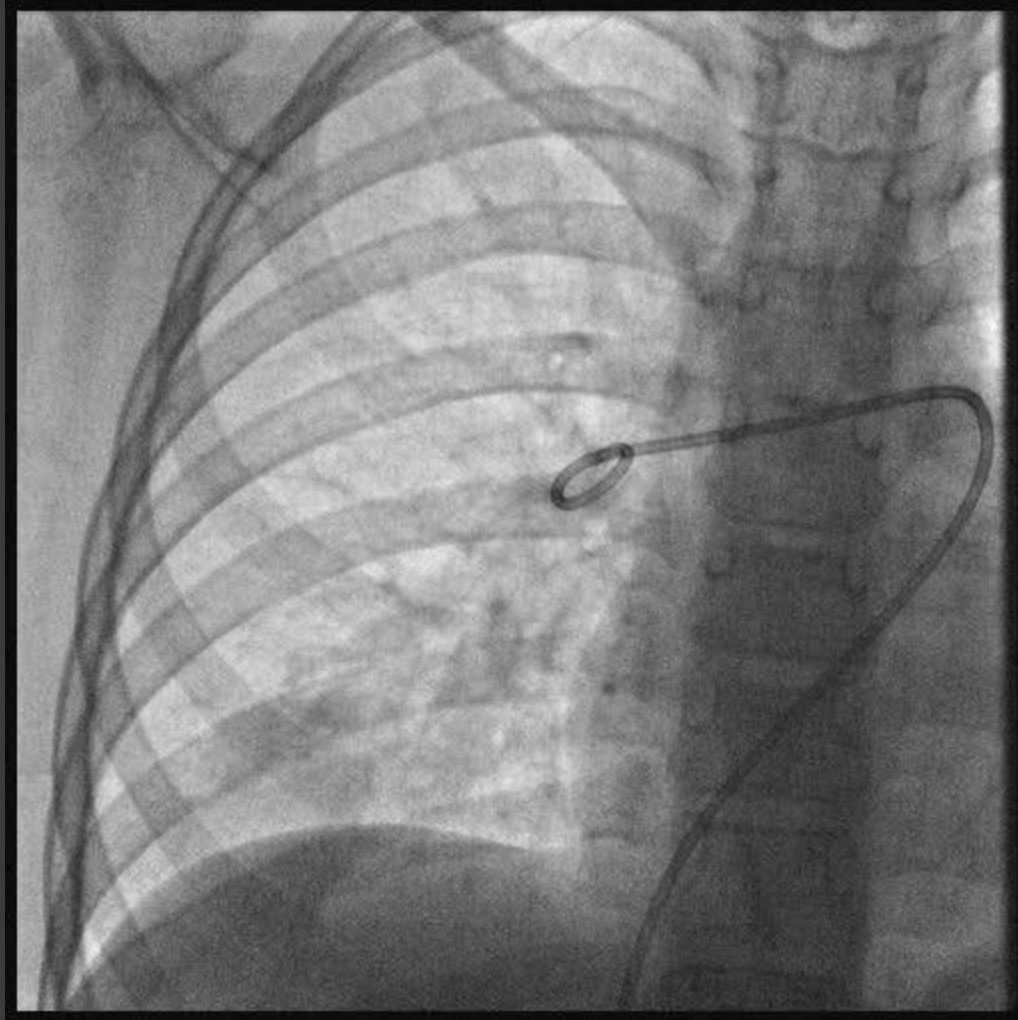


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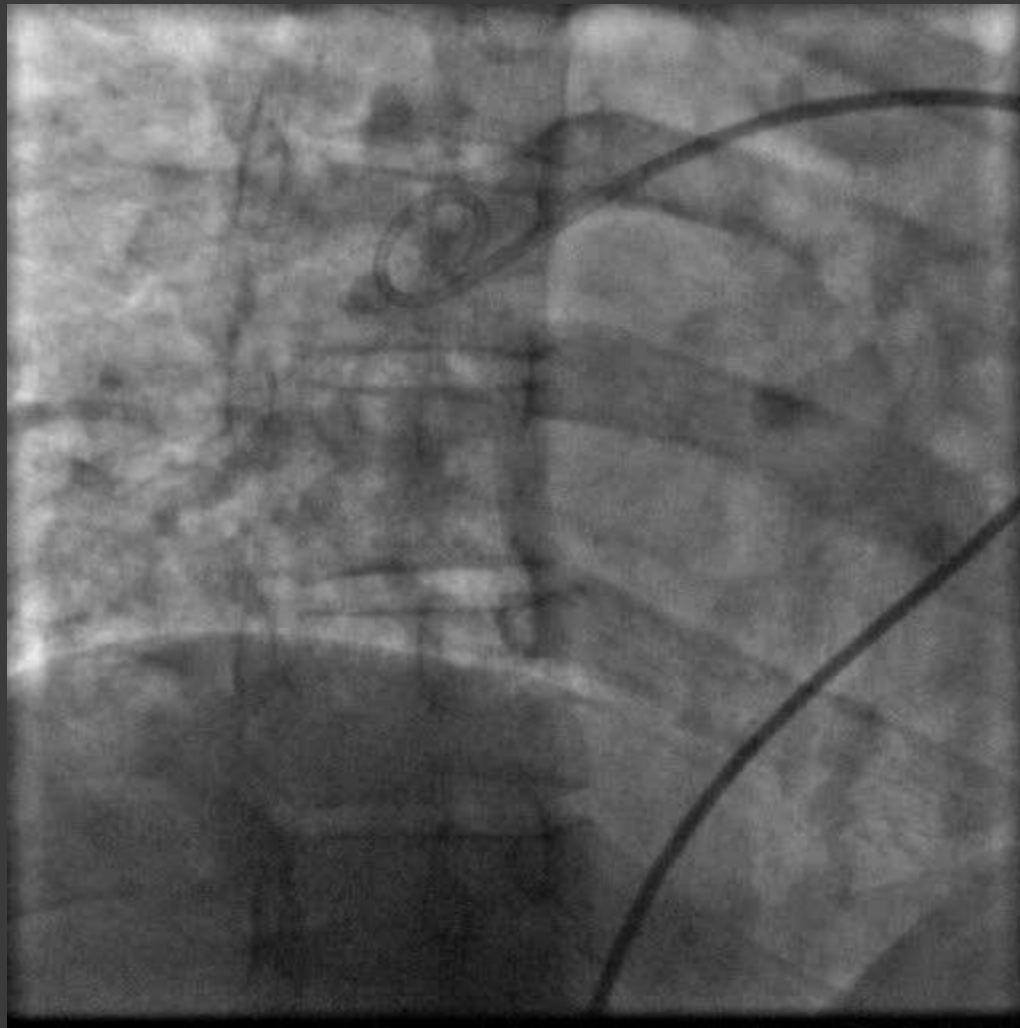
- Occluders or plugs are easier to use but cost more.
- Frequent use of multiple devices.



9 yo girl. SaO₂ 88% on 100% O₂



18 yo boy. SaO₂ 72% on room air. Four sessions through 6 years.



TIPS

- ⦿ Plan your strategy with the CT before the actual procedure.
- ⦿ Coaxial catheters are useful y tortuous courses.
- ⦿ Avoid air or clot in the catheters since they can embolize to the systemic circulation.
- ⦿ Before finishing procedure, make a general angio to be sure you closed all feeding vessels.
- ⦿ Follow-up with CT to ensure closure and look for new fistula.