Pulmonary artery banding (PAB): Fez’s experience

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Introduction:
Pulmonary artery banding itself has not been an entirely benign procedure. Hence, the exact place of the pulmonary banding should be well defined.

Material and methods:A retrospective study was done with 33 patients undergoing a PAB procedure between January 2011 and July 2015. Criteria for banding were not closely defined; patients presented with severe cardiac insufficiency with failure to thrive. The charts of all patients undergoing PA banding operations were analyzed retrospectively

Results:
The mean age of PAB was around 16 month. The mean weight was 7 kg. Six patients have Down’s syndrome. The diseases are; ventricular septal defect (II b) (8 patients), Swiss cheese ventricular septal defect (2patients), double-outlet right ventricle (2 patients), atrio-ventricular canal (5 patients), Transposition of the greats arteries with VSD (2 patients), single ventricle with tricuspid atresia (6 patients), single ventricle (5) and coarctation with VSD (3 patients). The pulmonary artery systolic pressure prior to banding was 60 to 100 mm Hg.
The same surgical technique was used for all patients (Toronto formula). The re-interventions that were done following the application of the band were as follows: the PAB was moved and replaced since there was left coronary artery compression by the band in one case. Pericardial effusions were drained in two patients. A pneumo -mediastinum in one case spontaneously improved.
The mean hospital stay was 10 ± 3 days. Four patients died by nosocomial infection and severe pulmonary hypertension with a hospital mortality of (4/33). An additional 6 patients died while they were awaiting definitive repair, total mortality is 30 %.

Conclusion: PAB still useful under in our area, can relieve heart failure symptom. But the mortality in our study is high, significant factor of death are advanced disease with high pulmonary hypertension.