Blood Pressure Monitoring during Follow-Up in Coartated Pts after Percutaneous Therapy

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Background: Aortic isthmic coarctation is only one part of an arteriopathy with lifelong implications that persist after initial correction of the aortic obstruction. Long-term follow-up after successful repair show that life expectancy remain reduced, mostly due to ARTERIAL HYPERTENSION. Hypertension may be associated with anatomical and functional changes in the arterial tree. Early detection and treatment of AoCo is associated with the best outcomes, however, some patients will develop hypertension despite repair.

Methods: from 2000-2015, 178 pts underwent to angiography procedure and transcatheter treatment. Population study was divided in : 58 native (28.1%) , and 128 re Coa(71.9%),64% males and 36% female. Median age at first procedure is ± 6.9 years. Mean FU is ± 5.9 years. All patients underwent to Echocardigraphic exam, studied in cath lab, and blood pressure was evaluated with office monitoring, 24 h-Holter and exercise testing

Results: all patients showed a decreased gradient peak to peak both in cath lab and in echo lab. At FU ±5.9 years: 77 % of patients were hypertensive after transcatheter therapy. So of this 38% were hypertensive at AMPB monitoring. 39% of patients had masked hypertension: 14% showed a BP no dipper at 24 hours Holter and 25% had an hypertensive answer at ergometric exercise. Data also have highlighted that the N of antihypertensive drugs increased from discharge to last assestment. Conclusion: Hypertension is endemic in patients with stented coarctation, irrespective of the absenceof residual obstruction. Due to abnormal BP homeostasis, hypertension should be aggressively pursued by ABPM assessment and exercise stress testing in this population. Relative hypoplasia of the stented arch after somatic growth may contribute to this tendency and should provoke considerationof elective serial redilation of coarctation stents. Arterial hypertension is the most common complication in the COA correction in cath lab. Our data are totally in agreement with literature