Pulmonary artery pulse pressure : A simple parameter to predict reversible PAH In Eisenmenger syndrome

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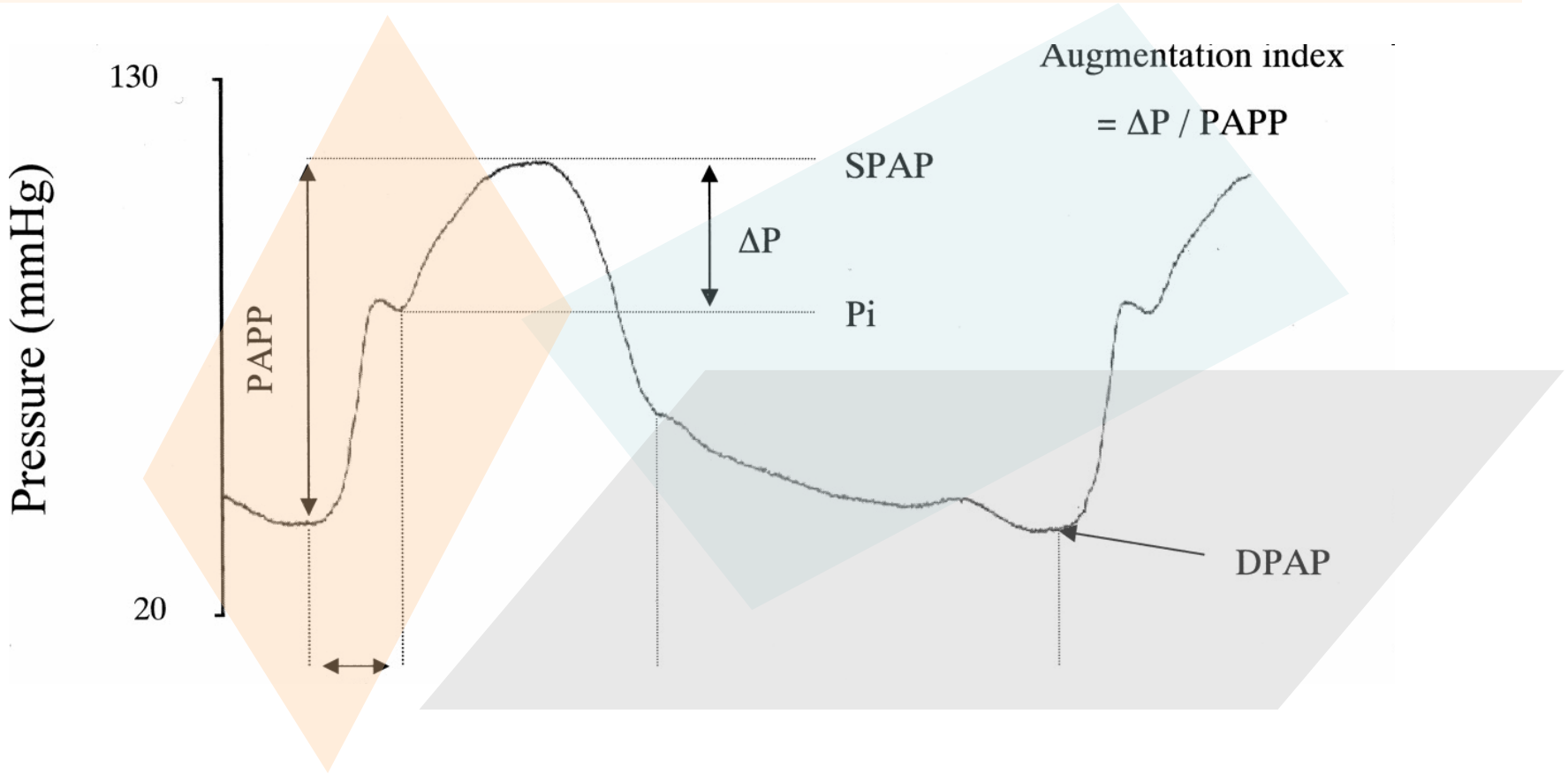
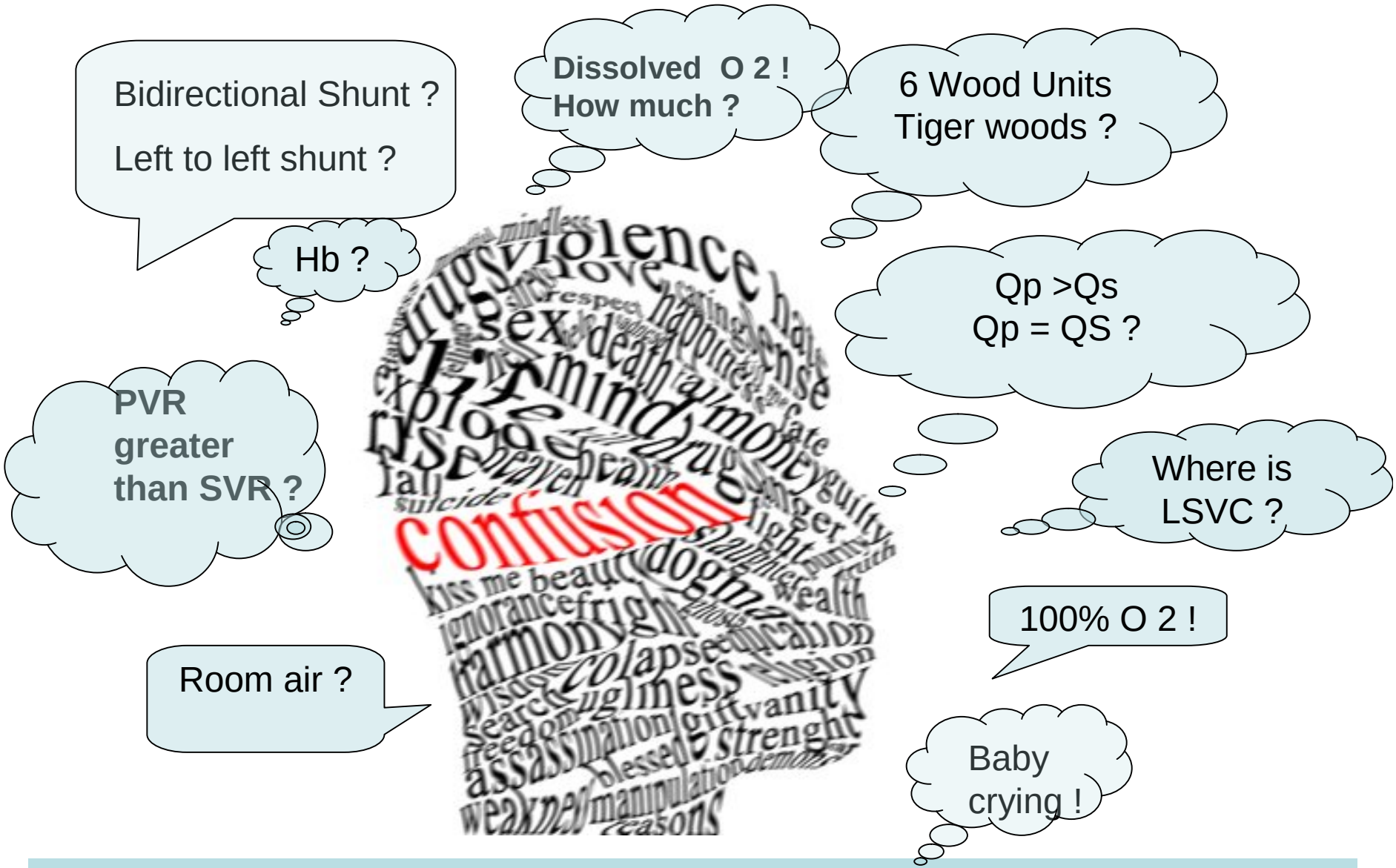


Predicting reversibility of PAH remains a difficult task

Cath derived PVR is a cumber some and error prone procedure .

Has dangerously low reproducibility as it involves too many measurements and calculations



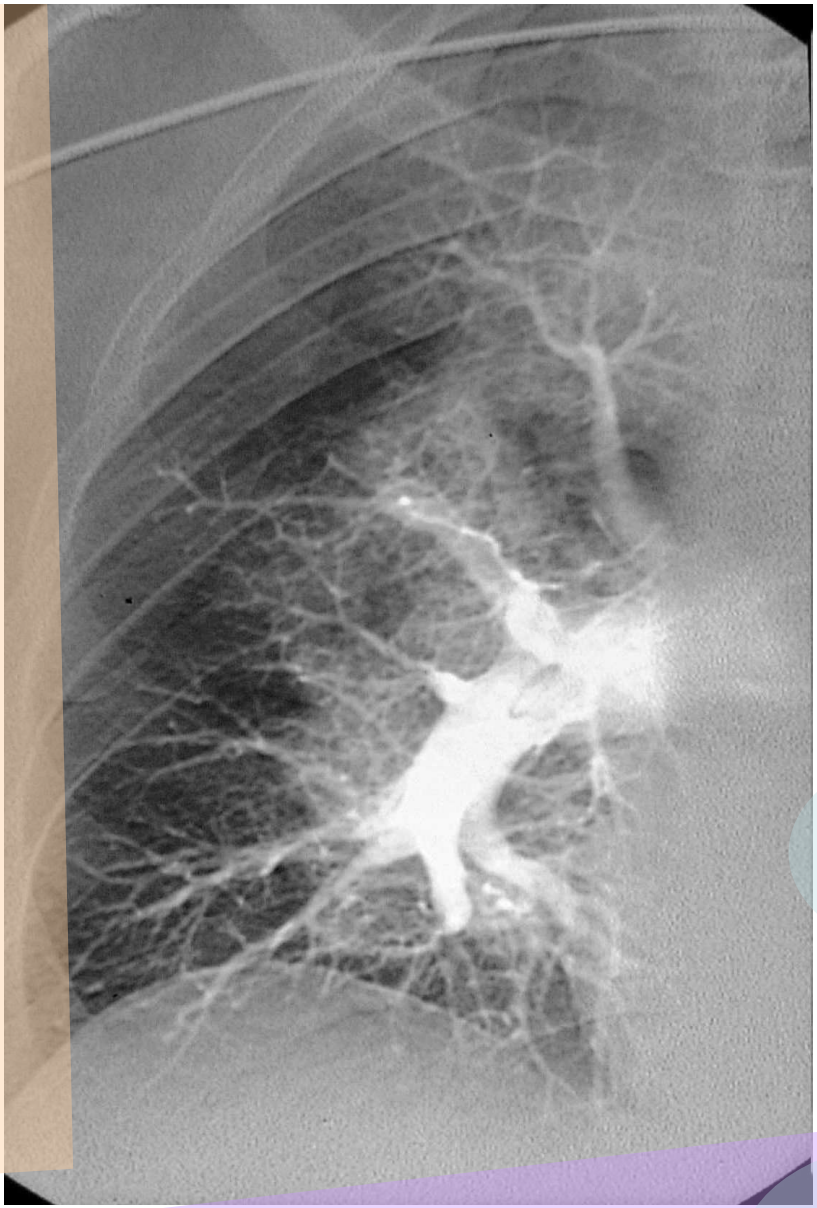
The art of calculating complex shunts in cath lab …

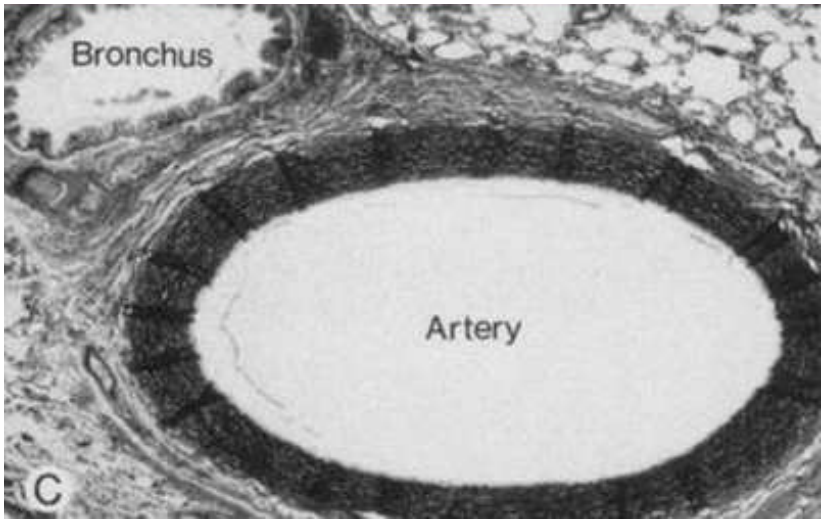
It remains a fact **cath derived PVR is a battered gold standard (14 carrot ?)**

Hence there is a need ***for a simple*** **but accurate method to assess PAH and it's reversibility**

Concept

We hypothesied *Pulmonary artery* diastolic pressure , *pulse pressure*. (PADP ,PAPP) can provide a vital predictive value in the reversibility of PAH as they are directly linked to PVR





Diastolic pressure

Systolic pressure

Cardiac output

Pulmonary vascular resistance

The aim of this study is to analyse the PAPAP and PADP with reference to PVR and reversibility of PAH.

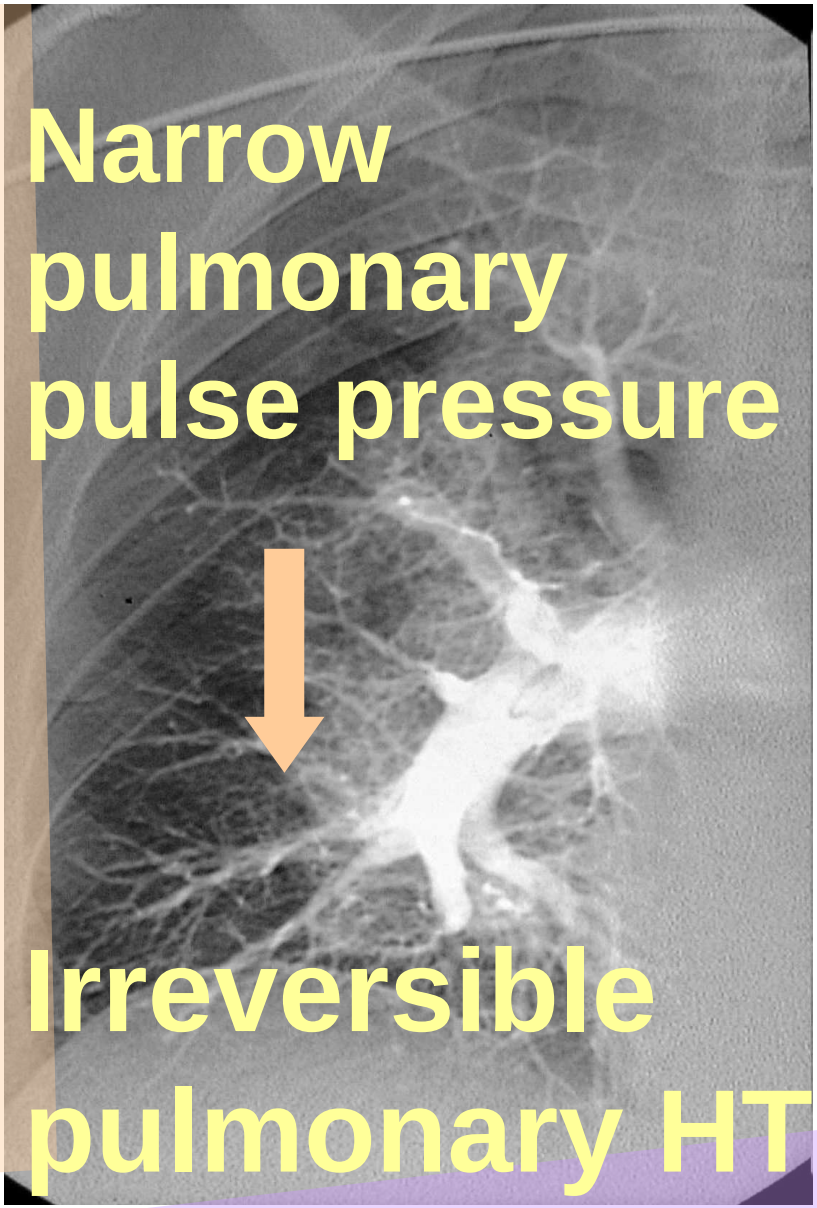
5 patients with VSD -4 , PDA-1 with the clinical diagnosis of Eisemenger syndrome were studied. They underwent cardiac cath study .

Results

Age	*Shunt*	*MPA Peak*	*MPA diastolic (PADP)*	*PA pulse pressure (PAPP)*	*Shunt Qp/Qs*	*PVR Wood units*	*PVR Response to 100% O2*	Surgical Outcome
F 8	**VSD**	**96**	**40**	**56**	**1.8:1**	**9.0**	**9.2**	**Not done**
M 14	**VSD**	**82**	**52**	**30**	**1.2:1**	**12.8**	**10.5**	**Inoperable**
F 15	**PDA**	**106**	**44**	**62**	**1.6:1**	**11.0**	**9.6**	**Good**
F 9	**VSD**	**104**	**48**	**56**	**1.8:1**	**10.2**	**9.0**	**Good**
M 16	**VSD**	**98**	**58**	**40**	**1.5:1**	**14.5**	**13.6**	**Inoperable**

Even though it is a small observation involving 5 patients it suggests there is possible true correlation between PAPP and PADP with PVR and reversibility of PAH.

Ironically we have compared with a standard that is less than ideal since We have no other option



Wide pulmonary pulse pressure

Reversible pulmonary HT

We conclude PAPP and PADP could be a simple , useful additional paratmeter to assess the reversibility of PAH in Eisenmenger syndrome. Further scrutiny of this concept is warranted.