

Multiple, apical and complex VSDs: the art of closing what seems impossible

Dr. Agustín Chozas
Hospital Universitario Austral
Pilar - Bs.As. - Argentina

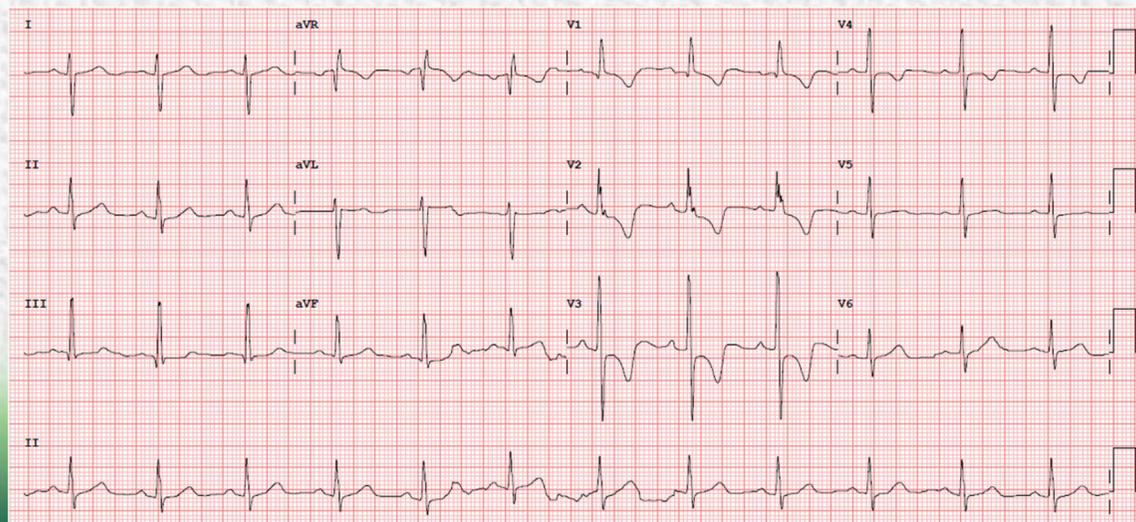


No disclosures



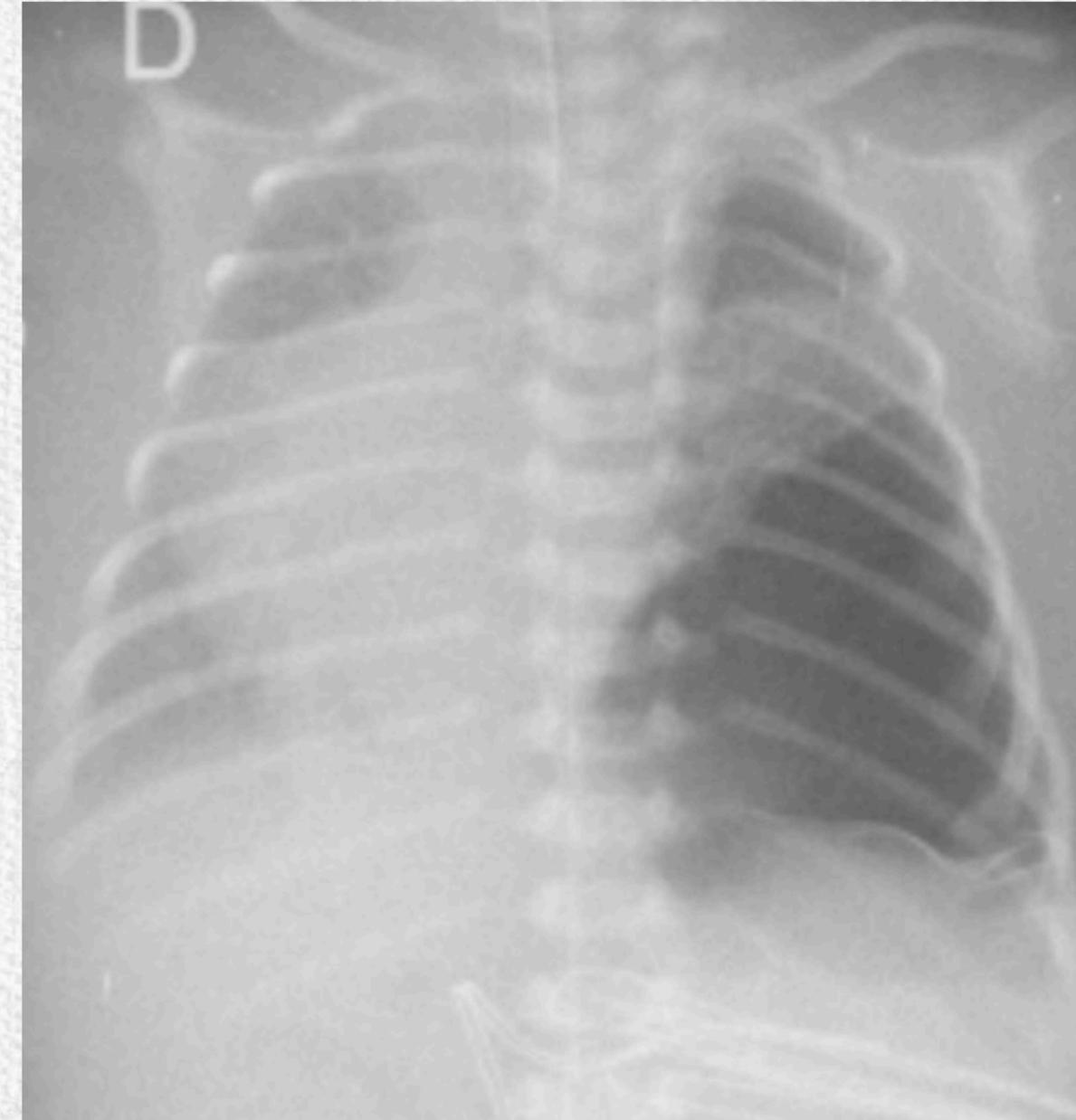
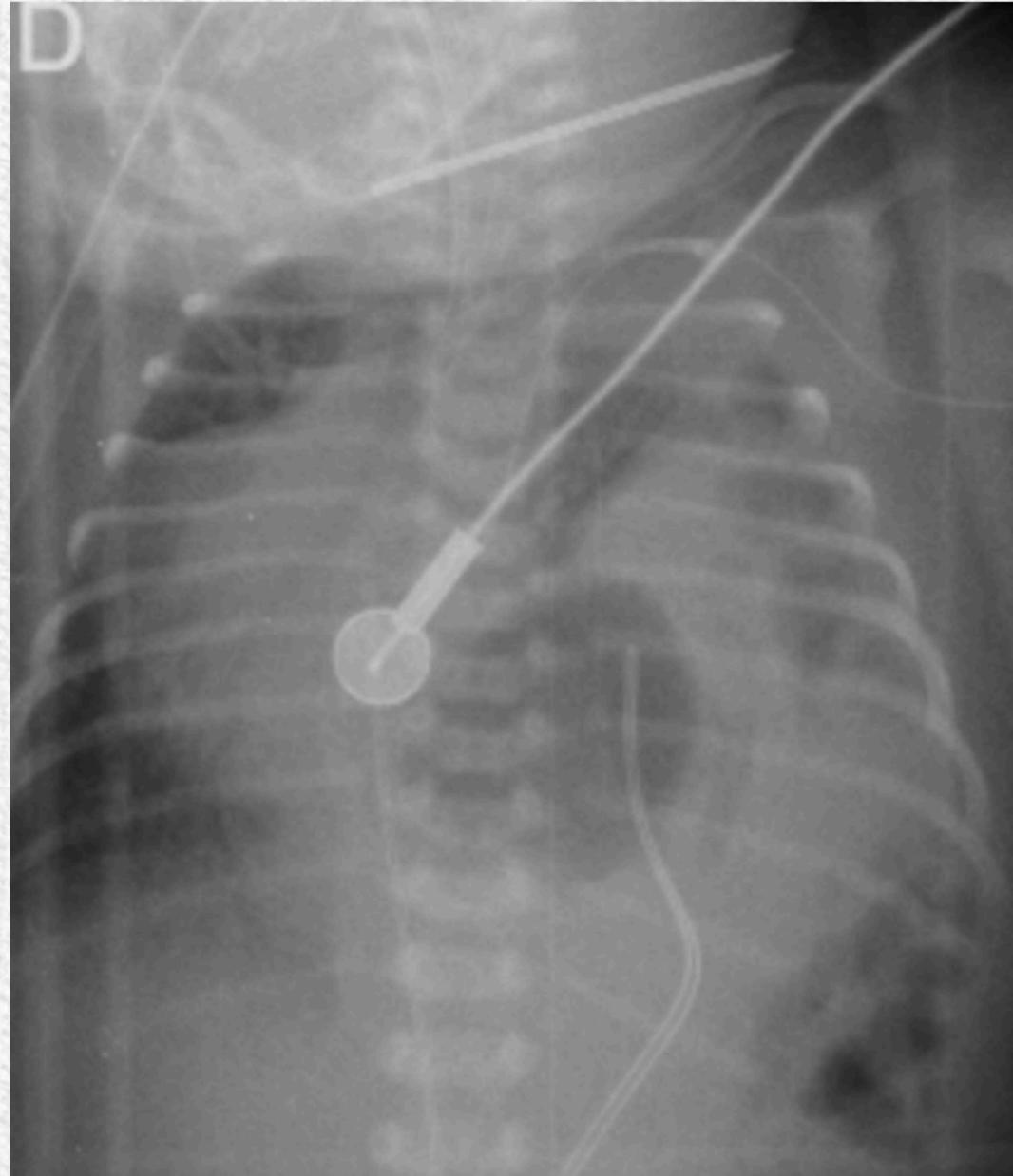
34 weeks premature newborn / W: 2135 gr
CDH LHR 36% (hepatic herniation)
Cardiac dextroposition with normal segments
Severe Pulmonary Hypertension (TR 60 mmHg)
Multiple muscular VSDs (“swiss cheese” type)
Large Ductus, bidirectional shunt

Adrenalin 0,17 ug/kg/min
Milrinone 0,5 ug/kg/min
Epoprostenol 0,025 ug/kg/min



PRE

POST



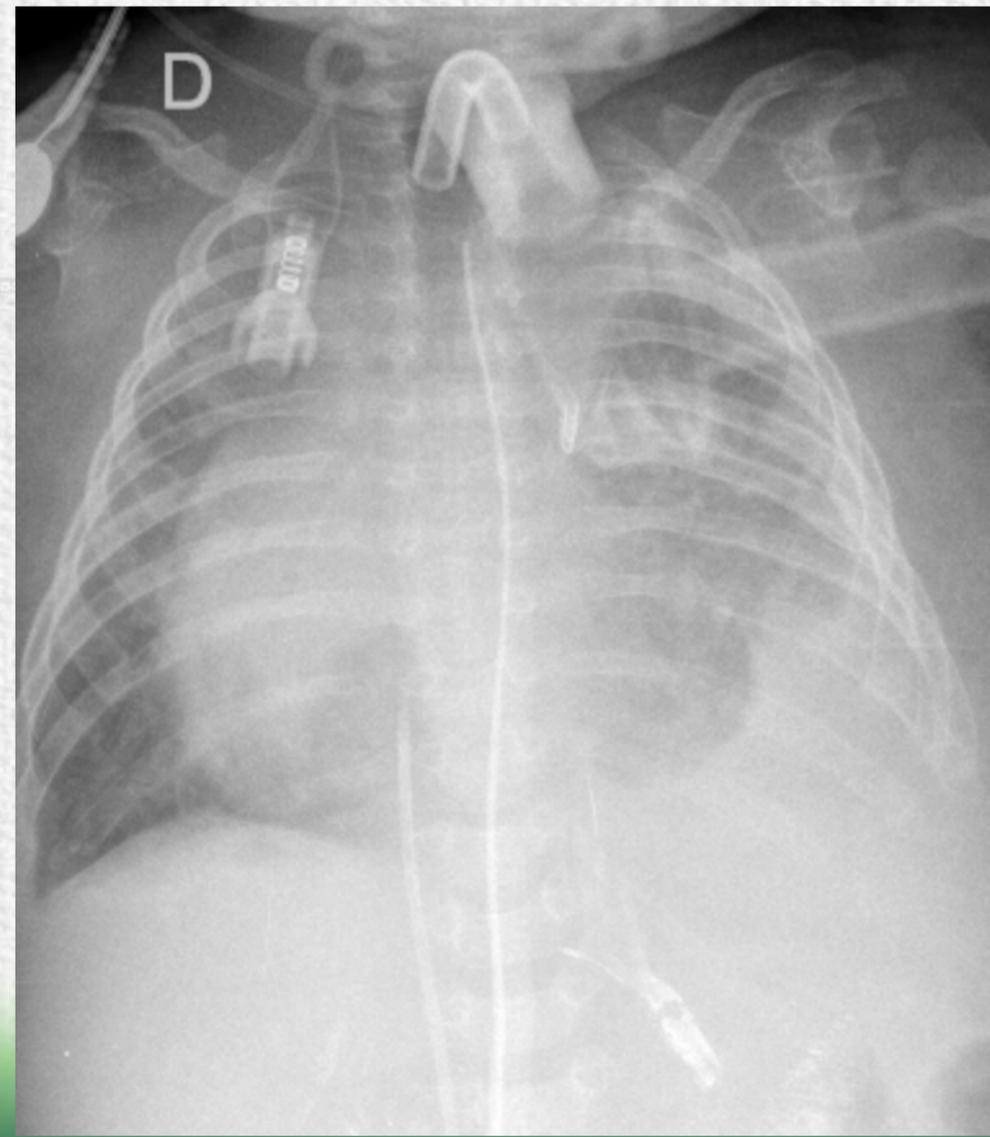
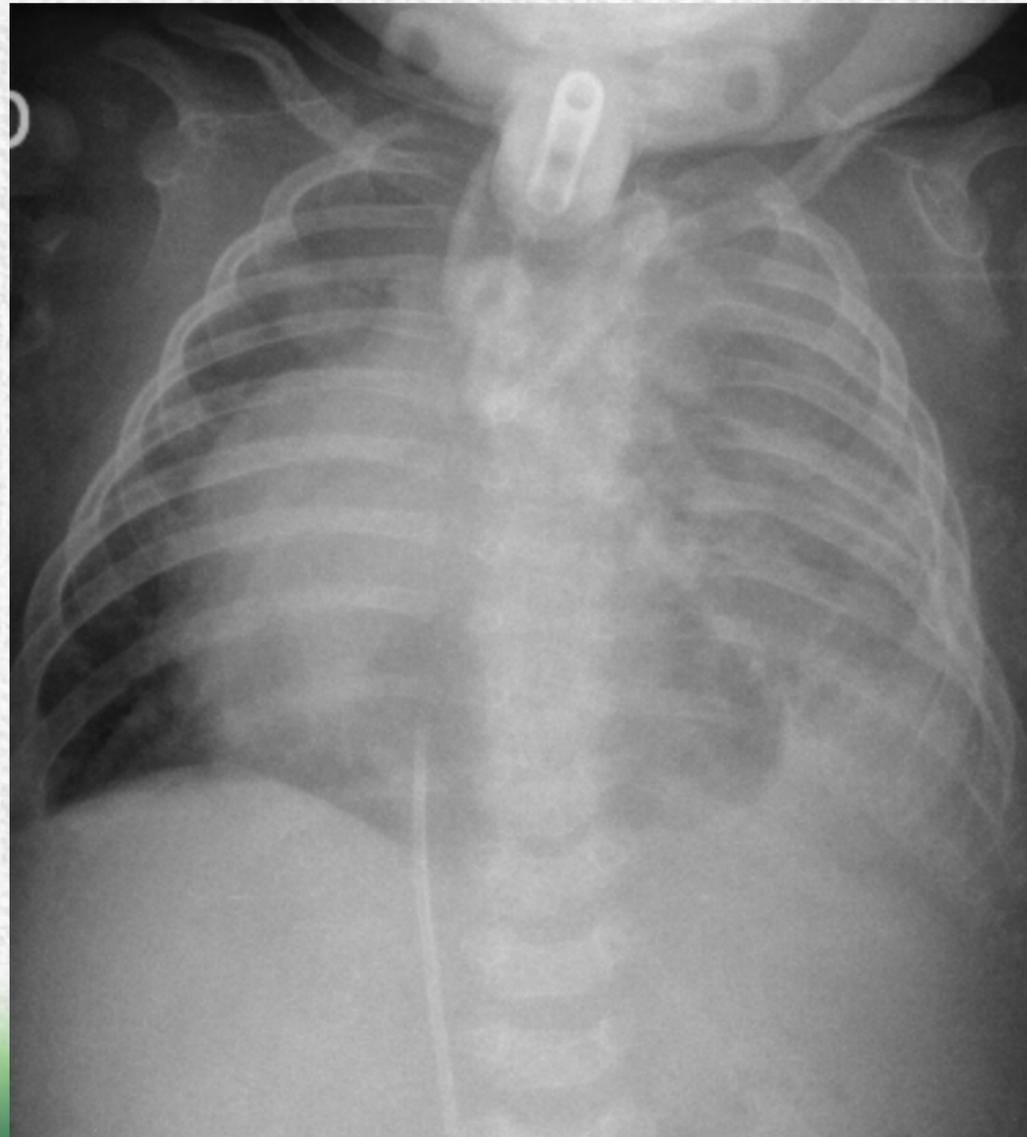
6 days old CDH corrective surgery
Long MVA requiring tracheostomy
Severe PHT Tx Sildenafil + Bosentan
Ventricular arrhythmias Tx Amiodarone

4 months old: ductal surgical closure (titanium clip)

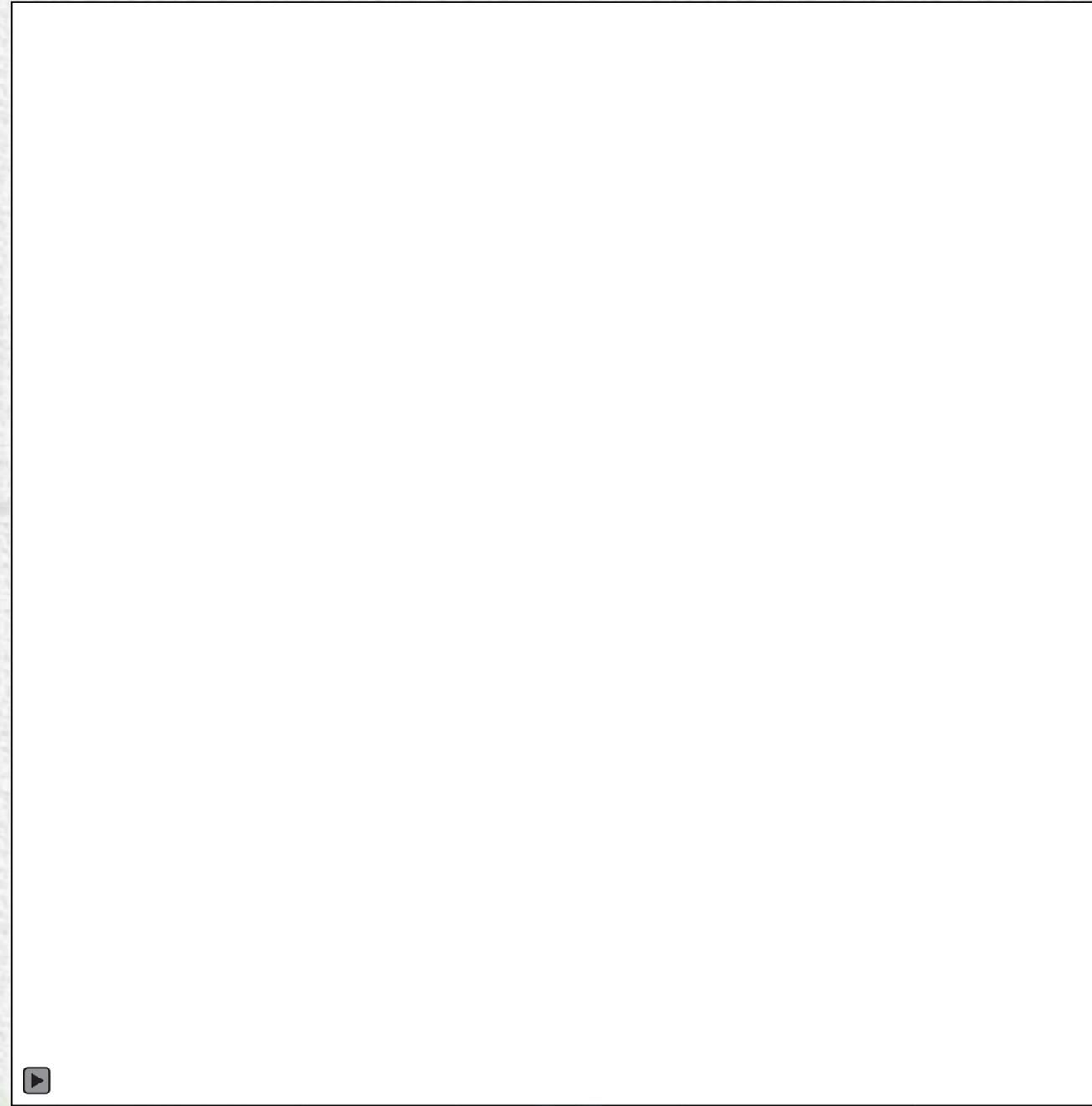
Critically ill patient

Multiple VSDs + large left heart cavities

VSDs sizes by echo: 5mm; 4,3mm and 3,5mm

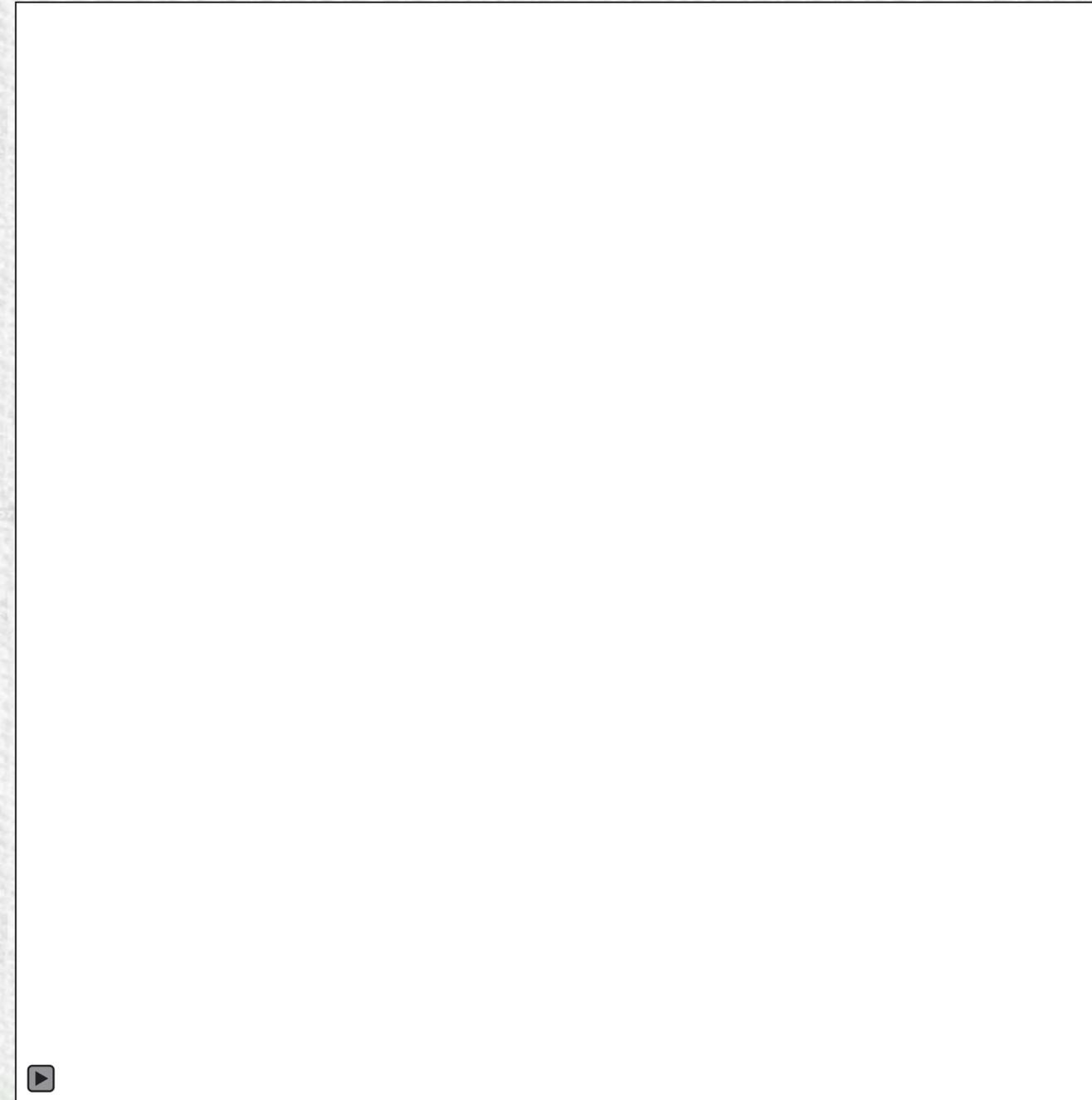
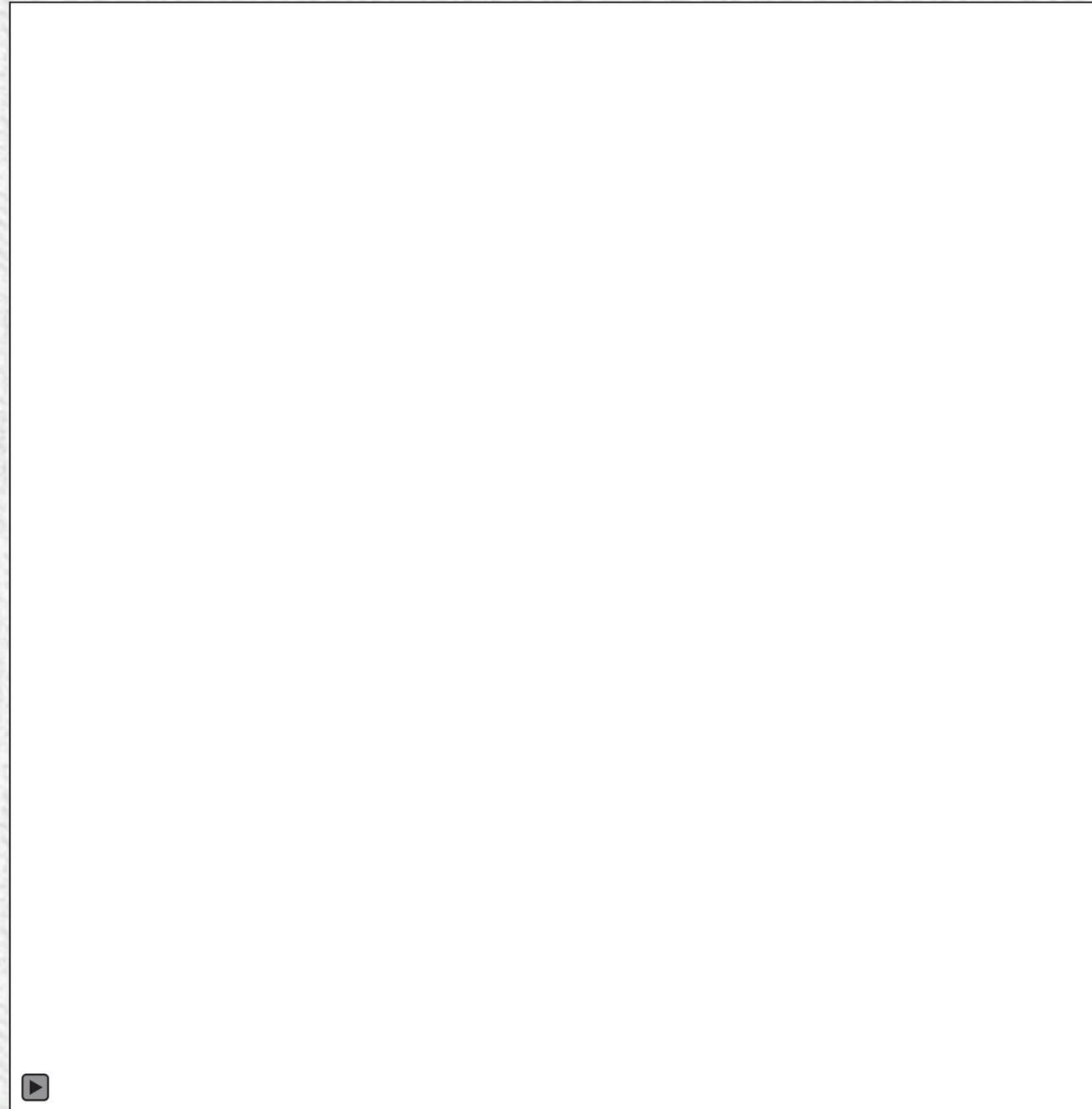


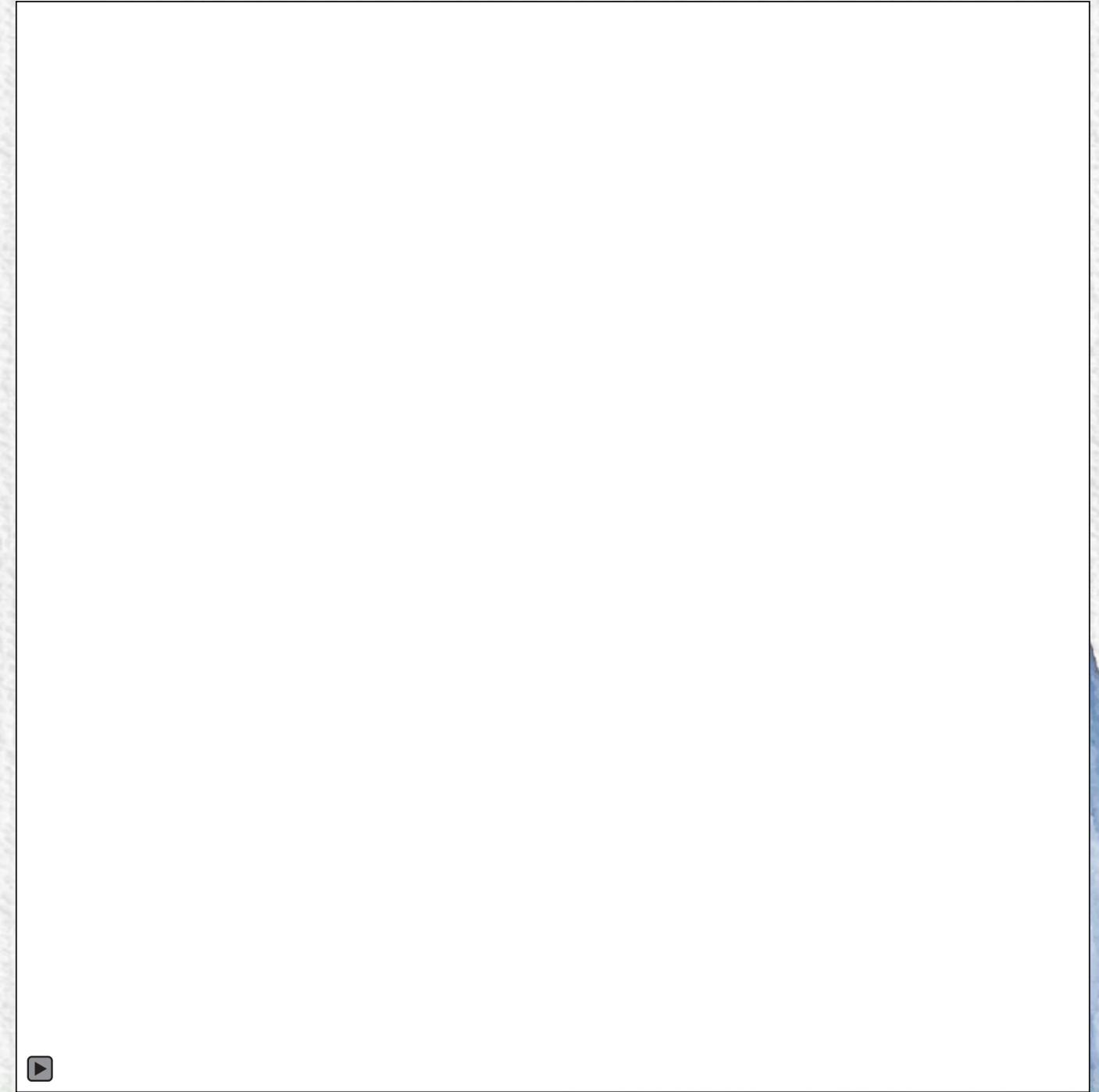
5 months // 5,2 Kg
Cath lab, first VSD closure



| | | | |
|-----|----|----|--|
| VD | 65 | | |
| VI | 80 | | |
| AO | 78 | 38 | |
| APT | 65 | 16 | |

JR 4Fr + hydrophilic guidewire 0,035' (loop PA)
Changed to Konar delivery system





6 months - 5,9 kg

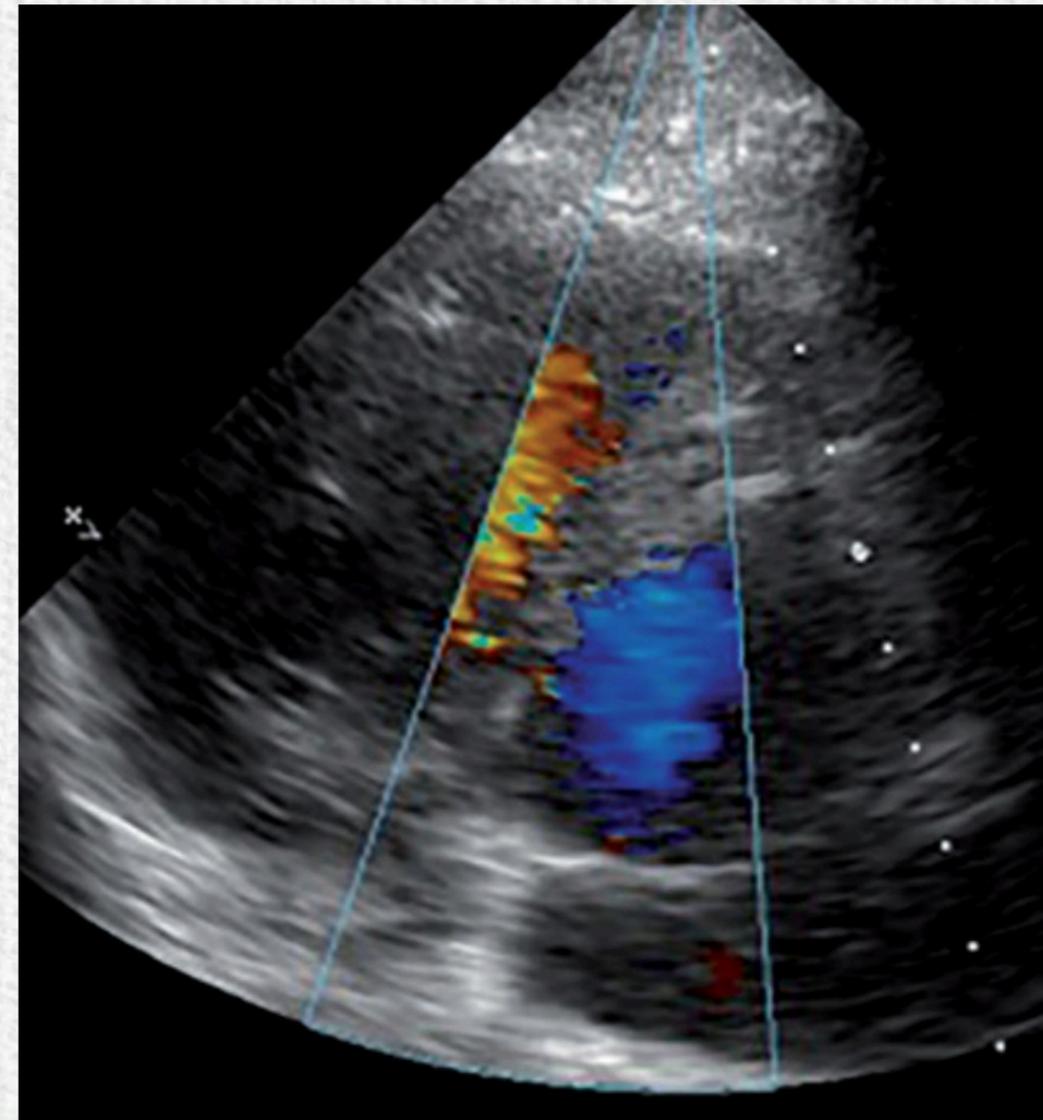
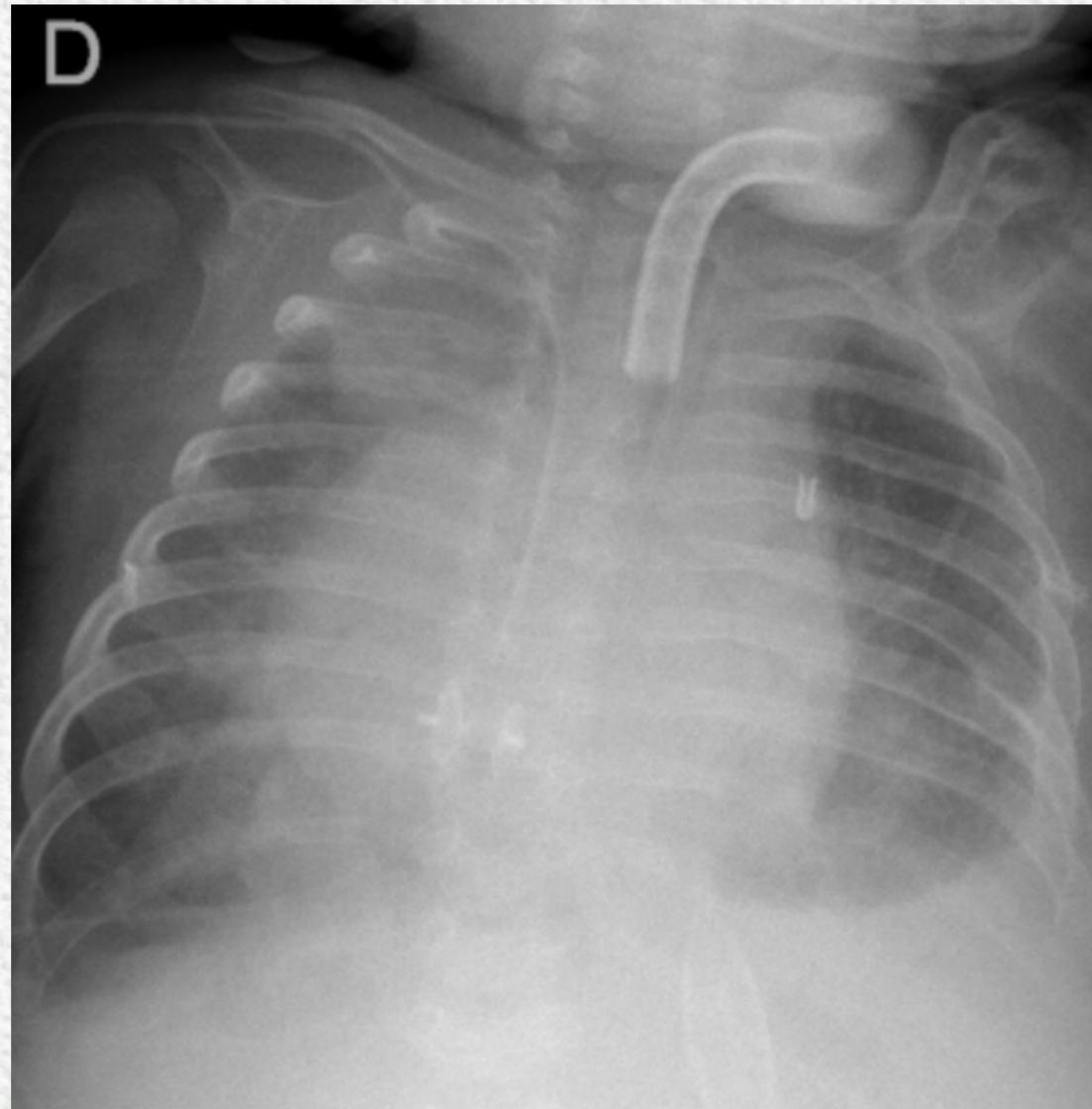
Chronically ill / hypoxic crisis

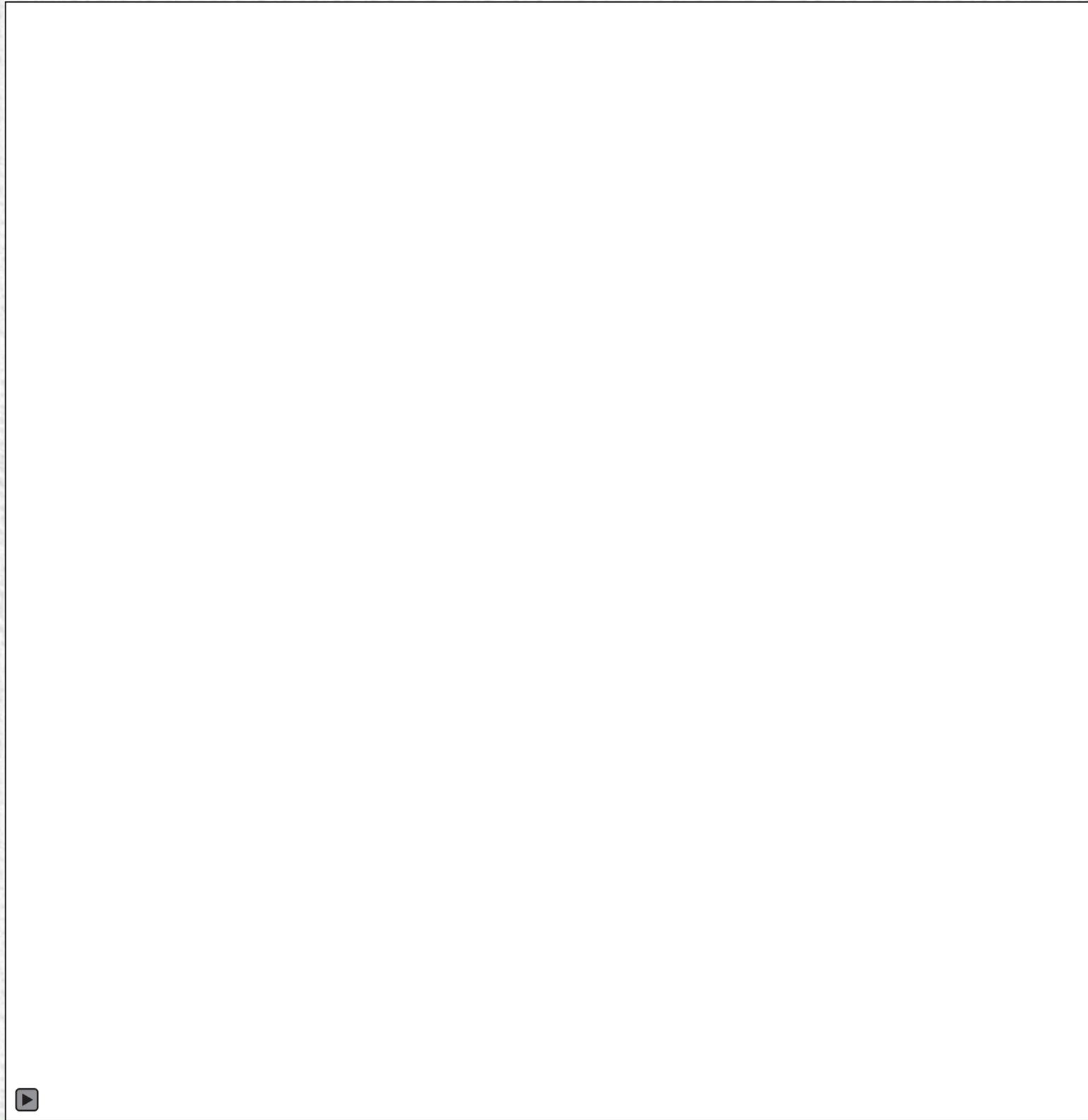
Multiple VSDs + large left cavities

Correctly located device

Residual VSDs: above device 3,5mm; below device 4,9mm; anterior VSD 2mm

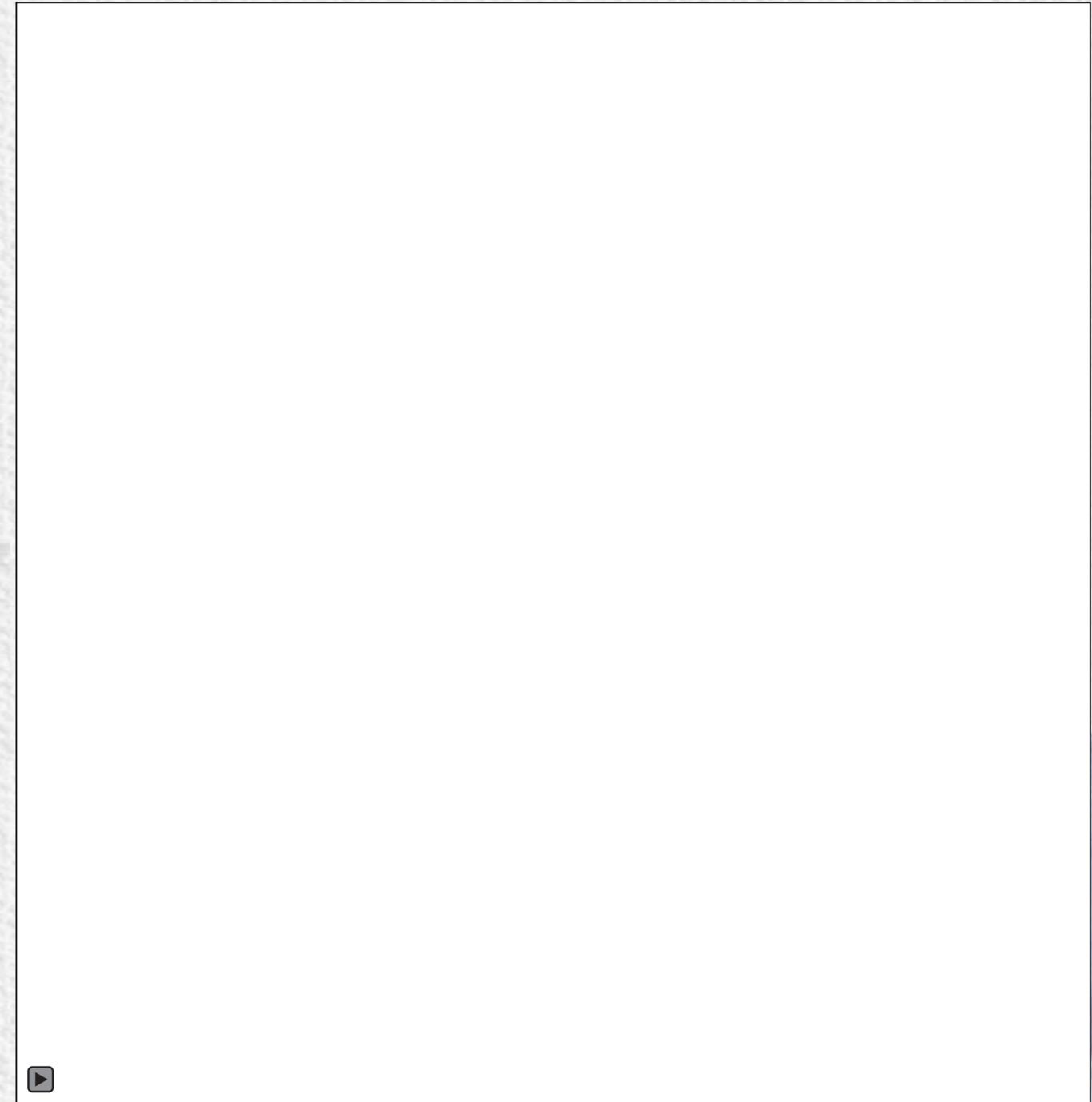
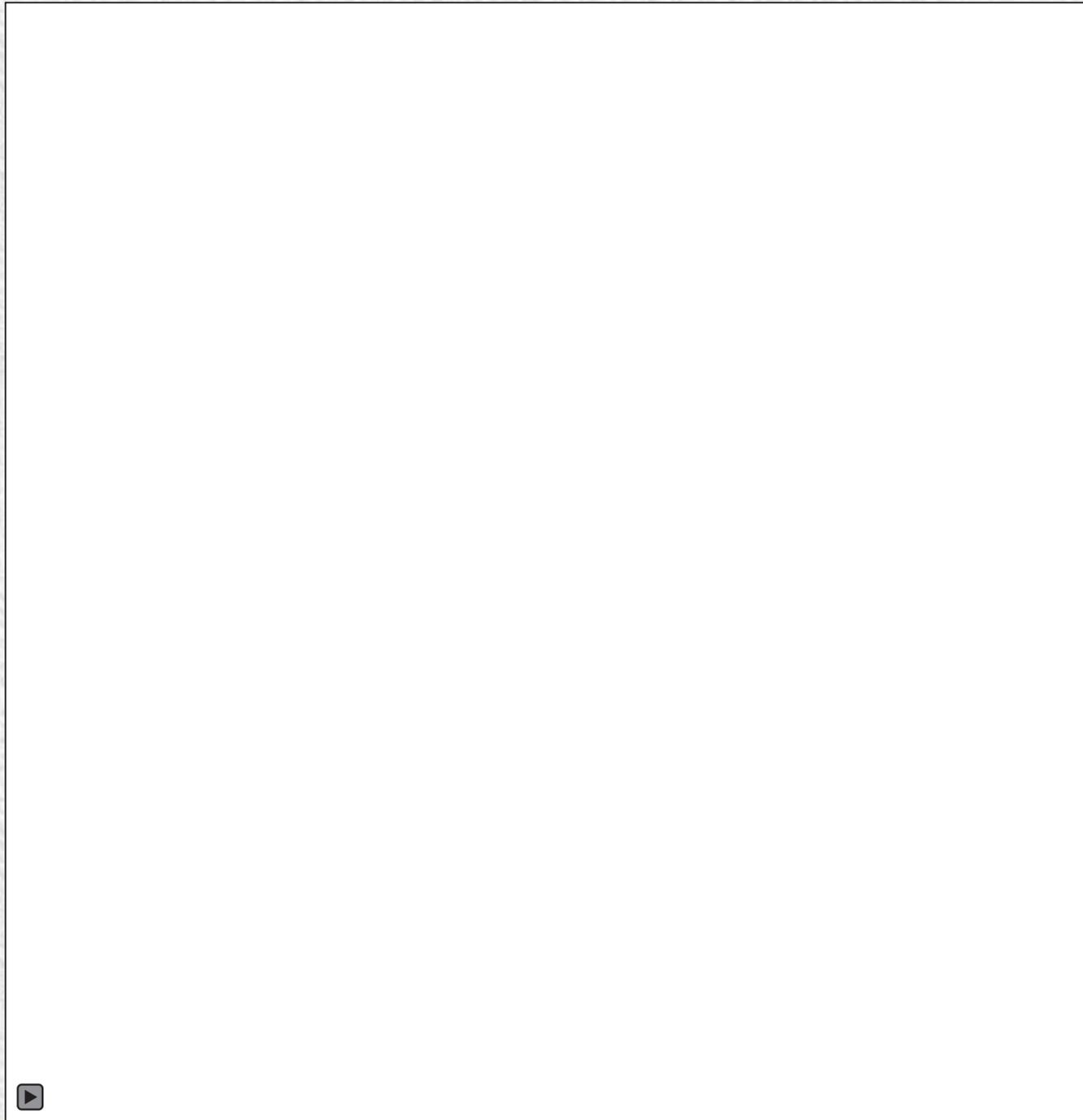
Pulmonary hypertension

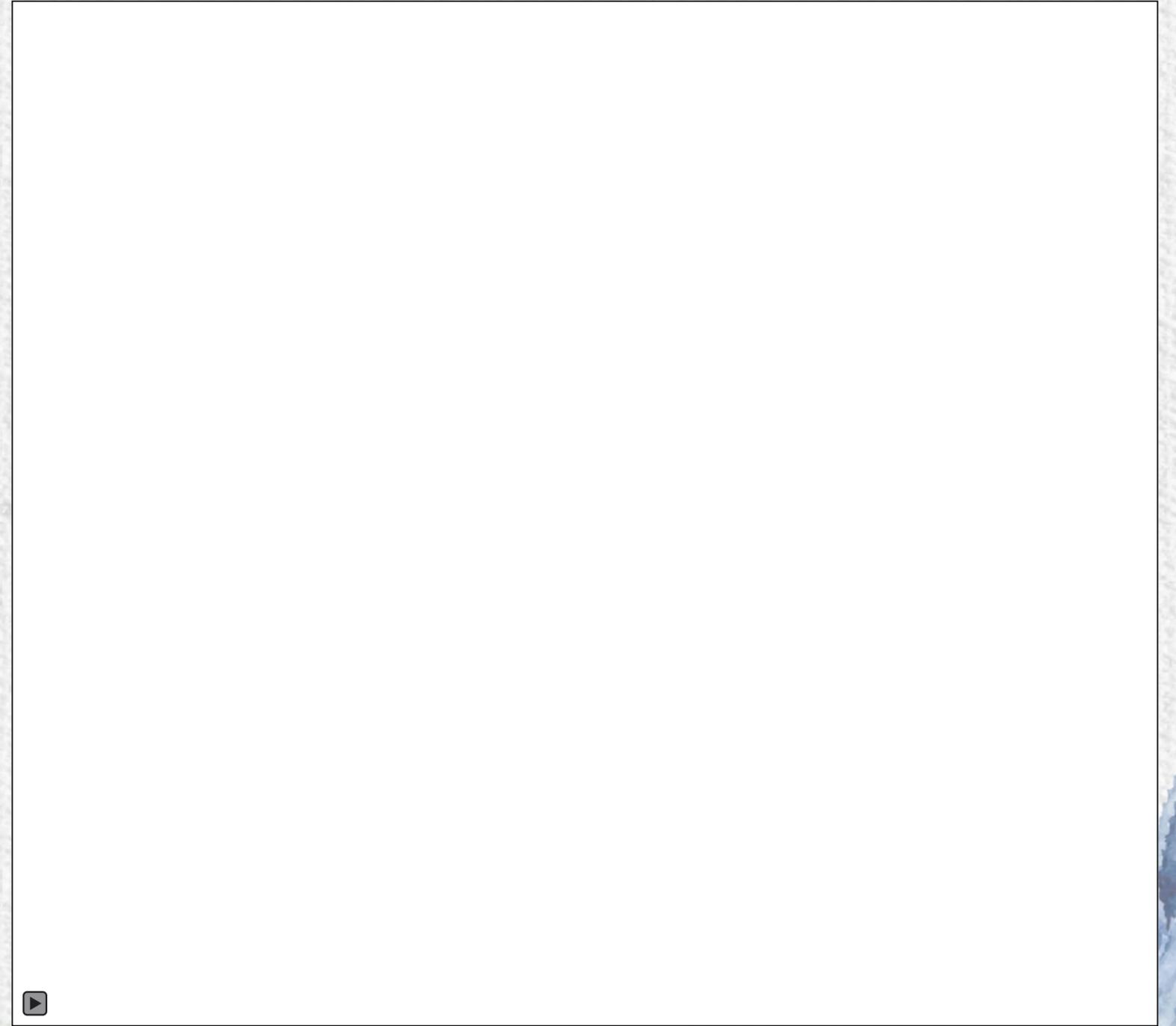




Right carotid approach 5Fr - Initial Angiography











ECHO:
IT 45 mmHg
CIVs residuales 1,9 y 1,7mm
Gr VI-VD 35 mmHg
FVP 0,6 m/s (↓)

Echocardiographic follow-up

9 mo - 7,3 kg

PH

Residual shunt 1mm + apical VSV 2,5mm (50% sistemic)

December 2023: 1 yo - 8 kg

Minimum residual apical VSD

Gr RV-RA 45 mmHg (50% sistemic)

December 2024: 2 yo - 11,7 kg

Gr RV-RA 29 mmHg (30% sistemic)

No residual shunt

Thank you for you attention...

