

were also excluded from the study. After exclusion, a total of 68 patients were included in the final analysis. All included patients had previously undergone TTE followed by CTA within a 3-months interval. Data were extracted retrospectively from imaging reports and archived images. TTE was performed using the

Philips Affiniti 50 system by an experienced pediatric cardiologist. Assessments included evaluation of the morphology and caliber of the pulmonary arteries and the pulmonary valve annulus in both short-axis and long-axis views (Fig 1).

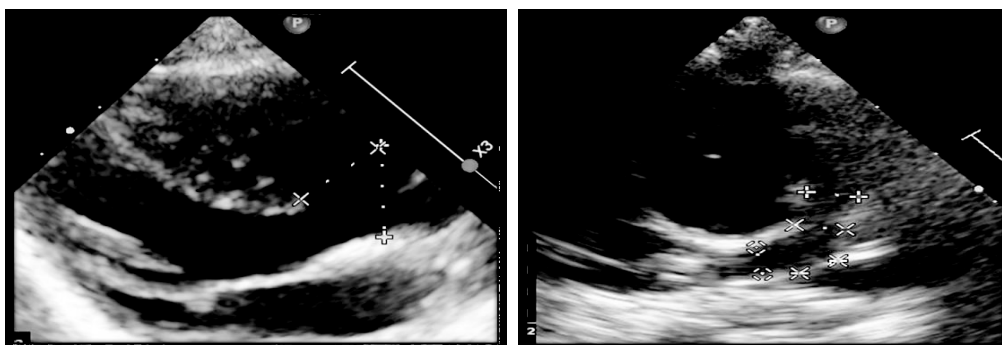


Figure 1: Transthoracic Echocardiography (TTE) images show, (a) para sternal long axis view shows pulmonary annulus (measured along the solid line); (b) Short axis view shows main pulmonary artery (1), left pulmonary artery (2) & right pulmonary artery (3).

CTA was performed using a GE Revolution EVO single-source CT scanner. Scanning parameters included a dynamic scan (2–3 phases), prospective non-ECG gating, gantry rotation time of 0.4 seconds, pitch 0.98, tube voltage 80–120 kV (age-adjusted), tube current 500 mA, and a field-of-view of 25–30

mm. Intravenous nonionic iodinated contrast (Iohexol 350 mg/ml) was administered at 2 ml/kg using a pressure injector, with scan timing determined via manual bolus tracking. Sedation was administered under the supervision of a pediatric anesthesiologist (Fig 2).

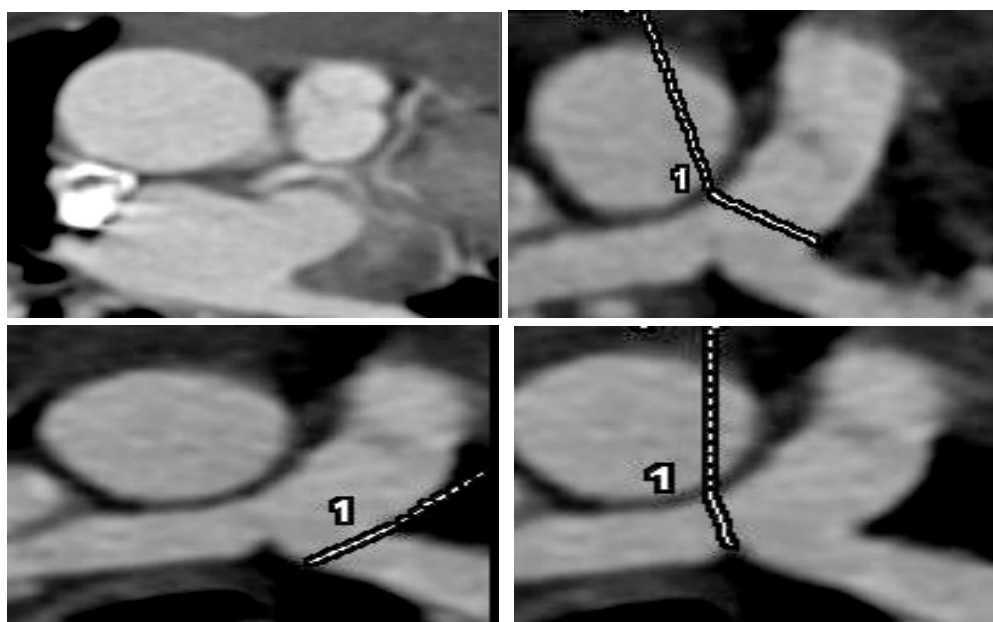


Figure 2: CTA images of pulmonary arteries & annulus. (a) oblique axial image of pulmonary annulus, (b) oblique axial image shows MPA measured before bifurcation, (c) Oblique axial image shows LPA measured in proximal part, (d) oblique axial image of RPA measured in proximal part. All the measurement shows as solid lines.