Surgical results of Ebsteins anomaly based on pathology and techniques

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Abstract:

The target of this investigation was to assess the results of patients who experienced the various strategies as indicated by the pathology of Ebstein inconsistency (EA).

Techniques: From March 2004 to February 2017, 228 patients (mean age, 19.8±15.4 years; run, 7 months-64 years) with EA experienced 232 heart tasks at our emergency clinic. Twenty-nine patients had an earlier heart technique previously. Among the patients in first strategies, 92 patients (46.2%) were ordered to Carpentier type C and 63 patients (31.7%) were type D, 7 patients (3.5%) had disengaged front handout descending removal. Anatomical fix were acted in 179 patients (Type B, n=35; type C, n=92; Type D, n=29; unclassifiable, n=7; reoperation, n=16), 1½ ventricle fix in 37 (Type D, n=33; reoperation, n=4), tricuspid valve fix in 3 (Type A, n=2; Type B, n=1), tricuspid valve substitution in 10 (7 reoperations), and Fontan method in 3 (TCPC, n=2; Glenn, n=1). Atrialized right ventricle was introduced in 194 cases (168 extracted, 6 consolidated). The pathology of 199 patients who experienced first techniques at our middle depicted in Table 1.

Results: The mortality was 1.7% (n=4: anatomical fix, n=3; 1½ ventricle fix, n=1). Among these, 1 pathology type was Carpentier type C and 3 were type D. 1 A-V square (0.4%) recently happened. 214 patients were accessible to development. The scope of follow-up length was 10 months to 13 years (mean, 7.3±3.2 years).

Late endurance was 99% (2 late passings) at 10 years. Three patients got (reoperation rate, 1.3%; TVR, n=1; 1½ ventricle fix, n=2). Mean New York Heart Association class improved from 3.5 to 1.1. Ends: The rule of the strategies is to recreate the tricuspid valve and right ventricle anatomically. For most cases, the anatomical fix was shown with low mortality, less confusions and amazing strength at long haul development. The Carpentier characterization can't sort all the patients. It is basic to pick pertinent careful procedures exclusively as indicated by the pathologic morphology for EA careful outcomes. In the event that the tricuspid valve is seriously hypoplastic, 1½ ventricle fix and valve substitution might be elective.

Ebstein’s contortion can be characterized as an inconsistency of the tricuspid valve existing in the setting of a privilege ventricular brokenness. The strategy presented via Carpentier in 1980 depends on the idea of activation of the prohibitive anterosuperior flyer related with a longitudinal plication of the channel part of the correct ventricle. From January 1980 to December 1999, 142 patients experienced medical procedure. The mean age was 25 +/- 15 years (1-65). Cyanosis was available in 48% and related sores in 64% of the patients. Patients were arranged utilizing an utilitarian methodology as indicated by the seriousness of the sores. Mellow uprooting of the septal pamphlet, alongside little size of the atrialized chamber was seen in 5% (alluded to as Type A). Enormous uprooting of the septal handout, however with ordinary movement of the anterosuperior flyer and a broad atrialized chamber, was seen in 35% (Type B). In 51%, the painting (substandard) flyer was missing, the anterosuperior handout was seriously confined by solid trabeculations and extremely short tendinous ropes, and the anterolateral papillary muscle was consolidated in the privilege ventricular divider. In these patients (Type C), the atrialized chamber was particularly extended and had dyskinetic dividers. In such cases, the contractility of the distal (useful) right ventricle was additionally impeded, and some level of stenosis of the tricuspid valve was available in one-fifth of them. In the most serious cases (8%), the pamphlet tissue of the valve was incredibly decreased and the privilege ventricular
dividers were slight and contracted ineffectively. This came about in the alleged tricuspid sack course of action (Type D). Valve substitution was required in just 4 cases, with preservationist medical procedure being accomplished in 138 patients by methods for activation of the anterosuperior handout and longitudinal plication of the bay part of the correct ventricle. Extra methods incorporated the utilization of a prosthetic ring (94 patients) and incomplete Glenn anastomosis (30 patients). The medical clinic mortality was 10%, for the most part because of intense postoperative right ventricular disappointment. Actuarial endurance was 75% at 10 years. After activity, 94% of the patients were in utilitarian class I or II of the New York Heart Association, and 88% had no or gentle tricuspid valve deficiency as decided by echocardiography. The pace of reoperation was 9% with a mean deferral of 3 years. A subsequent fix was acted in 5 patients. Opportunity from reoperation was 87% at 10 years. Sinus beat was available in 81%, and 8 pacemaker gadgets were embedded, 5 for precisely prompted atrioventricular square, and 3 in light of preoperative conduction aggravations. The utilization of the incomplete Glenn anastomosis was presented as of late in situations where the privilege ventricular contractility was seriously weakened, or potentially tricuspid valve fix was troublesome, and additionally changeless atrial fibrillation was available. In those patients with high hazard, including incomplete Glenn anastomosis decreased the usable mortality from 24% to 6%. Another advantage of the cavo-bipulmonary anastomosis was better practical resilience of gentle lingering tricuspid valve inadequacy. Those patients with the tricuspid sack course of action had a high pace of reoperation (2/11) and valve substitution (3/11), yet endured no usable passings. We presume that tricuspid valvoplasty related with longitudinal right ventricular plication is better than valve substitution. The course of action delivering a tricuspid sack isn’t reasonable for preservationist medical procedure. A related cavo-pneumonic anastomosis diminishes the usable mortality in patients at high hazard, and appears to safeguard right ventricular capacity.

Keywords: carpentier, Ebstein, anastomosis, anterosuperior, anastomosis.