LS3-1 Cardiac Surgery In Adults With Congenital Heart Disease: An Emerging Challenge

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As results of pediatric cardiac surgery have improved dramatically over the years, there is an ever enlarging population of patients born with congenital heart defects reaching adulthood. Many of these patients have either residual or newly developing lesions which require specialized cardiological evaluation and surgical management. In addition, there are also many patients who are either first diagnosed with congenital heart disease during adulthood, or their disease has finally progressed to the point of necessary intervention, and, not infrequently, re-intervention. These problems are often compounded by the development of adult acquired cardiac disease as well as other important non-cardiac co-morbidities. In many countries around the world, already this patient population exceeds in number the population of children with cardiac disease, resulting in a major health care challenge.

This work will highlight our overall approach to adult congenital cardiac operations, including safety protocols for complex reoperations, and will cover important issues regarding selected specific lesions, including atrial and ventricular septal defects, atrioventricular septal defects, primary and repeat operations for the aortic root or the aortic arch, aortic coarctation, and Tetralogy of Fallot, as well as surgery for late complications after arterial or atrial switch operations for TGA, and Fontan operations or procedures to manage late Fontan failure. Evidence based guidelines will be presented where appropriate. An overview of surgery for adult congenital heart disease in Europe will be provided, utilizing data from the European Congenital Heart Surgeons Association Congenial Database, including number and results of various procedures. Finally, organizational aspects of surgery for adult congenital heart surgery in Europe will be discussed.

LS4-1 Natural Course of Adult Ebstein Anomaly When Treated according to Current Recommendation

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Objective The aim of this study was to assess the clinical outcomes of adults with Ebstein Anomaly (EA) according to their treatment modalities.
Methods All adult EA patients diagnosed between October 1994 and October 2014 were retrospectively evaluated by medical record review in a single tertiary hospital.
Results Total 60 patients were categorized into 3 groups according to their treatment strategy, i.e. non-operative treatment (Group I, n = 23), immediate operative treatment (Group II, n = 27), and delayed operative treatment (Group III, n = 10). A composite of major adverse cardiac and cerebrovascular events (MACCE) and factors associated with MACCE were assessed in each treatment group. MACCE occurred in 13.0% patients in Group I, 55.6% patients in Group II and 50% in Group III (P = 0.006). Event free survivals at 5 years were 90% in Group I, 52.7% in Group II, 50.0% in Group III (P = 0.036). Postoperatively, most patients showed improvement on clinical symptoms. However, event free survival rate was lower in patients with operation compared to those with nonoperative treatment (58.7% vs. 90.9%; P = 0.007). Major arrhythmic event occurred more frequently even after surgical ablation (50.0% vs. 20.0%; P = 0.034). Re-operation was more frequent in patients underwent delayed surgery compared to those with immediate surgery (50.0% vs. 18.5%; P = 0.001).
Conclusions Current guideline to decide patient's treatment strategy appeared to be appropriate in adult patients with EA. However, surgical ablation for arrhythmia was not enough so that concomitant medical treatment should be considered. Therefore, attentive risk stratification and cautious decision of treatment strategy by experienced cardiac surgeon are believed to improve clinical outcome.