P-234

Risk of Thrombus formation and aortic regurgitation after repair of congenital coronary artery fistulas

Uyeda T., Kobayashi T., Kishiki K, Inage A., Hamamichi Y., Yazaki S., Yoshikawa T., Wada N., Ando M., Takahashi Y.
Sakakibara Heart Instiute,fuchu Tokyo Japan

Introduction: Coronary artery fistula (CAF) is a rare congenital anomaly of coronary artery. Management of CAF and operative indication are still unclear. Although surgical correction is indicated when the shunt flow is significant, post operated complications such as arrhythmia, myocardial infarction due to thrombosis and cardiomyopathy were reported.

Methods and Results: We retrospectively reviewed 20 patients identified with CAF in our hospital between 2004 and 2018. Median follow up duration was 10.1 ± 9.2 years. We classified Patients with CAF as proximal type 6 or distal type 14. 17 patients underwent surgical repair. Intracardiac ligation performed in 6, extracardiac ligation in 4, combined intra and extracardiac ligation in 4, transcoronary closure accompanied by coronary artery bypass graft in 2 and transcatheter closure in 1. 5 patients (distal type 1 and proximal type 4) had post operated thrombosis. 7patients of cases with post operated residual communication or conservative cases had no thrombotic events. 5 patients had mild to moderate aortic valve regurgitation (AR) including post operated cases.

Conclusions:
Post operated thrombotic episodes were frequent. We must choose the operative indication and options to the type of CAFs, coronary artery dominancy and distal branchs. And Proxymal type needs attention to pouch formation and distal type to slow flow of coronary ciruculation of residual aneurysm and coronary dilatation. And anticoagulation is needed for such high risk cases. Residual small shunt may raise the possiibilty to reduce the risk of post operated thrombosis. And the careful evaluation of AR should be needed even after operation. in distal type or coronary dilatation.