

会長要望セッション | 総動脈幹症

会長要望セッション03 (II-YB03)

総動脈幹症に対する内科的・外科的治療戦略

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Mon. Nov 23, 2020 4:00 PM - 6:00 PM Track4

[II-YB03-1] 【基調講演】 Long-Term outcome up to 40 years following repair of Common Arterial Trunk in 184 patients

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Objective: To determine potential risk factors for survival and freedom from reoperation in patients after common arterial trunk (CAT) repair.

Method: Freedom from events of 184 consecutive patients corrected between 1976 and 2020 was estimated using Kaplan-Meier method. Potential risk factors were compared using log-rank test and Cox regression modeling.

Results: Median follow-up time was 12.2 years (2697 patient years, maximum 41.2 years). Median age at correction was 87 days, and median weight was 3.8 kg. Neonatal repair was performed in 12.0 %.

Interrupted aortic arch was present in 7.9 % and coronary abnormalities in 20 %. Repair was performed before 2000 in 63.6 %. Right ventricle to pulmonary artery (RV-PA) reconstruction was performed using an allograft (45.7 %), a xenograft (39.7 %) or valveless connection (14.7 %). Survival before 2000 at 10, 20 and 30 years was 64.9 ± 4.4 %, 62.2 ± 4.5 % and 62.0 ± 4.6 %, respectively. Survival after 2000 was 87.8 ± 4.0 % at 1 year with no deaths thereafter. All patients underwent reoperations. Freedom from reoperation was 54.3 ± 4.3 %, 24.4 ± 4.1 %, and 12.8 ± 3.7 % at 5, 10 and 20 years, respectively. Era of surgery ($p=0.013$) emerged as significant risk factors for survival in multivariate analyses. Type of RV-PA conduit ($p=0.002$) and small Conduits ($p<0.001$) were significant risk factors for conduit reoperations in multivariate analyses. A valveless RV-PA connection performed better than homografts and homografts performed better than xenografts in terms of reoperations.

Conclusions: Hospital and long term survival has markedly improved after the year 2000, probably ensuring survival into the forth decade. The ideal RV-PA graft in heterotopic position has not been found yet.