Atrioventricular septal defect cases 7 cases (12%), the arterial switch cases 6 cases (11%), and others 8 cases (14%). The ICU stay, the length of hospital stay and the bypass time were significantly longer in the chylothorax group, also the ventilation time, the inotropes duration and number were higher in the chylothorax group.

Conclusion: Chylothorax after pediatric open heart surgery is not an uncommon complication, it occurs more commonly with single ventricle repair and aortic arch repair surgeries, it has a significant impact on the post operative course and post operative morbidity.

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Is there an optimal intensive care management? Following release of obstruction in neonates with critical PS/ATR & IVS

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Neonates with critical pulmonary stenosis or complete pulmonary artesia and intact interventricular septum represent wide range of pathological findings in term of magnitude of hypoplasia of the different right ventricular components.

Although available range of imaging modalities enabled paediatric cardiologist to delineate, who would benefit from interventional or surgical release of critical pulmonary stenosis/atresia. The post interventional or and after surgical release of critical pulmonary stenosis/atresia challenges the paediatric cardiac intensivist with various spectrum of pathophysiological status.

Empirically we noticed that some neonates recover and discharged from the intensive care unit in 2-3 days, while others require longer intensive care management and quite good number will stay in the ICU much longer on prostaglandin infusion and may require further intervention such as balloon atrial septostomy, shunt or implantation of PDA stent.

We have retrospectively evaluated these patients in relation to pre and post operative/interventional pathology/pathophysiology, age and general status of patients before and after procedures and highlighting the intensive care physical and pharmacological actions.

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Comparison of femoral closure devices with manual compression in postcardiac catheterization patients

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Objective: The objective of our study was to compare femoral closure devices to manual compression in limiting vascular access complications at our center.

Methods: Data was obtained from computer database for cardiac catheterizations done at University of Florida, Jacksonville from 1st March 2002 to 29th February 2004. Vascular complications included groin bleeding, hematoma (> 4 cm), retroperitoneal bleeding, AV fistula, limb ischemia, pseudoaneurysm, infection and death as a direct result of vascular complication. Hemostasis technique was divided into three groups; Manual compression, Sealant and Suture group.

Results: A total number of 3843 cases were performed and all variables were similarly distributed among three groups except for lesser GpIIb/IIIa inhibitor use in sealant group. A total of 71 complications (1.85%) were recorded. They included 33 bleeds, 12 Pseudoaneurysms, 17 hematomas (> 4 cm), 4 retroperitoneal bleeds, 2 AV fistulae, 1 infection and 2 deaths. Overall, 9 complications occurred in Sealant group (0.85%), 4 in Suture group (3.3%) and 58 (2.1%) in manual compression. Logistic regression analysis showed that when GpIIb/IIIa agents are not used, Sealant device is associated with less vascular complications. (p = 0.008) However, with GpIIb/ IIIa agents there is no difference among closure devices or manual compression (p = 0.074) with overall increase in vascular complications.

Conclusions: Sealant closure devices are associated with less vascular complications at our center when GpIIb/IIIa agents were not used. However, with GPIIb/ IIIa inhibitors, there is no difference in the vascular complications among the three groups.

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Does negative calcium score exclude coronary artery disease

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*Aim:* We aimed to measure the coronary calcification and investigate if negative coronary calcification excludes coronary artery disease (CAD).

Methods: Clinically indicated patients were scanned using 64 slice CCT to measure Agatston coronary calcification score. CT coronary angiography( CTA) was performed, and invasive coronary angiography (CA) was performed when it is indicated.

Results: 2352 patients were scanned. 1152 patients had negative calcium score (49%). The mean age was  $52 \pm 13.2$  y, 65% males, & 35% females. Chest pain was the indication in 80% of cases. There was 37% diabetic, 58% hypertensive, 23.6% hyperlipidemic, 13% smoker, & 32% with family history of CAD.

The calcium score excludes CAD in 90% of patients as confirmed by normal coronary CTA. In 10% of patients who had negative calcium, coronary plaques were found by CTA. CA was performed in 50% of those with negative CA score, where 30% had coronary stenting, 20% had bypass surgery , 35% had mild disease, and 15% had non obstructive lesions.

**Conclusion:** Negative calcium score excludes CAD in 90% of patients as confirmed by normal CTA. Coronary CTA is an important tool to detect early coronary atherosclerosis even in absence of coronary calcification.

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Effect of intracoronary (IC) transplantation of autologous bone marrow-derived mesenchymal stem cells (BMSC) in patients with advanced left ventricular systolic dysfunction

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*Background:* In the absence of cardiac transplantation programs and high cost of CRT-ICD in our community, large numbers of no-option HF patients (pts) for revascularization are still markedly symptomatic. IC-BMSC appears as promising option.

*Methods:* 33 (27 males) with chronic HF, LVEF  $\leq$  35 and mean age 46 y divided into 2 groups, 17 BMSC pts and 16 pts control. Both were maintained on maximum tolerated medications (follow-up 258 + 47 days). NYHA function class (NYHAFC), six minutes walking test (6MWT), LVESD, LVEDD, 2D-LVEF, systolic (S) and earlydiastolic (E) mitral annulus velocities by TDI evaluated. BMSC were obtained and selectively IC injected.

**Results:** Both groups showed improvement in NYHAFC from 3 to 2, P < 0.001 in BMSC, P < 0.04 for control. 6MWT marginally improved in BMSC from 348 ± 91 to 406 ± 87 meters (m) P < 0.06 while no improvement was noticed in control (361 ± 47 to 336 ± 110M, PNS). LVESD

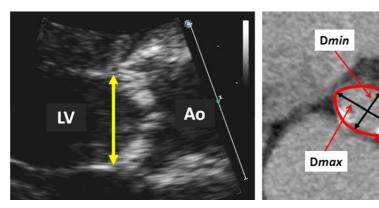


Figure 1.

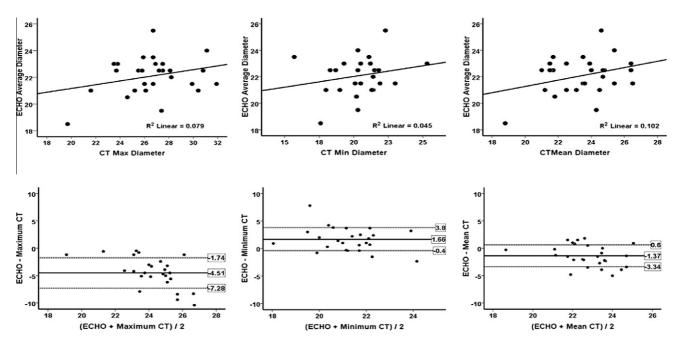


Figure 2.