15th World Cardiac Surgery & Angiology Conference

December 08-09, 2016 Philadelphia, USA

Surgery of aortic coarctation: About 40 cases

Lakehal Redha, Boukarroucha Radouane, Aimer Farid, Bouharagua Rabeh, Guériti Fateh, Bellara Radouane, Nazzel Rafik, Amros Amine, Cherif Samiha, Massikh Nadjet, Aziza Baya, Bendjaballah Soumaya and Brahami Abdelmallek Constantine University, Algeria

Introduction: Coarctation was defined if aortic diameter was reduced to 50% or more compared with the diaphragmatic aorta, hypertension in the upper extremity at or beyond the 95th percentile for age and gender, symptoms of associated distal ischemia, or an arm/leg gradient at rest of 50 mm Hg or more. The optimal method of coarctation repair in the infant is excision with primary extended end-to-end anastomosis; in adolescent and young adults still not been defined. There is no consensus in the literature regarding the optimal method for repair of coarctation of the aorta in the adolescent and young adult. Paraplegia is a devastating complication of coarctation of the aorta repair in patients with inadequate collaterals.

Methods: Between 2001 and 2016, there were 40 adolescents and adults between the ages of 4 and 46 years (mean age 20, years); weight: 17 to 96 kg, the surgery was done in majority without cardiopulmonary bypass ("clamp-and-sew" technique), only four patients underwent coarctation with CPB (femoral-femoral bypass); the diagnostic of coarctation was made by echocardiographic Doppler and CT tomography in all patients; the correction consisted in all patients in excision stenotic portion with interposition prosthetic grafts.

Results: The perioperative mortality rate was 02.7% (one patient: renal failure) and the morbidity rate was 13.5% (five patients). Stay in the USI varied from one to 24 days with a mean of nine days. The time from operation to discharge varied from eight to 60 days, with a mean of 15 days. Mean fellow up was of 59 months (range, 3 to 116 months); the late mortality was 0%.

Conclusion: Surgical repair of coarctation of the aorta in the adolescent and adult is safe and durable, various techniques are utilized (end to end anastomosis, prosthetic substitute and endocascular reparation). A successful surgical repair is defined by success rate in curing patients of hypertension, relieves symptoms and restores visceral and peripheral perfusion pressure, without recurrence of the coarctationor aneurysmal development around the repair site. Paraplegia is a serious complication in post operative; the prevention should be the major concern of surgeon during the surgical repair of the coarctation.

lakehal.redha@gmail.com

Outcome in tricuspid valve repair by De Vega's technique during concomitant mitral valve replacement

Sohail Aslam, Nasir Islam Khattak, Abdul Malik and Riaz Anwar Khan Lady Reading Hospital, Pakistan

Tricuspid regurgitation which often accompanies valvular heart lesions is mostly functional rather than organic and associated with pulmonary hypertension or right ventricular dilatation. Retrospective study from January 2004 to 2010 was conducted in patients with isolated mitral valve lesions with pulmonary hypertension associated with moderate to severe tricuspid regurgitation. Multiple valvular lesions, mitral valve lesions with coronary artery disease, non-rheumatic and congenital mitral lesions were excluded. Pre and postoperative NYHA status and right ventricular pressure were analyzed and compared. Result analyzed by SPSS version 17, P value<0.05 was considered to be significant. Total of 264 patients included having mean age 25.8 years, females were 67.80%. Mean right ventricular pressure was 69 mm Hg (48-101 mmHg). Severe TR was in 88% cases and 98% patients were in NYHA class 111. Post operatively five years follow up was done. 68% patients were in NYHA class 1 and 32% patients in class 2. Mean right ventricular pressure was 22 mm Hg. No TR in 88% patients and mild TR in 11% patients were found. FTR in isolated mitral valve disease (rheumatic) repaired by De Vega's technique carries satisfactory results. It is safe, effective and economical procedure in setup of a developing country.

aslamsohail@hotmail.com